COMP3297 Introduction to Software Engineering Department of Computer Science The University of Hong Kong

Elaboration 2 Task Sheet AB Credit (HK) Staff Development Platform

In Elaboration 1 you dealt with your major technical risk by implementing key use case scenarios using the Django framework. You now have an executable in place that provides basic SDP functionality related to creation, management and viewing lists and details of courses.

In Elaboration 2, you will deal with remaining risks associated with parts of the requirements that require mastery of other parts of the Django framework or for which you need to confirm that your design is workable. These areas address:

- authentication and permissioning;
- rendering components;
- managing the ordering and reordering of modules and components;
- placing restrictions on users.

As noted for the previous iteration of this Phase, you will:

- revise your specification of requirements, where necessary, and add detail to them;
- design, implement, test and baseline the architecture.

During this iteration you will demonstrate your Elaboration 1 executable together with your current state of progress on Elaboration 2 to ensure they meet clients' expectations.

[Just to warn you in advance: to simulate a real world project and maintenance-in-development there will be a requirements change coming during this iteration!]

Description: Iteration 2 (E2) of Elaboration

Building on your E1 executable, add basic functionality required in the areas listed above. If you do not have use cases covering those areas of the requirements, you must add them now. SSDs are not required.

With reference to stakeholder needs, your E2 executable will add the simplest forms of:

- (for Instructors) manage modules and components (including changing their ordering), possess sole permission to modify their courses.
- (for Participants) register as a participant, view rendered components of an enrolled course.
- (for Administrators) control access, restrict permission to create and modify courses to instructors, designate a user as instructor.
- (for HR Dept.) restrict users to take only one course at a time.

For authentication and permissioning, you might find Django's authentication framework useful. This is not a constraint, however, and you are free to use or develop alternative solutions if you wish.

Deliverables (E2)

1) Analysis models

Work from your success scenarios for this iteration (added to your Use Case Model if not already there) to refine and extend your Domain Model if necessary.

2) Design models

Refine and extend your Design Class Diagram that documents your Django model classes.

Summarize the design of realizations developed in this iteration. You can do this by means of short text descriptions of the key interactions in each realization or by means of sequence diagrams showing those interactions.

3) Implementation

Extend the previous increment (that is, your E1 implementation) by implementing the new parts of your design for this iteration. Again, you will not deliver your code in this iteration (you will deliver your code once, at the end of the project) but you will be required to give a demonstration.

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. At this stage, you should modify the Risk List only to adjust Exposure or to add any new significant risks you have identified.

Delivery:

Please upload a zipped file to Moodle containing new and modified documents and diagrams as described above.

Please deliver 2 hard copies of new and modified documents and diagrams.

Deadline:

November 25 (Friday), 11:55pm