# Project inception and elaboration phases

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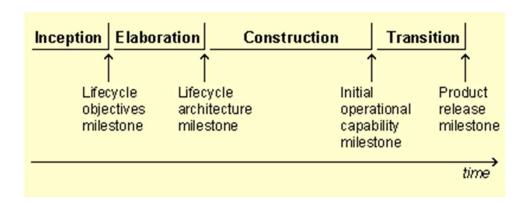
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# Phases and milestones of a project (OpenUP)



#### source:

http://epf.eclipse.org/wikis/openup/practice.mgmt.risk\_value\_lifecycle.base/guidances/concepts/phase\_milestones\_5678231E.h\_tml

# inception phase

Should be completed this week!

Inception is about understanding the project scope and objectives

**Understand what to build**. Determine an overall vision, including the **scope of the system and its boundaries**. **Identify** the stakeholders: **who is interested in this system** and what are their success criteria?

Identify key system functionality. Decide which requirements are most critical.

**Determine at least one possible solution**. Assess whether the vision is technically feasible. This may involve identifying a candidate high-level architecture or doing technical prototypes, or both.

Understand the high-level estimate for cost, schedule, and risks associated with the project.

#### source:

http://epf.eclipse.org/wikis/openup/practice.mgmt.risk\_value\_lifecycle.base/guidances/concepts/inception\_phase\_C4456871.ht\_ml

## 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 and cost estimates.

#### 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.

#### 3. 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

#### 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

#### [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 more detailed State-of-Art

Requirements elicitation

Define goals

State of the art (improved: related work + technologies)

Collect information: documents, interviews

Functional and non-functional requirements

Actors, uses cases and other

System Architecture

Skeleton structure of the system

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 (2-5,9): March 11, 2019
- . Teams (1,6-8,10): March 18, 2019