SWE 6633 – Software Project Planning & Management

Group Project Guidelines – Spring 2023

PLEASE NOTE: As you know, Group Project plays a significant role in this course and will count 30% toward your final grade in the course. If you do not actively participate and contribute for each deliverable, your grade for that part would be zero. No excuses, no exceptions. To get full credit you must follow the instructions carefully and also be concerned about the *quality* at every step.

- 1. The first step for your term project is to form groups. I have formed nine groups of 5 members each. Go to "Other", then "Groups" to know in what group you are.
- 2. The next step for each group is to select a group leader. Go to the discussion area created for your group for the selection of your group leader and other issues related to the group project (if your group prefers to meet somewhere else, that would be OK). I expect every member to actively participate in this process.
- 3. Once the group leader has been selected, he/she should email me so I make a note on that. If I don't hear from your group leader by this Sunday, 11:59 PM, then I'll randomly select a leader and will let you know on Monday. Please note that the main responsibility of the group leader is to coordinate project activities and make sure all members contribute equally, and report to me each member's contribution including those members who are not doing their part for each deliverable.
- 4. Please review the project (see below) so you will be prepared to begin working on it once you have your group leader.

PROJECT: High Level Project Description

Develop a project management system which keeps track of other projects. For each project, it receives a list of functional and non-functional requirements (as input, in addition to owner's name, etc.) and allows the user to view the total expended hours by requirements analysis, designing, coding, testing, and project management.

Your software should include the following set of functions.

A. A General section that allows the input of the following information:

- 1. A high level description of the software project
- 2. The owner or the project manager name
- 3. A list of project team members (which may vary as the project progresses)
- 4. A list of risks and risk status

B. Project Requirements

1. Have a feature that allows the user to enter a list of functional and nonfunctional requirements for the software project

C. Project Effort Monitoring and Tracking

- 1. Have a feature that allows the user to enter (at a daily or weekly basis) the effort in number of person hours expended on Requirements Analysis, Designing, Coding, Testing, Project Management (by each of the earlier entered requirements)
- 2. Have a feature that allows the user to view the total expended hours by requirements analysis, designing, coding, testing, project management (by each of the requirement entered).

Your team will need to indicate (in your plan) how much of the functionalities and features your team will include as part of the project; then proceed to develop the committed material.

Your Project Plan will be composed of 4 parts:

1. A description of the project (the functionalities and features), the goals for the project (e.g. product quality, product competitiveness, project effectiveness, etc.), and the major external deliverables (e.g. code, documents, presentations)

- 2. An assessment of the total cost in terms of resources (person months or person days or person hours) needed, with a short discussion on the rationale for this assessment. Note: your rationale will be based on what you know from either previous courses, work experiences, or both since we are still early in this course and may not have discussed this topic in full yet.
- 3. A schedule (based on some software engineering process that you picked) with a statement on the rationale behind the process and the schedule.
- 4. Risks and assumptions. Just list 3 or 4 top risks since this may be very long.

Notes (important–make sure to read carefully):

- 1. Each team must designate a team leader, responsible for the overall development process, and submitting the deliverables.
- 2. All submissions are at a team-based level. This means only the team leader from each group will submit the deliverables on behalf of her/his team.
- 3. You should communicate with your teammates early and begin working on the project. Make sure you break up the project so that each member of the team has a responsibility.
- 4. The project is graded at the team level. This means that each team member usually receives the same grade for each such element. However, if a student does not perform at the team level for a given element, that student should NOT expect the same grade as the other team members.
- 5. The expectation is NOT for you to make a fully functional product/application. Instead, you are expected to work with your teammates to create a minimum working prototype with whatever features you think you can reasonably implement within the semester.

This project consists of three parts (three deliverables to be submitted).

1. First deliverable (Quick Plan) Due: 2/26/2023

Second deliverable (Comprehensive Plan)
 Third deliverable (Final Product)

Due: 3/26/2023
Due: 5/1/2023

To prepare documents for each part, you can choose any format/structure/style that you want. However, it is your job/responsibility to decide what items should be included. Also you should use effective organization, correct English grammar and punctuation, acknowledge references where appropriate, and use a style and level

appropriate for a technical reader. You are encouraged to use Tables/Graphs/Charts when possible. Make sure every member carefully reviews each deliverable (and agrees with it) before the submission. Even a typo could affect the grade for the entire group.

Minimum requirements:

- 1. Title, Group #, Group leader's and Group members' name (with each member's contribution). For each member indicate one of the following:
 - A: did his/her share
 - B: did less than his/her share (explain if necessary)
 - C: did nothing
- 2. Table of Contents
- 3. Introduction
- 4. Body in sections/subsections (using Tables/Graphs/Charts when possible)
- 5. Summary
- 6. Bibliography/References

Grading your project

Your team project is worth 30 points and will be grades as follows:

- (i) Quick Plan 5 points
- (ii) Comprehensive Plan 10 points
- (iii) Develop the Product outlined in your Team Plan 15 points

Late submissions (up to two days late) will be accepted and graded for 50% of the grade. Submissions more than two days late will not be accepted/graded.

Good luck, and please let me know if you have any questions.