## Lab #2

Due date: 2/13

**Note**: you have to assume that every member of your team is responsible for all the relevant project activities, such as requirements gathering and analysis, design and architecture, coding, testing, management, etc. Each team should figure out how to equally distribute the work over each member in order to complete the project efficiently without giving all the work to one or two members.

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Complete the following tasks, write the  $l^{st}$  version of your project report including the outcomes of your tasks, and upload it to Titanium.

- 1. Write your team's project title, team member list with name, email address, and % contribution to the project so far including a brief description on major tasks performed.
- 2. Define your team's roles. You (your team) can assume that I (Dr. Ryu) will be your product owner.
- 3. Write a project vision and scope using the template given in class. As shown in the template, use the hierarchical numbering system to write your project report.
- 4. Give an initial iteration plan including total number of iterations, duration of each iteration, and timeline of iterations. You can refine the initial plan later as you go through several iterations.
- 5. Identify at least three most important requirements and define use cases for those three requirements. Since you use the Scrum process, you may use the casually dressed style of use case definition including at least use case ID, use case name, short description, actors, pre-conditions, normal course of actions, alternative course of actions if necessary, post-conditions, memo for possible issues to be discussed or resolved. Other use case elements are optional.
- 6. Draw a use case context diagram using UML notation illustrating the relationships among those identified requirements so far.
- 7. Create a product backlog including those requirements identified so far (in step 5). Normally product owner prepares requirements and determines the priority. However, due to the nature of this class setting, you prepare the initial requirements and priority. As the product owner I may change the priority of requirements later if necessary after I learned more about your project.
- 8. Create a sprint backlog based on the priority of those requirements. This can be changed later if I change the requirements priority.
- 9. Create a sprint burndown chart and a sprint velocity chart with initial information entered.
- 10. Give an initial cost and time estimate for the first requirement you selected and for the entire project. The cost estimate should be described in \$ amount. The time estimate should be described in man days (number of days/man). Show the process and method of your estimate, e.g., calculation process and estimation method such as Delphi. You can refine the estimate later as you go through multiple iterations.
- II. Briefly describe what was discussed in each of sprint planning meeting and daily scrum meeting. Review meeting and retrospective meeting are not applicable at this stage. Sprint planning meeting involves product owner. Since I may not able to attend all your planning meeting, you may consider any discussion with me or comments made by me as a participation in your sprint planning meeting.

Note that as specified in the syllabus, work results of this assignment must be typed and checked for English. Likewise, diagrams must be drawn using a software tool. Scanned images of hand-drawn diagrams except for pre-approved special cases, are NOT acceptable.