

# Certified Professional for Requirements Engineering

Glossary of Requirements Engineering Terminology - Portuguese (Brazil)

Standard Glossary for the CPRE Studies and Exams

Original English version by Martin Glinz







Martin Glinz: Glossary of Requirements Engineering Terminology - Version 2.2.0

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### About the Author

Martin Glinz is a full professor emeritus at the University of Zurich (UZH). From 1993 until 2017, he was a professor of Informatics at UZH's Department of Informatics. From 2007–2016, he was the department head. His interests include requirements and software engineering — in particular modeling, validation, quality, and evolution.

He received a diploma degree in Mathematics in 1977 and a Dr. rer. nat. in Computer Science in 1983, both from RWTH Aachen University. Before joining the University of Zurich, he worked in industry for ten years, where he was active in software engineering research, development, training, and consulting. He retired in summer 2017, but he is still active in Requirements Engineering research, education, and service.

Martin Glinz has over 40 years of experience in Requirements Engineering, both academic and industrial. He is on editorial boards and program committees of major journals and conferences in software and requirements engineering and served as general chair, program chair, steering committee chair and organizer for the top international conferences in his field. He is a full member of the International Requirements Engineering Board (IREB), where he chairs the IREB Council. He received the ACM SIGSOFT Distinguished Service Award and the IEEE International Requirements Engineering Conference Lifetime Service Award in 2016 and the IEEE International Requirements Engineering Conference Most Influential Paper Award in 2017.



### Preface to Version 2.0

In the preface to the first edition of this glossary, published in May 2011, I wrote:

When looking for definitions of terms in Requirements Engineering, one can find definitions for almost any term by searching the web. However, such searching requires effort and the quality of the results is unpredictable. Frequently, definitions found in different sources are inconsistent with each other. Existing glossaries in Requirements Engineering textbooks mostly focus on the topics covered in these books. Systematic translations of terminology into major languages other than English are missing completely.

This glossary aims at collecting the existing knowledge on Requirements Engineering terminology and defining the core terminology carefully and consistently. In cases where more than one definition is in use or where terms are defined differently when viewed from different perspectives, multiple definitions or perspectives are included. For terms having both a general meaning and a specific meaning in a Requirements Engineering context, both meanings are defined. Important terms are annotated with hints and additional information.

This glossary has closed the gap identified above. The principle of not just compiling existing definitions but defining the core Requirements Engineering terminology carefully and consistently, has also stood the test of time. Nevertheless, after almost ten years since its initial publication, it was time for a major revision.

A good glossary should be a stable work product: users need to rely on a common terminology — which is not possible when that terminology is constantly changing. On the other hand, it would be foolish to believe that terminology does not evolve over time. In particular, the major revision of the IREB CPRE Foundation Level syllabus required adaptations and extensions of the terminology. Doing a major revision was also an occasion to include important terms from the IREB CPRE Advanced Level syllabi (which did not yet exist when the glossary was initially published). Finally, IREB and ISTQB, the International Software Testing Qualification Board, had agreed in 2019 to harmonize the quality and testing terminology in their respective glossaries.

From the 128 terms defined in the first edition of the glossary, 42 (i.e., about one third) remained unchanged. 67 definitions underwent minor or merely syntactic changes. We rewrote 17 definitions, deleted two ones, and added 85 new definitions. Major additions concern terminology about agile, modeling, prototyping, and product lines. We also added several basic terms such as activity, method, process, or technique.

Many major changes were due to the harmonization of terminology with ISTQB. However, we also modernized fundamental terms: for example, we simplified the definitions of requirement and Requirements Engineering and made major changes to the notes in the definition of system. The major revision of the glossary was also an occasion to mark explanatory notes clearly in all definitions, separating them from the main definition phrase.

The translations of the terminology into other languages, which were an integral part of the previous versions of this glossary, are now published as separate dictionaries of terminology. I gratefully acknowledge the work performed by all the translators.



Karol Frühauf owes my deepest thanks for carefully reviewing all my definition drafts and for fruitful discussions that led to major improvements of this glossary. I also thank Xavier Franch and Stan Bühne for many helpful comments. Most of all, I thank my wife Angelika. Without her love, patience and understanding, most of my professional work, including this one, would not have been possible.

Martin Glinz

Zurich, October 2020

### Preface to Version 2.2

This version is a minor revision of version 2.0 of October 2020. I added a few definitions based on feedback from the community. Furthermore, there is no longer a separate IREB RE@Agile Glossary. As a consequence, I have revised and extended the agile terminology in this glossary. Finally, the definitions of *client*, *customer* and *persona* are now aligned with the terminology that we had agreed upon when revising the IREB Digital Design Professional.

Zurich, October 2025

### Acknowledgements

I gratefully acknowledge the contributions of several people to this glossary. Discussions and joint work with Klaus Pohl, Chris Rupp and Thorsten Weyer shaped several definitions in the first version of this glossary. Karol Frühauf carefully reviewed my drafts of all definitions in version 2.0. Karol's review comments and the subsequent discussions between him and me were valuable sources for improvement.

The alignment of terminology between the glossaries of IREB and ISTQB was achieved in intense discussions between Karol Frühauf and me for IREB and Matthias Hamburg and Armin Born for ISTQB.

Xavier Franch was the IREB Council shepherd for this glossary. He carefully reviewed the final draft and provided feedback that improved the final document in many places.

Many people contributed to the translations of the terminology into languages other than English. Only the translation into German was done by myself.

### CPRE Online Glossary

The CPRE Glossary is available online in all supported languages: https://cpre.ireb.org/en/downloads-and-resources/downloads#cpre-glossary



## Version History

Version history			
Version	Date	Change	
1.1.0	May 2011	Initial Document	
2.0.0 October 2020	Major revision and extension of terminology covered by this glossary, including important terms from the CPRE Advanced Levels.		
		Aligned with the terminology used in the CPRE Foundation Level 3.0. Implemented the alignment between the IREB and ISTQB glossaries.	
		Created independent dictionaries of RE terminology for languages other than English.	
2.0.1	July 2022	Bold used instead of asterisk for key terms	
2.0.2	January 2024	Updated to new corporate design	
2.1.0	January 2024	Correction of the swapped definitions for the terms <i>redundancy</i> and <i>refactoring</i> as well as for <i>statechart</i> and <i>state-transition diagram</i>	
2.2.0	October 2025	Minor revision: Addition of a few definitions of terms used in the IREB CPRE syllabi and handbooks. Update of the RE@Agile terminology. Alignment of some definitions with the terminology used in the IREB Digital Design Professional.	



# Table of Contents

Table of Contentsvi	i
Definitions of Terms	1
List of Abbreviations Fehler! Textmarke nicht definiert	•
Sources4	5
References4	6



# Definitions of Terms

 ${\it Terms formatted in } \textbf{bold} \ are \ key \ terms \ that \ have \ to \ be \ known \ on \ the \ IREB \ CPRE \ Foundation \ Level.$ 

Termo (brasileiro)	Term (English)	Definition
Aceitação, aceite	Acceptance	The process of assessing whether a <u>↑</u> system satisfies all its <u>↑</u> requirements.
Adequação (do requisito)	Adequacy (of a requirement)	The degree to which a <u>1</u> requirement expresses the <u>1</u> stakeholders' true and agreed desires and needs (i.e., those they had actually in mind when stating the requirement).
Ágil	Agile	<ol> <li>In general:         <ul> <li>a. Able to move quickly and easily.</li> <li>b. Quick, smart, and clever.</li> </ul> </li> <li>In software development: A development approach which builds a product _incrementally by dividing work into _iterations of fixed duration (_timeboxes).</li> <li>Note:         <ul> <li>Agile development is characterized by focusing on delivering a working product in each iteration, collaboration with _stakeholders with frequent feedback and adaptation of plans after each iteration based on feedback and changed _requirements.</li> </ul> </li> </ol>
Ambiguidade	Ambiguity	The contrary of $\rightarrow$ unambiguity.
Análise de requisitos	Requirements analysis	<ol> <li>Analysis of elicited <u>↑</u>requirements in order to understand and document them.</li> <li>Synonym for <u>↑</u>Requirements Engineering.</li> </ol>



Tormo (brasilairo)	Torm (English)	Definition
Termo (brasileiro)	Term (English)	Definition
Análise estruturada	Structured Analysis	An approach for specifying the <u>↑</u> functionality of a system based on a hierarchy of <u>↑</u> data flow diagrams. Data flows as well as persistent data are defined in a data dictionary. A <u>↑</u> context diagram models the sources of incoming and the destinations of outgoing <u>↑</u> data flows.
Artefato	Artifact	Synonym for <u>↑</u> work product.
Associação	Association	In UML: A relationship between two ↑classes in a ↑UML ↑class model.
Atividade	Activity	An action or a set of actions that a person or group performs to accomplish a <u>*</u> task.
Ator	Actor	A person in some <u>↑</u> role, a <u>↑</u> system or a technical device in the context of a subject under consideration that interacts with that subject.  Note:  In RE, the subject under consideration typically is a <u>↑</u> system. In testing, it may be a test <u>↑</u> object.
Atributo	Attribute	A characteristic property of an <u>↑</u> entity or an <u>↑</u> object.
Backlog	Backlog	$\Rightarrow$ Product backlog, $\Rightarrow$ sprint backlog. Typically used as a short form for $\triangle$ product backlog.
Backlog da sprint	Sprint backlog	A set of <u>1</u> product backlog items that have been selected to be implemented in the current <u>1</u> sprint.
Backlog do produto	Product backlog	An ordered, typically prioritized collection of work items that a development team has to work on when developing or evolving a \_system.  Note:  Items include \_requirements, \_defects to be fixed, or \_refactorings to be done.
Baseline de requisitos, lilnha de base de requisitos	Requirements baseline	A <u>↑</u> baseline for a set of <u>↑</u> requirements.



Termo (brasileiro)	Term (English)	Definition
Baseline, linha de base	Baseline	A stable, change-controlled _configuration of _work products.  Note:  Baselines serve for _release planning and release definition as well as for project management purposes such as effort estimation.
Branch de requisitos, ramificação de requisitos	Requirements branching	<u>→</u> Branch
Branch, ramificação	Branch	A line of _configurations or _work product _versions that forks away from the main line (or from another branch) at some point in time.  Note:  A branch is created by making a copy of some configuration or work product version and making this copy the root of the branch. A branch may be merged with the main line or with another branch at some later point in time.
Característica, recurso, funcionalidade	Feature	<ul> <li>A distinguishing characteristic of a ↑system that provides value for ↑stakeholders.</li> <li>Notes:</li> <li>1. A feature typically comprises several ↑requirements and is used for communicating with ↑stakeholders on a higher level of abstraction and for expressing variable or optional characteristics.</li> <li>2. In agile development, some approaches denote medium-grained requirements as features.</li> </ul>
Cardinalidade	Cardinality	<ol> <li>In modeling: The minimum and maximum number of ↑objects in a relationship.</li> <li>In mathematics: The number of elements in a set.</li> <li>Note:</li> <li>In ↑UML, the term multiplicity is used for cardinality.</li> </ol>



Termo (brasileiro)	Term (English)	Definition
Caso de uso	Use case	A set of possible interactions between external $ extstyle  extsty$
Cenário	Scenario	<ol> <li>In general: A description of a potential sequence of events that lead to a desired (or unwanted) result.</li> <li>In RE: An ordered sequence of interactions between partners, in particular between a \(\textit{\textit{system}}\) system and external \(\textit{\textit{actors}}\). May be a concrete sequence (instance scenario) or a set of potential sequences (type scenario, \(\textit{\textit{type}}\) case).</li> </ol>
Classe	Class	A representation of a set of $\triangle$ objects of the same kind by describing the structure of the objects, the ways they can be manipulated and how they behave.
Cliente (Consumidor)	Customer	<ul> <li>A person or organization who receives a ↑system, a ↑product or a ↑service.</li> <li>Notes:</li> <li>In most cases, customers are ↑stakeholders.</li> <li>Frequently, the persons or organizations who order a system are different from those who receive the system after it has been built. Therefore, we distinguish between ↑clients and customers.</li> <li>"Receiving" includes buying, being provided with and obtaining for free.</li> <li>When customer and client are the same person or organization, the term customer is used in RE contexts.</li> </ul>



Termo (brasileiro)	Term (English)	Definition
Cliente (Solicitante)	Client	<ul> <li>A person or organization who orders a ↑system, a ↑product or a ↑service to be built.</li> <li>Notes:</li> <li>1. In most cases, clients are ↑stakeholders.</li> <li>2. Frequently, the persons or organizations who order a system are different from those who receive the system after it has been built. Therefore, we distinguish between clients and ↑customers.</li> </ul>
Comitê de controle de mudanças	Change control board	A committee of _client and _supplier representatives that decides on _change requests.  Abbreviation: CCB  Note:  The Change control board should not be confused with a change advisory board, which is a committee that evaluates change requests for a _system in operation and typically has no decision power.
Comitê diretivo	Steering committee	A committee that supervises a project.
Completude (do requisito)	Completeness (of requirements)	<ol> <li>For a single <u>requirement</u>: The degree to which the specification of a requirement is self-contained.</li> <li>For a <u>requirement</u>: The degree to which the work product covering multiple requirements: The degree to which the work product contains all known requirements that are relevant in the scope of this work product.</li> </ol>
Compliance, Observância	Compliance	The adherence of a \(\triangle\) work product to \(\triangle\) standards, conventions, regulations, laws, or similar prescriptions.



Termo (brasileiro)	Term (English)	Definition
Componente	Component	<ol> <li>In general: A delimitable part of a ↑system.</li> <li>In software architecture: An encapsulated set of coherent ↑objects or ↑classes that jointly achieve some purpose.</li> <li>In testing: A part of a ↑system that can be tested in isolation.</li> <li>Note:</li> <li>When viewed in isolation, a component is a ↑system by itself.</li> </ol>
Comportamento	Behavior	The way in which a <u>1</u> system reacts to stimuli, changes its state and produces observable results.  Note:  Stimuli may be events or changes of conditions. Their origin may be external or system-internal.
Composição (no contexto técnico)	Composition (in a technical context)	<ol> <li>An <u></u></li></ol>
Compreensibilidade	Understandability	The degree to which an <u>↑</u> item is comprehensible to its intended users.  Note:  Typical items are: a <u>↑</u> system, a <u>↑</u> work product, or a part thereof.
Confiabilidade	Reliability	The degree to which a <u>*</u> system performs specified functions under specified conditions for a specified period of time.  Note:  Reliability may be stated as a <u>*</u> quality requirement.
Configuração	Configuration	A consistent set of logically coherent <u>1</u> items. The items are individually identifiable <u>1</u> work products or parts of work products in at most one <u>1</u> version per item.
Configuração de requisitos	Requirements configuration	→ Configuration



Termo (brasileiro)	Term (English)	Definition
Conflito (sobre requisitos)	Conflict (about requirements)	→ Requirements conflict
Conflito de requisitos	Requirements conflict	<ol> <li>A situation where two or more ↑requirements cannot be satisfied together.</li> <li>A situation where two or more ↑stakeholders disagree about certain ↑requirements.</li> <li>Note:</li> <li>Requirements conflicts have to be solved by ↑requirements negotiation.</li> </ol>
Consistência (dos requisitos)	Consistency (of requirements)	The degree to which a set of <u>↑</u> requirements is free of contradicting statements.
Contexto	Context	<ol> <li>In general: The network of thoughts and meanings needed for understanding phenomena or utterances.</li> <li>Especially in RE: The part of a _system's environment being relevant for understanding the system and its _requirements.</li> <li>Note:</li> <li>Context in the second meaning is also called the _system context.</li> </ol>
Contexto de sistema	System context	The part of a $\uplus$ system's environment that is relevant for the definition as well as the understanding of the $\uplus$ requirements of a $\uplus$ system to be developed.
Controle de fluxo	Control flow	The order in which a set of actions is executed.
Correção	Correctness	The degree to which the information contained in a \(\textit{\textit{w}}\) work product is provably true. <b>Note:</b> In RE, correctness is sometimes used as a synonym for \(\textit{\textit{a}}\) adequacy, particularly when validating a \(\textit{\textit{r}}\) requirement rigorously against formally stated properties in the \(\textit{\textit{c}}\) context of a \(\textit{\textit{s}}\) system.



Termo (brasileiro)	Term (English)	Definition
Critério de aceitação, critério de aceite	Acceptance criteria	<ol> <li>The criteria that a \(\triangle \)work product must satisfy to be accepted by the \(\triangle \)stakeholders.</li> <li>In agile development: Criteria that the implementation of a \(\triangle \)backlog item must satisfy in order to be accepted by the stakeholders.</li> </ol>
<b>Critério de qualidade</b> (na ER)	<b>Quality criteria</b> (in RE)	<ul> <li>A set of expected ↑qualities of good ↑requirements or good RE ↑work products.</li> <li>Notes:</li> <li>1. There is no general agreement about which sets of qualities form the quality criteria to be used in RE.</li> <li>2. The set of quality criteria to be applied in a given project depends on the characteristics and ↑context of the project.</li> </ul>
Defeito	Defect	An imperfection or deficiency in a \(\triangle \text{work product that impairs its intended}\) use.  Synonyms: bug, fault
Defeito, bug	Bug	<u>→</u> Defect
Descoberta de requisitos	Requirements discovery	→ Requirements elicitation



Termo (brasileiro)	Term (English)	Definition
Design, Projeto	Design	<ol> <li>A plan or drawing produced to show how something will look, function or be structured before it is made.</li> <li>The activity of creating a design.</li> <li>A decorative pattern [This meaning does not apply in the software engineering 1 domain].</li> <li>Notes:</li> <li>In software product development, we distinguish between creative design which shapes the look and feel of the product, i.e., its perceivable form, function and quality, and technical design (also called software design) which determines the inner structure of the product, in particular the software architecture.</li> <li>The creative design of products is also called digital design.</li> <li>The creative design of digital solutions is called digital design.</li> </ol>
Diagrama de atividade	Activity diagram	A diagram type in <u>1</u> UML which models the flow of actions in some part of a <u>1</u> system, including <u>1</u> data flows and areas of responsibility where necessary.
Diagrama de características	Feature diagram	A diagrammatic representation of a <u>↑</u> feature model.
Diagrama de caso de uso	Use case diagram	A diagram type in _UML that models the _actors and the _use cases of a _system.  Note:  The boundary between the actors and the use cases constitutes the _system boundary.
Diagrama de classes	Class diagram	A diagrammatic representation of a <u>↑</u> class model.
Diagrama de contexto	Context diagram	A diagrammatic representation of a _context model.  Note: In _Structured Analysis, the context diagram is the root of the _dataflow diagram hierarchy.



Termo (brasileiro)	Term (English)	Definition
Diagrama de fluxo de dados	Data flow diagram	A diagrammatic representation of a <u>1</u> data flow model. <b>Abbreviation:</b> DFD
Diagrama de máquina de estados	State machine diagram	A diagrammatic representation of a <u>↑</u> state machine.
Diagrama de objeto	Object diagram	A diagrammatic representation of an <u>↑</u> object model.
Diagrama de sequência	Sequence diagram	A diagram type in $\triangle$ UML which models the interactions between a selected set of $\triangle$ objects and/or $\triangle$ actors in the sequential order in which those interactions occur.
Diagrama de transição de estados	State-transition diagram	→ State machine diagram.
Diagrama entidade- relacionamento	Entity-relationship diagram	A diagrammatic representation of an <u>1</u> entity-relationship model. <b>Abbreviation:</b> ERD
Documento de requisitos	Requirements document	A document consisting of a <u>*</u> requirements specification. <b>Note:</b> Requirements document is frequently used as a synonym for requirements specification.
Domínio	Domain	A range of relevant things (for some given matter); for example, an _application domain.
Domínio da aplicação	Application domain	Those parts of the real world that are relevant for determining the $\underline{\uparrow}$ context of a $\underline{\uparrow}$ system.



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Termo (brasileiro)	Term (English)	Definition
Dono do Produto, product owner	Product owner	A person responsible for a <u></u>
Efetividade	Effectiveness	The degree to which an <u>↑</u> item produces the intended results.  Note:  In RE, effectiveness frequently is the degree to which a <u>↑</u> system enables its <u>↑</u> users to achieve their <u>↑</u> goals.
Eficiência	Efficiency	The degree to which resources are expended in relation to results achieved.
Elaboração (dos requisitos)	Elaboration (of requirements)	An umbrella term for requirements $\underline{\uparrow}$ elicitation, $\underline{\uparrow}$ negotiation and $\underline{\uparrow}$ validation.
Elementos comuns	Commonality	The parts of a <u>↑</u> product line that are shared by all its members.
Elicitação (dos requisitos)	Elicitation (of requirements)	→ Requirements elicitation
Elicitação de Requisitos	Requirements elicitation	The process of seeking, capturing and consolidating $\underline{\uparrow}$ requirements from available $\underline{\uparrow}$ sources, potentially including the re-construction or creation of requirements.
Engenharia de Requisitos	Requirements Engineering	The systematic and disciplined approach to the <u>↑</u> specification and management of <u>↑</u> requirements with the goal of understanding the <u>↑</u> stakeholders' desires and needs and minimizing the <u>↑</u> risk of delivering a <u>↑</u> system that does not meet these desires and needs. <b>Abbreviation:</b> RE



Termo (brasileiro)	Term (English)	Definition
Engenheiro de Requisitos	Requirements Engineer	A person who – in collaboration with <u>↑</u> stakeholders – elicits, documents, validates, and manages <u>↑</u> requirements.  Note: In most cases, requirements engineer is a <u>↑</u> role and not a job title.
Entidade	Entity	<ol> <li>In general: Anything which is perceivable or conceivable (→ item).</li> <li>In entity-relationship-modeling: An individual <u>↑</u>item which has an identity and does not depend on another item (→ object).</li> </ol>
Épico	Epic	In agile development: A description of a \_stakeholder need which is typically larger than what can be implemented in a single \_iteration.  Note:  Epics typically represent coarse-grained \_requirements in a \_product backlog.
Erro	Error	<ol> <li>A human action that produces an incorrect result.</li> <li>A discrepancy between an observed ↑behavior or result and the specified behavior or result.</li> <li>Note:</li> <li>In practice, both meanings are used. Where needed, the meaning of error can be disambiguated by using human error and observed error or observed fault, respectively.</li> </ol>
Escopo (do sistema de desenvolvimento)	Scope (of a system development)	The range of things that can be shaped and designed when developing a



Termo (brasileiro)	Term (English)	Definition
Especificação	Specification	<ol> <li>As a work product: A systematically represented description of the properties of an _item (a _system, a device, etc.) that satisfies given criteria.</li> <li>As a process: the process of specifying (_eliciting, documenting and _validating) the properties of an _item.</li> <li>Note:         A specification may be about required properties (_requirements specification) or implemented properties (e.g., a technical product specification).     </li> </ol>
Especificação de requisitos	Requirements specification	<ul> <li>A systematically represented collection of ↑requirements, typically for a ↑system, that satisfies given criteria.</li> <li>Notes:</li> <li>In some situations we distinguish between a ↑customer requirements specification (typically written by the ↑customer) and a ↑system requirements specification or ↑software requirements specification (written by the ↑supplier).</li> <li>Requirements specification may also denote the ↑process of specifying (↑eliciting, documenting and ↑validating) requirements.</li> </ul>
Especificação de requisitos de sistema	System requirements specification	A _requirements specification pertaining to a _resystem.  Note:  A system requirements specification is frequently considered to be a synonym for _requirements specification.  Abbreviation: SyRS
Especificação de requisitos de software	Software requirements specification	A <u>↑</u> requirements specification pertaining to a software <u>↑</u> system. <b>Abbreviation:</b> SRS



Termo (brasileiro)	Term (English)	Definition
Especificação de requisitos do cliente	Customer requirements specification	A coarse description of the required capabilities of a $ extstyle  extstyle $
Especificação por exemplo	Specification by example	A <u>1</u> technique that specifies test cases and <u>1</u> requirements for a <u>1</u> system by providing examples of how the system should behave.
Falha	Fault	<u>→</u> Defect
Ferramenta (em engenharia de software)	<b>Tool</b> (in software engineering)	A (software) $ _$ system that helps develop, operate and maintain systems.  Note:  In RE, tools support $ _$ requirements management as well as modeling, documenting, and validating $ _$ requirements.
Fluxo de dados	Data flow	A sequence of data items flowing from a producer to a consumer.
Fonte (do requisito)	Source (of a requirement)	→ Requirements source
Fonte de requisitos	Requirements source	The source from which a <u>↑</u> requirement has been derived.  Note:  Typical sources are <u>↑</u> stakeholders, documents, existing <u>↑</u> systems and observations.
Fornecedor	Supplier	A person or organization who delivers a ↑product or ↑service to a ↑customer or a ↑client.
Funcionalidade	Functionality	The capabilities of a $\underline{\uparrow}$ system as stated by its $\underline{\uparrow}$ functional requirements.
Gerenciamento de mudanças	Change management	A controlled way to effect or deny a requested change of a 1work product.



Termo (brasileiro)	Term (English)	Definition
Gerenciamento de requisitos	Requirements management	The process of managing existing $\underline{\uparrow}$ requirements and requirements-related $\underline{\uparrow}$ work products, including the storing, changing and tracing of requirements ( $\underline{\uparrow}$ traceability).
Glossário	Glossary	A collection of definitions of terms that are relevant in some <u>↑</u> domain.  Note:  Frequently, a glossary also contains cross-references, <u>↑</u> synonyms, <u>↑</u> homonyms, acronyms, and abbreviations.
Gráfico de Burndown	Burndown chart	A diagram plotting the work items that remain to accomplish on a time scale.
Grau de conformidade	Conformity	The degree to which a <u>↑</u> work product conforms to regulations given in some <u>↑</u> standard.
História (em um contexto ágil)	Story (in an Agile context)	<ul> <li>A short narrative describing a piece of required ↑functionality or ↑quality.</li> <li>Notes:</li> <li>Stories may describe <ul> <li>funtionality or quality from a user's perspective (↑user story),</li> <li>required infrastructure functionality or quality,</li> <li>work items that enable required ↑features or properties of a ↑system.</li> </ul> </li> <li>In agile development, stories are frequently considered to be atomic ↑backlog items, that is, items which are not further decomposed in the ↑backlog.</li> </ul>



Termo (brasileiro)	Term (English)	Definition
História de Usuário	User story	<ul> <li>A short narrative describing a need from a ↑user's perspective together with the expected benefit when this need is satisfied. Also see → story.</li> <li>Notes:</li> <li>User stories are typically written in ↑natural language using the ↑user story template and are usually accompanied by ↑acceptance criteria.</li> <li>In agile development, user stories serve as a user-oriented way to discuss and formulate ↑requirements. They are typically considered to be atomic ↑backlog items, that is, items which are not further decomposed in the ↑backlog (see → story).</li> </ul>
Homônimo	Homonym	A term looking identical to another term but having a different meaning.  Note:  For example, bill as a bank note and bill as a list (of materials) are homonyms.
Incremento (no desenvolvimento de software)	Increment (in software development)	An addition to a <u>↑</u> system under development that extends, enhances or refactors ( <u>↑</u> refactoring) the existing parts of the system.  Note: In <u>↑</u> agile development, every <u>↑</u> iteration produces an increment.
Inspeção	Inspection	A formal $\underline{\uparrow}$ review of a $\underline{\uparrow}$ work product by a group of experts according to given criteria, following a defined procedure.
Item	Item	Anything which is perceivable or conceivable. Synonyms: $\rightarrow$ entity, $\rightarrow$ object
Item do Backlog	Backlog item	An individual element of a ↑backlog.  Note:  Backlog items include ↑requirements, ↑stories, ↑tasks, ↑features, ↑epics, ↑defects to be fixed, or ↑refactorings to be done.



Termo (brasileiro)	Term (English)	Definition
Iteração	Iteration	<ol> <li>In general: The repetition of something, for example, a procedure, a process or a piece of program code.</li> <li>In agile development: Atimeboxed unit of work in which a development team implements antincrement to thetsystem under development.</li> <li>Note:</li> <li>In agile development, iteration andtsprint are frequently used as synonyms.</li> </ol>
Liberação, release	Release	A <u>↑</u> configuration that has been released for installation and use by <u>↑</u> customers.
Limite de sistema	System boundary	<ol> <li>The boundary between a ↑system and its surrounding ↑context.</li> <li>Notes:         <ol> <li>The system boundary delimits the system as it shall be after its implementation and deployment.</li> <li>At the system boundary, the external interfaces between the ↑system and its ↑context have to be defined.</li> </ol> </li> <li>The system boundary frequently coincides with the ↑scope of a ↑system (which denotes the range of things that can be shaped and designed). However, this is not always the case: there may be components within the system boundary that have to be re-used as they are (i.e., cannot be shaped nor designed), while in the system context there may be things that can be re-designed when the system is developed (which means that they are in scope).</li> </ol>



Termo (brasileiro)	Term (English)	Definition
Limite do contexto	Context boundary	The boundary between the _context of a _system and those parts of the _application domain that are irrelevant for the _system and its _requirements.  Note:  The context boundary separates the relevant part of the environment of a system to be developed from the irrelevant part, i.e., the part that does not influence the system to be developed and, thus, does not have to be considered during Requirements Engineering.
Linguagem	Language	A structured set of signs for expressing and communicating information.  Note:  Signs are any elements that are used for communication: spoken or written words or expressions, symbols, gestures, sounds, etc.
Linguagem de especificação	Specification language	An artificial <u>↑</u> language that has been created for expressing <u>↑</u> specifications.
Linguagem de modelagem	Modeling language	A <u>1</u> language for expressing <u>1</u> models of a certain kind. May be textual, graphic, symbolic or some combination thereof.
Linguagem natural	Natural language	A _language that people use for speaking and writing in everyday life.  Note:  This is in contrast to artificial languages that people have deliberately created for specific purposes such as programming or specifying.
Linha de produto	Product line	A jointly managed set of systems (provided as products or services) that share a common core and have a configurable set of $ extstyle{1}$ variants for satisfying needs of particular $ extstyle{1}$ customers or market segments.  Note:  The points in a product line where there is more than one $ extstyle{1}$ variant to select from are called $ extstyle{1}$ variation points.  Synonym: Product family



Termo (brasileiro)	Term (English)	Definition
Manutenibilidade	Maintainability	The ease with which a ↑system can be modified by the intended maintainers.  Note:  Maintainability may be stated as a ↑quality requirement.
Mapa de Histórias	Story map	A two-dimensional arrangement of $ extstyle  e$
<b>Maquete</b> (de um sistema digital)	<b>Mock-up</b> (of a digital system)	A medium-fidelity prototype that demonstrates characteristics of a user interface without implementing any real functionality.  Note:  In RE, a mock-up primarily serves for specifying and validating user interfaces.
Máquina de estados	State machine	A <u>*</u> model describing the behavior of a <u>*</u> system by a finite set of <i>states</i> and state <i>transitions</i> . State transitions are triggered by <i>events</i> and can in turn trigger <i>actions</i> and new events.
Meta, objetivo	Goal	A desired state of affairs (that a <u>*</u> stakeholder wants to achieve).  Note:  Goals describe intentions of stakeholders. They may conflict with one another.
Método	Method	The systematic application of a <u>↑</u> technique (or a set of techniques) to achieve an objective or create a <u>↑</u> work product.
Metodologia	Methodology	<ol> <li>The systematic study of ↑methods in a particular field, in particular, how to select, apply or evaluate methods systematically in a given situation.</li> <li>A set of ↑methods being applied in some combination.</li> </ol>



Termo (brasileiro)	Term (English)	Definition
Modelo	Model	<ul> <li>An abstract representation of an existing part of reality or a part of reality to be created.</li> <li>Notes:</li> <li>1. The notion of reality includes any conceivable set of elements, phenomena, or concepts, including other models.</li> <li>2. Models are always built for specific purposes in a specific context.</li> <li>3. With respect to a model, the modeled part of reality is called the original.</li> <li>4. In RE, ↑requirements can be specified with models.</li> </ul>
Modelo de atividade	Activity model	A $\underline{\uparrow}$ model of the flow of actions in some part of a $\underline{\uparrow}$ system.
Modelo de características	Feature model	A <u>↑</u> model describing the variable features of a <u>↑</u> product line, including their relationships and dependencies.
Modelo de caso de uso	Use case model	A $\underline{\uparrow}$ model consisting of a set of $\underline{\uparrow}$ use cases, typically together with a $\underline{\uparrow}$ use case diagram.
Modelo de classes	Class model	A model consisting of a set of $\underline{\uparrow}$ classes and relationships between them.
Modelo de comportamento	Behavior model	A $\underline{\uparrow}$ model describing the $\underline{\uparrow}$ behavior of a $\underline{\uparrow}$ system, e.g., by a $\underline{\uparrow}$ state machine.
Modelo de contexto	Context model	A <u>↑</u> model describing a <u>↑</u> system in its <u>↑</u> context.
Modelo de documento	Document template	A template providing a predefined skeleton structure for a document. (→ requirements template)  Note:  In RE, document templates can be used to structure ↑requirements documents.



Termo (brasileiro)	Term (English)	Definition
Modelo de domínio	Domain model	<ul> <li>A ↑model describing phenomena in an ↑application domain.</li> <li>Notes:</li> <li>1. In RE, domain models are created with the intention to understand the ↑application domain in which a planned ↑system will be situated.</li> <li>2. Static domain models specify (business) objects and their relationships in a ↑domain of interest.</li> <li>3. Domain story models specify visual stories about how actors interact with devices, artifacts, and other items in a ↑domain.</li> </ul>
Modelo de entidade- relacionamento	Entity-relationship model	A _model of data that are relevant for a _system or of the data of an _application domain, consisting of a set of entity types that are each characterized by _attributes and linked by relationships.  Abbreviation: ER Model
Modelo de fluxo de dados	Data flow model	A model that describes the _functionality of a _system by _activities, data stores and _data flows.  Note:  Incoming data flows trigger activities which then consume the received data, transform them, read/write persistent data held in data stores and then produce new data flows which may be intermediate results that trigger other activities or final results that leave the system.
Modelo de formulário	Form template	A template providing a form with predefined fields to be filled-in.  (→ requirements template)  Note:  In RE, form templates can be used to specify ↑use cases or ↑quality requirements.



Tormo (brasilairo)	Torm (English)	Definition
Termo (brasileiro)	Term (English)	Definition
Modelo de interacção	Interaction model	A <u>↑</u> model describing the interaction between a <u>↑</u> system and its environment or the interaction of <u>↑</u> items within a system.
		Note:
		system and its environment. A <u>*</u> sequence diagram, for example, can model the interaction between selected <u>*</u> objects within a system.
Modelo de meta, modelo de	Goal model	A ↑model representing a set ↑goals, sub-goals and the relationships
objetivo	Godifficaci	between them.
		Note:
		Goal models may also include tasks and resources needed to achieve a goal, actors who want to achieve a goal, and obstacles that impede the
		achievement of a goal.
Modelo de objeto	Object model	A ↑model describing a set of ↑objects and relationships between them.
Modelo de processo	Process model	A <u>↑</u> model describing a <u>↑</u> process or a set of related processes.
Modelo de requisitos	Requirements model	A <u>↑</u> model that has been created with the purpose of specifying
		<u>↑</u> requirements.
Modificabilidade	Changeability	→ Modifiability
Modificabilidade	Modifiability	The degree to which a <u>↑</u> work product or <u>↑</u> system can be modified without
		degrading its <u>↑</u> quality.
Multiplicidade	Multiplicity	<u>→</u> Cardinality
Não ambiguidade (dos	Unambiguity (of requirements)	The degree to which a <u>↑</u> requirement is expressed such that it cannot be
requisitos)		understood differently by different people.
Necessidade (do requisito)	Necessity (of a requirement)	The degree to which an individual <u>*</u> requirement is a necessary part of the
		<u>↑</u> requirements specification of a <u>↑</u> system.
Negociação	Negotiation	→ Requirements negotiation



Termo (brasileiro)	Term (English)	Definition
Negociação de requisitos	Requirements negotiation	A <u>↑</u> process where <u>↑</u> stakeholders are working toward reaching an agreement to resolve <u>↑</u> requirements conflicts.
Norma	Standard	A formal, possibly mandatory set of regulations for how to interpret, develop, manufacture, or execute something.  Note: In RE, there are RE-relevant standards issued by ISO/IEC and IEEE.
Objeto	Object	<ol> <li>In general: Anything which is perceivable or conceivable (→ item).</li> <li>In software engineering: an individual _item which has an identity, is characterized by the values of its _attributes and does not depend on another item (→ entity).</li> </ol>
Padrão de processo	Process pattern	An abstract, reusable 1 model of a 1 process which can be used to configure and instantiate a concrete process for a given situation and 1 context.
Papel, função	Role	<ol> <li>In general: A part played by a person in a given context.</li> <li>In ↑UML ↑class models: The parts played by the linked ↑objects in an ↑association.</li> </ol>
Persona	Persona	A fictitious character representing a group of people with similar needs, values and habits who are expected to use a <u>*</u> system or benefit from it in a similar way.
Perspectiva	Viewpoint	A certain perspective on the <u>requirements</u> of a <u>reguirements</u> system.  Note:  Typical viewpoints are perspectives that a <u>reguirements</u> stakeholder or stakeholder group has (for example, an end user's perspective or an operator's perspective). However, there can also be topical viewpoints such as a security viewpoint.



Termo (brasileiro)	Term (English)	Definition
Ponto variante	Variation point	A point in a <u>†</u> product line where an element of the product line (typically a variable or a <u>†</u> feature) can be chosen from a set of <u>†</u> variants.
Portabilidade	Portability	The ease with which a ↑system can be transferred to another platform while preserving its characteristics.
Prática	Practice	A proven way of how to carry out certain types of <u>↑</u> tasks or <u>↑</u> activities.
Prioridade	Priority	The level of importance assigned to an <u>↑</u> item, e.g., a <u>↑</u> requirement or a <u>↑</u> defect, according to certain criteria.
Priorização	Prioritization	The process of assigning priorities to a set of <u>↑</u> items.
Problema	Problem	A difficulty, open question or undesirable condition that needs investigation, consideration, or solution.
Processo	Process	A set of interrelated \(\triangle \)activities performed in a given order to process information or materials.  Note:  The notion of process includes business processes (e.g., how to commission and send ordered goods to \(\triangle \)customers), information processes (e.g., how to deliver records from a database that match a given query), and technical processes (e.g., cruise control in a car).
<b>Produto</b> (no contexto de software)	<b>Product</b> (in the context of software)	A software-based $\underline{\uparrow}$ system or a $\underline{\uparrow}$ service provided by a system which is developed and marketed by a $\underline{\uparrow}$ supplier and used by $\underline{\uparrow}$ customers.
Produto de trabalho, Produto de artefato	Work product	A recorded, intermediate or final result generated in a work <u>↑</u> process.  Synonym: <u>↑</u> Artifact



Termo (brasileiro)	Term (English)	Definition
Proteção	Safety	The capability of a $\uparrow$ system to achieve an acceptable level of probability that the system, under defined conditions, will not reach a state in which human life, health, property, or the environment is endangered.  Note:  Safety $\uparrow$ requirements may be stated as $\uparrow$ quality requirements or in terms of $\uparrow$ functional requirements.
Prototipação	Prototyping	A $\underline{\uparrow}$ process that involves the creation and evaluation of $\underline{\uparrow}$ prototypes.
Protótipo	Prototype	<ol> <li>In manufacturing: A piece which is built prior to the start of mass production.</li> <li>In software and systems engineering: A preliminary, partial realization of certain characteristics of a ↑system.</li> <li>In design: A preliminary, partial instance of a design solution.</li> <li>Notes:</li> <li>In RE, prototypes are used as a means for requirements ↑elicitation (see ↑specification by example) and ↑validation.</li> <li>Prototypes in RE can be classified         <ul> <li>with respect to their degree of fidelity into ↑native prototypes, ↑mock-ups and ↑wireframes;</li> <li>with respect to their purpose into ↑exploratory prototypes and ↑evolutionary prototypes.</li> </ul> </li> </ol>
Protótipo de alta fidelidade	Native prototype	A high-fidelity <u>1</u> prototype that implements critical parts of a <u>1</u> system to an extent that <u>1</u> stakeholders can use the prototype to see whether the prototyped part of the system will work and behave as expected.
Protótipo evolutivo	Evolutionary prototype	A pilot system forming the core of a 1system to be developed.
Protótipo exploratório	Exploratory prototype	A throwaway <u>1</u> prototype used to create shared understanding, clarify <u>1</u> requirements or validate requirements.



Termo (brasileiro)	Term (English)	Definition
Qualidade	Quality	<ol> <li>In general: The degree to which a set of inherent characteristics of an item fulfills ↑requirements.</li> <li>In systems and software engineering: The degree to which a ↑system satisfies stated and implied needs of its ↑stakeholders.</li> <li>Note:         Quality in this definition means fitness for intended use, as stated in the ↑requirements. This is in contrast to the colloquial notion of quality which is typically connoted with goodness or excellence.     </li> </ol>
Rastreabilidade	Traceability	<ol> <li>In general: The ability to establish explicit relationships between related         </li></ol>
Redundância	Redundancy	Multiple occurrence of the same information or resource.
Refatorar	Refactoring	The improvement of the internal _quality of source code, particularly the structure of the code, without changing its observable behavior.
Requisito	Requirement	<ol> <li>A need perceived by a <u>*</u>stakeholder.</li> <li>A capability or property that a <u>*</u>system shall have.</li> <li>A documented representation of a need, capability or property.</li> </ol>
Requisito de desempenho, requisito de performance	Performance requirement	A _requirement describing a performance characteristic (timing, speed, volume, capacity, throughput,).  Note:  In this glossary, performance requirements are regarded as a sub-category of _quality requirements. However, they can also be considered as a _kind of requirements of its own.



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Termo (brasileiro)	Term (English)	Definition
Requisito de domínio	Domain requirement	A $\underline{\uparrow}$ domain property in the $\underline{\uparrow}$ context of a $\underline{\uparrow}$ system that is required to hold.
Requisito de negócio	Business requirement	A <u>Trequirement stating a business <u>Tgoal</u>, objective or need of an organization.  Note:  Business requirements typically state those business goals, objectives and needs that shall be achieved by employing a <u>Tsystem or a collection of systems</u>.</u>
Requisito de qualidade	Quality requirement	A <u>Trequirement</u> that pertains to a quality concern that is not covered by <u>Trunctional requirements</u> .
Requisito de sistema	System requirement	A <u>↑</u> requirement pertaining to a <u>↑</u> system.
Requisito de stakeholder, requisito da parte interessada	Stakeholder requirement	A <u>*</u>
Requisito de usuário	User requirement	A <u>*</u> requirement expressing a <u>*</u> user need. <b>Note:</b> User requirements are typically about what a system should do for certain users and how they can interact with the system. User requirements are a subset of <u>*</u> stakeholder requirements.
Requisito funcional	Functional requirement	A $\underline{\uparrow}$ requirement concerning a result or $\underline{\uparrow}$ behavior that shall be provided by a function of a $\underline{\uparrow}$ system.
Requisito não-funcional	Non-functional requirement	A _quality requirement or a _constraint.  Note:



Termo (brasileiro)	Term (English)	Definition
Restrição (na ER)	Constraint (in RE)	A $\underline{\uparrow}$ requirement that limits the solution space beyond what is necessary for meeting the given $\underline{\uparrow}$ functional requirements and $\underline{\uparrow}$ quality requirements.
Revisão	Review	An evaluation of a \(\triangle \text{work product by an individual or a group in order to find problems or suggest improvements.}  Note:  Evaluation may be performed with respect to both contents and conformance.
Risco	Risk	A possible event that threatens the success of an endeavor.  Note:  A risk is typically assessed in terms of its probability and potential damage.
Scrum	Scrum	A popular ↑process framework for ↑agile development of a ↑system.
Segurança	Security	The degree to which a $ _$ system protects its data and resources against unauthorized access or use and secures unobstructed access and use for its legitimate $ _$ users.  Note:  Security requirements may be stated as $ _$ quality requirements or in terms of $ _$ functional requirements.
Semântica	Semantics	The meaning of a sign or a set of signs in a <u>↑</u> language.
Semi-formal	Semi-formal	Something which is formal to some extent, but not completely.  Note:  A ↑work product is called semi-formal if it contains formal parts, but isn't formalized totally. Typically, a semi-formal work product has a defined ↑syntax, while the ↑semantics is partially defined only.



Termo (brasileiro)	Term (English)	Definition
Serviço	Service	The provision of some <u>1</u> functionality to a human or a <u>1</u> system by a provider (a system, organization, group or individual) that delivers value to the receiver.
		Note: In systems engineering, software engineering and Requirements Engineering, services are typically provided by a ↑system for a ↑user or another system.
Sinônimo	Synonym	A word having the same meaning as another word.
Sintaxe	Syntax	The rules for constructing structured signs in a <u>↑</u> language.



Termo (brasileiro)	Term (English)	Definition
Sistema	System	1. In general: A principle for ordering and structuring.
		<ol><li>In engineering: A coherent, delimitable set of elements that – by coordinated action – achieve some purpose.</li></ol>
		Notes:
		<ol> <li>A system may comprise other systems or \(\tau\)components as sub- systems.</li> </ol>
		<ul> <li>2. The purposes achieved by a system may be delivered by <ul> <li>deploying the system at the place(s) where it is used,</li> <li>selling/providing the system as a ↑product to its ↑users,</li> <li>having providers who offer the system's capabilities as ↑services to users.</li> </ul> </li> <li>3. Systems containing both software and physical ↑components are called cyber-physical systems.</li> <li>4. Systems spanning software, hardware, people and organizational aspects are called socio-technical systems.</li> <li>Important: In this glossary, system is used as an umbrella term which includes</li> <li>↑Products provided to ↑customers,</li> <li>↑Services made available to customers,</li> <li>Other ↑work products such as devices, procedures or tools that help people or organizations achieve some ↑goal,</li> <li>System ↑components or ↑compositions of systems.</li> </ul>
Solicitação de mudança	Change request	In RE: A well-argued request for changing one or more ↑baselined ↑requirements.
Spike	Spike	In agile development: A task aimed at gaining insight or gathering information, rather than at producing a ↑product ↑increment.
Sprint	Sprint	An $\underline{\uparrow}$ iteration in $\underline{\uparrow}$ agile development, particularly when using $\underline{\uparrow}$ Scrum.



Termo (brasileiro)	Term (English)	Definition
Stakeholder, parte interessada	Stakeholder	A person or organization who influences a <u>*</u> system's <u>*</u> requirements or who is impacted by that system.  Note:  Influence can also be indirect. For example, some stakeholders may have to follow instructions issued by their managers or organizations.
Statechart, mapa de estados	Statechart	A <u>t</u> state machine having states that are hierarchically and/or orthogonally decomposed.
Storyboard	Storyboard	A series of sketches or pictures that visualize the execution of a $ extstyle  extsty$
Tabela de decisão	Decision table	A tabular representation of a complex decision, specifying which actions to perform for the possible combinations of condition values.
Tarefa	Task	A coherent chunk of work to be done.
Técnica	Technique	A documented set of coherent actions for accomplishing a <u>1</u> task or achieving an objective.
Template da História de Usuário	User story template	<ul> <li>A ↑phrase template of the form As a <role person="">, I want <something> so that <benefit>.</benefit></something></role></li> <li>Notes:</li> <li>1. Most ↑user stories are written using this template.</li> <li>2. In agile development, this template is also used for expressing other ↑backlog items that communicate stakeholder needs, for example, ↑epics.</li> <li>3. Some authors replace <something> by more concrete concepts such as <goal>, <desire>, or <target>.</target></desire></goal></something></li> </ul>



Termo (brasileiro)	Term (English)	Definition
Template de requisitos	Requirements template	A template for specifying <u>↑</u> requirements.  Note:  In RE, several forms of templates are used. <u>↑</u> Phrase templates are used for specifying individual <u>↑</u> requirements or <u>↑</u> user stories. <u>↑</u> Form templates can be used to specify <u>↑</u> use cases or <u>↑</u> quality requirements. <u>↑</u> Document templates provide a predefined structure for <u>↑</u> requirements documents.
Template de sentença	Phrase template	A template for the syntactic structure of a phrase that expresses an individual $\underline{\uparrow}$ requirement or a $\underline{\uparrow}$ user story in $\underline{\uparrow}$ natural language ( $\underline{\rightarrow}$ requirements template, $\underline{\rightarrow}$ user story template)
Teste de aceitação, teste de aceite	Acceptance test	A test that assesses whether a \_system satisfies its \_requirements.  Note:  Typically used by \_customers or \_clients to determine whether or not to accept a system.
Timebox, prazo delimitado	Timebox	A fixed, non-extendable amount of time for completing a set of <u>↑</u> tasks.
Tipo de requisito	Kind of requirement	A classification of requirements according to their kind into <i>↑system</i> requirements (consisting of <i>↑functional</i> requirements, <i>↑quality</i> requirements and <i>↑constraints</i> ), <i>project</i> requirements, and <i>process</i> requirements.  Notes:  1. RE is primarily concerned with system requirements.  2. Quality requirements and constraints are also called <i>↑non-functional</i> requirements.
Tolerância a falhas	Fault tolerance	The capability of a 1system to operate as intended despite the presence of (hardware or software) 1faults.  Note:  Fault tolerance may be stated as a 1quality requirement.



Termo (brasileiro)	Term (English)	Definition
UML	UML	Abbreviation for Unified Modeling Language, a standardized language for modeling problems or solutions.
Usabilidade	Usability	The degree to which a \(\triangle \)system can be used by specified \(\triangle \)users to achieve specified \(\triangle \)goals in a specified context of use.  Note:  Usability particularly includes the capability of a \(\triangle \)system to be understood, learned, used, and liked by its intended \(\triangle \)users.
Usuário	User	A person who uses the _functionality provided by a _system.  Note:  Users (also called end users) always are _stakeholders of a _system.
Usuário final	End user	<u>→</u> User
Validação	Validation	The <u>↑</u> process of confirming that an <u>↑</u> item (a <u>↑</u> system, a <u>↑</u> work product or a part thereof) matches its <u>↑</u> stakeholders' needs.  Note:  In RE, validation is the process of confirming that the documented <u>↑</u> requirements match their <u>↑</u> stakeholders' needs; in other words: whether the right requirements have been specified.
Variabilidade	Variability	<ol> <li>The degree to which a \(\times\)system can be changed or customized.</li> <li>In product lines: The \(\times\)features that can differ among the members of the \(\times\)product line.</li> </ol>
Variante	Variant	One of the possible forms that an <u>↑</u> item (e.g., a <u>↑</u> requirement) may have.



Termo (brasileiro)	Term (English)	Definition
Velocidade	Velocity	In agile development: The average amount of work that a team is able to complete in an <u>1</u> iteration.  Note:  Agile teams decide how to meaure <i>amount of work</i> . For example, they may measure the average number of <u>1</u> stories implemented per <u>1</u> iteration, or, if they measure the size of stories with so-called <i>story points</i> , the average number of story points implemented per iteration.
Verificabilidade (dos requisitos)	Verifiability (of requirements)	The degree to which the fulfillment of a ↑requirement by an implemented ↑system can be verified.  Note:  Such ↑verification can be performed, for example, by defining ↑acceptance test cases, measurements or ↑inspection procedures.
Verificação	Verification	The process of confirming that an <u>1</u> item (a system, a work product, or a part thereof) fulfills its <u>1</u> specification.  Note:  Requirements verification is the process of confirming that the <u>1</u> requirements have been documented properly and satisfy the <u>1</u> quality criteria for requirements; in other words, whether the requirements have been specified right.
Versão	Version	An occurrence of an <u>1</u> item which exists in multiple, time-ordered occurrences where each occurrence has been created by modifying one of its previous occurrences.
Viabilidade (do requisito)	Feasibility (of a requirement)	The degree to which a <u>1</u> requirement for a <u>1</u> system can be implemented under existing <u>1</u> constraints.
View, visualização	View	An excerpt from a \(\text{\textsuperscript{\text{work product, containing only those parts one is currently interested in.}\)  Note:  A view can abstract or aggregate parts of the work product.



Termo (brasileiro)	Term (English)	Definition
<b>Visão</b> (para o sistema ou produto)	Vision (for a system or product)	A conceptual imagination of a future $\underline{\uparrow}$ system or $\underline{\uparrow}$ product, describing its key characteristics and how it will create value for its $\underline{\uparrow}$ users.
Walkthrough	Walkthrough	A <u>*</u> review in which the author of a <u>*</u> work product leads the reviewers systematically through the work product and the reviewers ask questions and make comments about possible issues.
Wireframe	Wireframe	A low-fidelity _prototype built with simple materials that primarily serves for discussing and validating requirements, design ideas or user interface concepts.  Note:  When prototyping digital systems, wireframes are typically built with paper. Such prototypes are also called paper prototypes.



## English - Portuguese (Brazil) Dictionary

Term (English)	Termo (brasileiro)
Acceptance	Aceitação, aceite
Acceptance criteria	Critério de aceitação, critério de aceite
Acceptance test	Teste de aceitação, teste de aceite
Activity	Atividade
Activity diagram	Diagrama de atividade
Activity model	Modelo de atividade
Actor	Ator
Adequacy (of a requirement)	Adequação (do requisito)
Agile	Ágil
Ambiguity	Ambiguidade
Application domain	Domínio da aplicação
Artifact	Artefato
Association	Associação
Attribute	Atributo
Backlog	Backlog
Backlog item	Item do Backlog
Baseline	Baseline, linha de base
Behavior	Comportamento
Behavior model	Modelo de comportamento
Branch	Branch, ramificação
Bug	Defeito, bug
Burndown chart	Gráfico de Burndown
Business requirement	Requisito de negócio
Cardinality	Cardinalidade
Change control board	Comitê de controle de mudanças
Change management	Gerenciamento de mudanças



Term (English)	Termo (brasileiro)
Change request	Solicitação de mudança
Changeability	Modificabilidade
Class	Classe
Class diagram	Diagrama de classes
Class model	Modelo de classes
Client	Cliente (Solicitante)
Commonality	Elementos comuns
Completeness (of requirements)	Completude (do requisito)
Compliance	Compliance, Observância
Component	Componente
Composition (in a technical context)	Composição (no contexto técnico)
Configuration	Configuração
Conflict (about requirements)	Conflito (sobre requisitos)
Conformity	Grau de conformidade
Consistency (of requirements)	Consistência (dos requisitos)
Constraint (in RE)	Restrição (na ER)
Context	Contexto
Context boundary	Limite do contexto
Context diagram	
Context diagram	Diagrama de contexto
Context model	Diagrama de contexto  Modelo de contexto
-	-
Context model	Modelo de contexto
Context model Control flow	Modelo de contexto  Controle de fluxo
Context model Control flow Correctness	Modelo de contexto  Controle de fluxo  Correção
Context model Control flow Correctness Customer	Modelo de contexto  Controle de fluxo  Correção  Cliente (Consumidor)
Context model Control flow Correctness Customer Customer requirements specification	Modelo de contexto  Controle de fluxo  Correção  Cliente (Consumidor)  Especificação de requisitos do cliente
Context model Control flow Correctness Customer Customer requirements specification Data flow	Modelo de contexto  Controle de fluxo  Correção  Cliente (Consumidor)  Especificação de requisitos do cliente  Fluxo de dados



Term (English)	Termo (brasileiro)
Defect	Defeito
Design	Design, Projeto
Document template	Modelo de documento
Domain	Domínio
Domain model	Modelo de domínio
Domain requirement	Requisito de domínio
Effectiveness	Efetividade
Efficiency	Eficiência
Elaboration (of requirements)	Elaboração (dos requisitos)
Elicitation (of requirements)	Elicitação (dos requisitos)
End user	Usuário final
Entity	Entidade
Entity-relationship diagram	Diagrama entidade-relacionamento
Entity-relationship model	Modelo de entidade-relacionamento
Epic	Épico
Error	Erro
Evolutionary prototype	Protótipo evolutivo
Exploratory prototype	Protótipo exploratório
Fault	Falha
Fault tolerance	Tolerância a falhas
Feasibility (of a requirement)	Viabilidade (do requisito)
Feature	Característica, recurso, funcionalidade
Feature diagram	Diagrama de características
Feature model	Modelo de características
Form template	Modelo de formulário
Functional requirement	Requisito funcional
Functionality	Funcionalidade
Glossary	Glossário



Term (English)	Termo (brasileiro)
Goal	Meta, objetivo
Goal model	Modelo de meta, modelo de objetivo
Homonym	Homônimo
Increment (in software development)	Incremento (no desenvolvimento de software)
Inspection	Inspeção
Interaction model	Modelo de interacção
Item	Item
Iteration	Iteração
Kind of requirement	Tipo de requisito
Language	Linguagem
Maintainability	Manutenibilidade
Method	Método
Methodology	Metodologia
Mock-up (of a digital system)	Maquete (de um sistema digital)
Model	Modelo
Modeling language	Linguagem de modelagem
Modifiability	Modificabilidade
Multiplicity	Multiplicidade
Native prototype	Protótipo de alta fidelidade
Natural language	Linguagem natural
Necessity (of a requirement)	Necessidade (do requisito)
Negotiation	Negociação
Non-functional requirement	Requisito não-funcional
Object	Objeto
Object diagram	Diagrama de objeto
Object model	Modelo de objeto
Performance requirement	Requisito de desempenho, requisito de performance
Persona	Persona



Term (English)	Termo (brasileiro)
Phrase template	Template de sentença
Portability	Portabilidade
Practice	Prática
Prioritization	Priorização
Priority	Prioridade
Problem	Problema
Process	Processo
Process model	Modelo de processo
Process pattern	Padrão de processo
Product (in the context of software)	Produto (no contexto de software)
Product backlog	Backlog do produto
Product line	Linha de produto
Product owner	Dono do Produto, product owner
Prototype	Protótipo
Prototyping	Prototipação
Quality	Qualidade
Quality criteria (in RE)	Critério de qualidade (na ER)
Quality requirement	Requisito de qualidade
Redundancy	Redundância
Refactoring	Refatorar
Release	Liberação, release
Reliability	Confiabilidade
Requirement	Requisito
Requirements analysis	Análise de requisitos
Requirements baseline	Baseline de requisitos, lilnha de base de requisitos
Requirements branching	Branch de requisitos, ramificação de requisitos
Requirements configuration	Configuração de requisitos
Requirements conflict	Conflito de requisitos



Term (English)	Termo (brasileiro)
Requirements discovery	Descoberta de requisitos
Requirements document	Documento de requisitos
Requirements elicitation	Elicitação de Requisitos
Requirements Engineer	Engenheiro de Requisitos
Requirements Engineering	Engenharia de Requisitos
Requirements management	Gerenciamento de requisitos
Requirements model	Modelo de requisitos
Requirements negotiation	Negociação de requisitos
Requirements source	Fonte de requisitos
Requirements specification	Especificação de requisitos
Requirements template	Template de requisitos
Review	Revisão
Risk	Risco
Role	Papel, função
Safety	Proteção
Scenario	Cenário
Scope (of a system development)	Escopo (do sistema de desenvolvimento)
Scrum	Scrum
Security	Segurança
Semantics	Semântica
Semi-formal	Semi-formal
Sequence diagram	Diagrama de sequência
Service	Serviço
Software requirements specification	Especificação de requisitos de software
Source (of a requirement)	Fonte (do requisito)
Specification	Especificação
Specification by example	Especificação por exemplo
Specification language	Linguagem de especificação



Term (English)	Termo (brasileiro)
Spike	Spike
Sprint	Sprint
Sprint backlog	Backlog da sprint
Stakeholder	Stakeholder, parte interessada
Stakeholder requirement	Requisito de stakeholder, requisito da parte interessada
Standard	Norma
State machine	Máquina de estados
State machine diagram	Diagrama de máquina de estados
Statechart	Statechart, mapa de estados
State-transition diagram	Diagrama de transição de estados
Steering committee	Comitê diretivo
Story (in an Agile context)	História (em um contexto ágil)
Story map	Mapa de Histórias
Storyboard	Storyboard
Structured Analysis	Análise estruturada
Supplier	Fornecedor
Synonym	Sinônimo
Syntax	Sintaxe
System	Sistema
System boundary	Limite de sistema
System context	Contexto de sistema
System requirement	Requisito de sistema
System requirements specification	Especificação de requisitos de sistema
Task	Tarefa
Technique	Técnica
Timebox	Timebox, prazo delimitado
Tool (in software engineering)	Ferramenta (em engenharia de software)
Traceability	Rastreabilidade



Term (English)	Termo (brasileiro)
UML	UML
Unambiguity (of requirements)	Não ambiguidade (dos requisitos)
Understandability	Compreensibilidade
Usability	Usabilidade
Use case	Caso de uso
Use case diagram	Diagrama de caso de uso
Use case model	Modelo de caso de uso
User	Usuário
User requirement	Requisito de usuário
User story	História de Usuário
User story template	Template da História de Usuário
Validation	Validação
Variability	Variabilidade
Variant	Variante
Variation point	Ponto variante
Velocity	Velocidade
Verifiability (of requirements)	Verificabilidade (dos requisitos)
Verification	Verificação
Version	Versão
View	View, visualização
Viewpoint	Perspectiva
Vision (for a system or product)	<b>Visão</b> (para o sistema ou produto)
Walkthrough	Walkthrough
Wireframe	Wireframe
Work product	Produto de trabalho, Produto de artefato



## List of Abbreviations

CCB Change control board

CPRE Certified Professional for Requirements Engineering

**DFD** Data flow diagram

ER Entity-relationship

**ERD** Entity-relationship diagram

IREB International Requirements Engineering Board

**RE** Requirements Engineering

SRS Software requirements specification

SyRS System requirements specification

UML Unified Modeling Language



## Sources

I don't cite sources for individual definitions because I deliberately decided not to compile definitions from various existing sources just by copy-paste, but to carefully re-formulate all definitions consistently and according to today's use.

Several definitions are based on my own work [GI07], [GIWi07], [GI19]. Some definitions from the agile domain are joint work of myself with the IREB RE@Agile working group. The major revision of the IREB CPRE Foundation Level syllabus in 2020 [IREB20] also informed several new or changed definitions.

I consulted numerous international standards when writing the definitions [IEEE610], [IEEE730], [IEEE830], [IEEE1012], [IEEE1028], [ISO9000], [ISO12207], [ISO19770], [ISO20246], [ISO24765], [ISO25000], [ISO25010], [ISO26550], [ISO29148], [ISO42010]. However, as the terminology defined or used in these standards is frequently inconsistent or inadequate for a Requirements Engineering glossary, I did not copy any definitions verbatim from these standards.

Other sources that influenced some definitions are [GaWe89], [My06], [Po10], [St73], and [ZoCo05].

For cross-checking, I also consulted the Merriam-Webster online dictionary (https://www.merriam-webster.com) and Wikipedia (https://en.wikipedia.org). I have not used any generative AI tools.

Below I want to give credit for some definitions that I have taken more or less verbatim from a source or that are joint work with others.

Tabelle 0.1: Credits

Term	Reference
Context boundary	Joint work with Klaus Pohl, Chris Rupp, and Thorsten Weyer, based on [Po10], [PoRu11] and [We10]
Functional requirement	Joint work with Klaus Pohl, Chris Rupp, and Thorsten Weyer
Model	Joint work with Klaus Pohl and Chris Rupp, based on [PoRu11]
Quality requirement	Joint work with Klaus Pohl, Chris Rupp, and Thorsten Weyer, based on definitions in my course notes on Requirements Engineering I
Requirements Engineering	Definition is a simplification of a definition that was joint work with Klaus Pohl, Chris Rupp, and Thorsten Weyer
Requirements specification	Adapted from Pohl and Rupp [PoRu11]
System boundary	Joint work with Klaus Pohl, Chris Rupp, and Thorsten Weyer based on [Po10], [PoRu11]
System context	Joint work with Klaus Pohl, Chris Rupp, and Thorsten Weyer based on [Po10], [PoRu11], [We10]



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