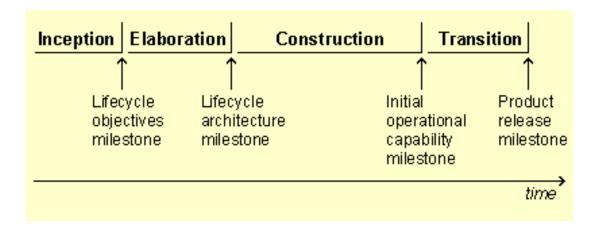
# Project inception and elaboration phases

Projeto em Engenharia de Computadores e Informática — (LECI), Departamento de Eletrónica, Telecomunicações e Informática, Universidade de Aveiro

(2021)

# Phases and milestones of a project (OpenUP)



#### source:

http://epf.eclipse.org/wikis/openup/practice.mgmt.risk value lifecycle.base/guidances/concepts/phase milestones 5678231E.h tml

## elaboration phase

The purpose is to establish the baseline of the architecture of the system and provide a stable basis for the bulk of the development effort in the next phase.

Get a more detailed understanding of the requirements.

Design, implement, validate, and establish the baseline for the architecture. **Design, implement, and test a skeleton structure of the system**.

Mitigate essential risks and produce accurate schedule.

#### source:

http://epf.eclipse.org/wikis/openup/practice.mgmt.risk value lifecycle.base/guidances/concepts/elaboration phase BE880435. html

# Elaboration phase: requirements elicitation

Describe the requirements of system users, customers and other stakeholders

#### 1. Requirements gathering

Sources of information including interviews, questionnaires, user observation, workshops, brainstorming, etc.

#### 2. Functional requirements

What the system is supposed to accomplish, for example: business Rules, administrative functions, authentication and authorization levels, reporting, historical data, or Regulatory Requirements.

#### Context and State of The Art (SOA)

How the system is expected to be used and what has been done in this context

# Elaboration phase: requirements elicitation

#### 4. Actors

Describe the target users in your system.

#### 5. Use cases

Describe the interaction between users and the system to achieve specific goals. Tip: organize the use cases by packages.

http://agilemodeling.com/artifacts/useCaseDiagram.htm

https://www.visual-paradigm.com/guide/uml-unified-modeling-language/what-is-use-case-diagram/

#### 6. Non-functional requirements

Describe how the system works (while functional requirements describe what the system should do), for example: performance (e.g., response time, capacity, availability, recoverability, maintainability, security, data integrity, usability, or interoperability.

do not forget assumptions and dependencies.

### Elaboration phase: system architecture

#### Deployment diagram

Describe the hardware the software installed on that hardware and the middleware used to connect machines.

Include the technologies used in the system.

http://www.agilemodeling.com/artifacts/deploymentDiagram.htm

https://www.visual-paradigm.com/guide/uml-unified-modeling-language/what-is-deployment-diagram/

#### [Domain model]

A diagram capturing the main entities and relationships between them may also help in some systems.

http://agiledata.org/essays/agileDataModeling.html#InitialDomainModel

#### [User interaction]

Design mock-ups as soon as possible.

### recommended to do list $\rightarrow$ milestone 2

Present a detailed State-of-the-Art and how your project relates to previous work

Requirement's elicitation

Define goals

Collect information: documents, interviews

Functional and non-functional requirements

Actors, uses cases and other

System Architecture

Skeleton structure of the system is tested: system components can communicate with each other

Design mock-ups as soon as possible

>> remember: be proactive <<

### Milestone 2

Elaboration phase completed!

Prepare a 12-15 minutes presentation: details on elaboration phase results are mandatory.

#### Due date:

- . Teams (1, 2, 3, 6, 7, 8, 9): December 10, 2021
- . Teams (4, 5, 10): December 17, 2021