

Elaboration 1 Task Sheet

AB Credit (HK) Staff Development Platform

You have completed the Inception phase of your project and now move into the next phase of the UP: Elaboration. This is the most challenging UP phase, in which you deal with major technical issues and deliver a documented core executable. You will perform Elaboration in two iterations to take us to the LCA milestone.

The major objectives of the Elaboration Phase are:

- to refine your understanding of requirements;
- to establish a proven, executable architectural baseline;
- to mitigate major risks.

To achieve those objectives your team must:

- revise your specification of requirements, where necessary, and add detail to them;
- design, implement, test and baseline the architecture. To establish a baseline means to create an executable architecture that you are confident will be able to support the application. It also means that, given the current requirements, it is extremely unlikely you will need to change this architecture during the remainder of development. In the SDP project, the Django framework supplies the architecture and resolves the majority of architectural issues. However, you need to determine how best to implement your project within that framework.

In your Risk Lists, many of you highlighted risks associated with lack of experience or skill in web application development, particularly using Django. Many also identified risks associated with uncertainties in requirements. The first iteration of Elaboration, Elaboration 1, will focus on implementing thin vertical prototypes to drive down the first risk. Since the prototypes will be executable and can be demonstrated to users, they will help drive down the second risk as an added benefit.

Description: Iteration 1 (E1) of Elaboration

In your Inception documents, you identified 2 or 3 key use cases, and provided fully-detailed descriptions. The majority of teams included use-cases dealing with some or all of:

1. managing courses, including creating a course and adding modules and components;
2. enrolling in a course, including viewing a list of available courses and viewing course details;
3. viewing course components (for example, as a participant taking a course)

Teams split this functionality differently over use cases – for example, some teams included course creation as a flow within a Manage Course use case, while others separated Create Course and Manage Course into different use cases. Both approaches are acceptable at this stage.

In the first iteration (E1) of Elaboration your team will analyse, design and implement realizations of (1) and (2) above. If you do not have use-cases and SSDs in your model that cover such functionality you must add them in this iteration. We will defer (3) until later.

With reference to stakeholder needs, your E1 executable will provide the simplest forms of:

- (for Instructors) create a new course, add modules to a course, add components to a module.
- (for Participants) view courses, view course details, enroll in a course.

Deliverables (E1)

1) Analysis models

Work from your success scenarios for this iteration and identify a set of conceptual classes. Construct a partial Domain Model in the form of a single Domain Class Diagram showing conceptual classes, attributes and associations relevant for those scenarios.

2) Design models

Since your principal focus in this iteration is to gain sufficient expertise with the framework to implement end-to-end functionality, you will not provide a full set of design models for your vertical prototypes. You will deliver only the following to outline your design:

- a class diagram documenting the Django model classes you create to realize the use case scenarios;
- a brief description of other elements of your realization (such as views and URLconf) components and how they (including models) interact within the framework to provide the request/response cycles required by the scenarios.

3) Implementation

Implement your design. Your goal is to create a working increment of a small slice of the final product. You will not deliver your code in this iteration but you may be required to demonstrate your progress.

4) Updated Artefacts

If you need to update your Use-case Model or Risk List, make your revisions and submit new versions of those documents. You are developing iteratively and incrementally and every iteration provides an opportunity to correct or extend artefacts produced in earlier iterations. In this iteration there is no need to submit revisions to other documents you produced in Inception – you will submit a definitive set at the end of the project.

Delivery: Please upload to Moodle:

- a zipped file containing new and modified documents and diagrams as described above.

Deadline: October 30 (Sunday), 11:55pm