DIT045/DAT355 Assignment 2

Fall 2020

Table of Contents

Submission Instructions

Assignments must be handed in through Canvas to A2 under Assignments. The final assignment should be submitted in PDF format. One submission per group.

Cover Page (3 points)

On the cover page of your assignment include the following information:

- The name of the course
- The date
- Your group name
- Your group members

- Which assignment case was selected
- The number of pages in the assignment

Assignment Due Date
Friday December 4th, 23:59

Late Policy
Up to One day late: - 20% of final mark
Up to Two days late: - 40% of final mark
Two or more days late: 0%

Groupwork
This assignment must be completed in your course group. Please work in the group you have submitted in A0 in Canvas. Indicate the group name on your cover page.

All team members must fill out a peer evaluation form, found in Canvas under quizzes.

Assignment Case
Use the same assignment case as you selected in A1.

Question 1: Elicitation Techniques (10 points)
In the lectures, you've learned about several techniques for elicitation. Think about your selected assignment case, focusing particularly on your selected scope. If you were going to elicit requirements from the stakeholders, which techniques would you use and why? Which stakeholders would be involved in what techniques? How would you select stakeholders for participation in elicitation? In A1, likely you focused your models on a particular set of stakeholders and particular use cases. Try to pick a selection of stakeholders and techniques which would give you a good coverage over your area of focus. Answer this question via text (which could include tables and lists).
Expectation: up to a page of text.

Question 2: Requirements from Context Diagram (10 points)
For your scope, capture a minimum of 8 SRS-Style textual requirements and two domain assumptions. Look at the context diagram for inspiration and try to capture all of the major elements of the diagram in your requirements. You may not cover the entire diagram with the requirements and assumptions.

Indicate whether each requirement is a: functional requirement, a quality requirement (NFR), or a constraint. Try to capture at least two requirements of each type (FR, NFR, constraint) and two domain assumptions. If the model does not contain these different types of requirements (e.g., no quality requirements), be inspired by the content to add related quality requirements or constraints.

Question 3: Requirements from iStar Diagrams (10 points)
For your scope, capture a minimum of 8 SRS-Style textual requirements and two domain assumptions. Look at the goal models (iStar SD and SR) for inspiration and try to capture all of the major elements of the diagram in your requirements. Try not to write requirements that are very similar to the requirements from Question 2. You may not cover the entire diagram with your requirements and assumptions.

Indicate whether each requirement is a: functional requirement, a quality requirement (NFR), or a constraint. Try to capture at least two requirements of each type (FR, NFR, constraint) and two domain assumptions. If the model does not contain these different types of requirements (e.g., no constraints), be inspired by the content to add related quality requirements or constraints.

Question 4: Requirements from Personas (10 points)

For your scope, capture a minimum of 10 User Stories. Look at your two personas for inspiration and try to think of requirements that the personas would need to meet their needs. Try not to write requirements that are very similar to the requirements from Question 2 and 3. If you are confident you have covered all of the aspects in the Personas, you can come up with new user stories to fill out your 10.

Question 5: Requirements from Customer Journey Maps (10 points)

For your scope, capture a minimum of 10 User Stories. Look at your two customer journey maps for inspiration and try to think of requirements cover elements of the journey. Try not to write requirements that are very similar to the requirements from Question 2-4. If you are confident you have covered all of the aspects in the customer journey maps, you can come up with new user stories to fill out your 10.

Question 6: Requirements from Use Case Templates (10 points)

For your scope, capture a minimum of 8 SRS-Style textual requirements and two domain assumptions. Look at the use case templates for inspiration and try to capture all of the major elements of the templates in your requirements.

Indicate whether each requirement is a: functional requirement, a quality requirement (NFR), or a constraint. Try to capture at least two requirements of each type (FR, NFR, constraint) and two domain assumptions. If the model does not contain these different types of requirements (e.g., no quality requirements), be inspired by the content to add related quality requirements or constraints.

Try not to write requirements or domain assumptions that are very similar to the requirements from Question 2-5. If you are confident you have covered all of the aspects in the use case templates, you can come up with new requirements to fill out your 10.

Question 7: Combine Results & Reflect (10 points)

You should now have 24 SRS-style requirements and likely 6 domain assumptions, as well as 20 user stories. Merge these requirements statements (SRS, domain assumptions, user stories) into one list. Sort by topic so that related requirements are near to each other. You can use sub-headings if you like.

Consider scoping again, are there any requirements that you have captured that you now believe are out of scope? Indicate which may be out of scope by crossing them out. Be careful not to remove essential functionality.

Provide a short reflection on the completeness of your requirements. For your chosen scope, if you were to pass these requirements on to another person or team to implement, would they be complete? Would the other person or team know what to implement? Or would they need more information and clarifications. Expectation: Merged list of requirements and 1-2 paragraphs for the reflection.

Question 8: Sitemap/UX Planning (10 points)

Create a sitemap or plan of your UI screens. Show each screen as a box with a text label and a number. Indicate whether each screen is navigable from another or not. We can't say how many screens you should plan for, but the entirely of your sitemap or app planning should satisfy all requirements in your scope. Your system may be usable on a mobile phone, PC, or other devices, or all of the above. Indicate which screens are usable on which devices.

Question 9: Begin UX Design (20 points)

Screen Design (8 points)

Submit prototypes which covers the three of your planned screens. These can be screens for any type of device, but indicate the type of device intended (e.g., mobile, browser on PC, tablet, kiosk). Try not to focus on screens which are common across many applications (e.g., registration or login screens). You may use whichever prototype tool or method you like (paper, digital, HTML, whichever tool for digital).

Note: you'll need to work on these more for A3, so make sure whatever tool you use does not expire before A3 is due (e.g., some tools have a 2-week trial) (!)

Note: if you use an online prototype tool where the prototype is not downloadable (e.g., Figma), submit screenshots of all of your screens in addition to a URL. Do not just submit a URL to show us the prototype.

The dynamic nature of the screens should be somehow clear, e.g., if I click here, what happens? You can do this either by writing notes or arrows on the pictures of the various prototype screens, or via a dynamic PDF with clickable button/links (i.e. as many of the tools would produce). For paper prototypes, you may need to submit more than one picture of each screen, if, e.g., there are sub-menu or popups that appear. As you are submitting only three, not all of the buttons/menus have to have corresponding actions/screens (yet), but there should be a decent coverage of available actions (i.e., buttons, menus, etc.). Eventually (A3) the prototypes will have to be complete.

Pattern Application (6 points)

While designing your screens, begin to apply the patterns from the Tidwell book. For each screen, try to apply at least two patterns. In total, apply six unique patterns across all your screens. For each screen, indicate which patterns are applied and why (one paragraph per screen).

Expectation: prototype with three screens (and possible menus, pop-ups), list of patterns used, rationale for patterns used.

Mapping to Requirements (6 points)

The prototypes you've designed should map to/satisfy some of your requirements. List each requirement satisfied/implemented by a screen, including the requirement number and text, and say briefly (one sentence) how it's satisfied. It is likely that each screen satisfies more than one requirement.

Hint: You are unlikely be able to implement an NFR in a prototype (e.g., how do we know it is easy to use?). Map prototypes to FRs.

Expectation: for each screen, list of requirements satisfied with short description of how.

Grading Criteria

Requirements

Follow instructions in terms of number and type of requirements. Keep in mind the qualities of good requirements for both SRS requirements and user stories. Use the correct format for user stories. Use patterns as specified in the lecture notes.

Reflections

Credit is given for answering all the questions. To get full marks, answers must be clear, thoughtful and not obvious (i.e. not something mentioned in the lecture slides). Points are given for writing style, including grammar, punctuality, spelling, and readability.

Prototypes

Prototypes should be neat, readable, and easy to understand. It should be fairly clear how the screen is used, and how it satisfies the listed requirements. Transitions between the three screens should be clear. We should be able to view the screens and move between them (if prototype is not paper). Prototypes should use at least two patterns per screen and four in total. The use of patterns should make sense, be a sensible pick for the functionality of that screen, and not just be picked at random. The patterns should be applied correctly. Note: if we cannot open or use the prototype file easily (e.g., we have to download some special software) you will lose marks.