Name:	Date:
Name	Date

# **Term Project Requirements**

### **Project Timeline of Deliverables**

Due Date	Event
4/10	Project Proposal
4/24	Project Requirements and Specifications Peer evaluations #1 and feedback of GUI design
5/1	Status Report #1
5/8	Finalized project plan submission
5/15	Peer evaluations #2 and feedback of GUI implementation
5/22	Status Report #2
5/29	Optional – Test run and preload your software configuration on the instructor computer and test with the projector.
6/2 - 6/5	Project Presentations
6/7	Last Day to Submit Source Code and Documentation

#### Introduction

For your term project, you will think of a code project that you will work on throughout the duration of the term. This project will be a significant amount of work. Budget the estimated time of about 4 labs worth of work involved in the project. This project should be something you would be proud to display in your portfolio.

The project topic is pretty open ended and intended for you to pick a project that interests you. The important part, however, is it has to have a graphical user interface with at least two different pages.

You can choose which platform you want to develop your project on (desktop, web, or mobile) but depending on the platform, I will have additional requirements.

Desktop applications must create an installer package.

Web applications must have a deploy system and demonstrate on a web server. Page must be dynamic and cannot feature just static elements.

Mobile applications must support two separate user interfaces scenarios, cell phones and tablets. Both user interfaces must share the same code backend.

# **Project Proposal (Week 2)**

Before you even think about writing any code, you will need to write up a proposal to discuss the project idea and what your project accomplishes.

The proposal will include:

- Cover page, abstract, project justification
  - Name/acronym for your project
  - Three quarters/one page (max): –

- Attention hook (elevator pitch)
- What problem are you trying to solve
- Project justification why you picked this project (unhappy with current apps, nothing available, career area, learn additional skills in this area, etc.)

The proposal will be due by the end of Week 2.

## Requirements/Specifications (Week 3)

Once you have your Proposal written up, you will need to consider some of the things you will be implementing during for your project. These will be your Project Requirements. The requirements you list here will be the grading criteria for your final project. Consider this as your project's delivery contract with the client.

- Project specifications (10-15 minimum) will add more next draft
  - o Clear, concise, measurable, testable, etc.
  - o Arrange by 'category' (e.g., hardware, OI, UI, help documentation)
  - o Deployment methodology (desktop app installer, web deployment, etc.)
  - Instrumentation
- Rough draft of UI
- Work breakdown structure/Action List
  - Needed research to be done, materials to gather
  - Vendor/info sources/contacts
  - Organization plan make sure your project is feasible!
- Milestones achievable checkpoints of progress

The requirements will be due by the end of Week 3.

# Weekly Logs (One every week from Weeks 4-9)

Starting from Week 4 after you submit your first draft of your project requirements, you will be keeping a weekly log of activities done. The weekly log will be a very simple journal entry style paragraph explaining what you worked on for the week and what you did not get a chance to work on if you had a to-do from the prior week. The weekly log will also consist of a to-do list of the tasks you need to do the next week.

- Short paragraph of what was worked on
- If you have tasks you did not accomplish set from a previous week, a short summary describing which tasks and what caused you to not finish them.
- A to-do list of what you plan on working on the next week.

The weekly logs are primarily for yourself to keep a reminder of where to pick up from the previous week and to set small attainable goals to get the overall project completed.

#### Peer Evaluation #1 (Week 4)

You will be working with teams twice throughout the project. User interfaces should never be implemented alone. Feedback on GUI designs are important as they can demonstrate accessibility issues or alternative workflows that you wouldn't see by yourself.

You will find (at least two) other students in the class to discuss project idea and to get feedback on possible user interface design ideas. Everyone should have their project evaluated by at least two students and you should evaluate their projects.

You must commit to your repository the evaluations received from the other students and the evaluations that you have sent to the other students. There will be an evaluation worksheet which will be done together as a group.

# Status Report #1 (Week 4)

Status reports are a little different than weekly logs. Consider them a report of the overall project status to convey the work you have been doing to your manager. There will be two status reports that will be done so I can get an overall check-in of your project status throughout the term.

- Status report #1
  - Updated screenshots of UI progress/interaction designs
  - Tasks completed/progress towards milestones
  - Tasks remaining
  - Something learned so far
  - o Current unknowns or issues

Git commit of latest project code.

### Final Project Specifications and Project Plan (Week 5)

The final draft of your project requirements will be due by the end of Week 5. Any refined requirements or requirements that need to be added or removed should be done by this point.

A Project Plan consisting of a week breakdown of what requirements will be worked on and when they will be worked on and estimated completion.

### Peer Evaluation #2 (Week 6)

This is the second meeting with your peers that you met with for the first evaluation. You should have now implemented your basic user interface and have a general idea of what works and doesn't work. This evaluation will be so you can identify any possible changes that your peers can suggest to better your user interface.

A worksheet will be provided to fill out together as a group. Commit the worksheets to your repository.

# Status Report #2 (Week 7)

The second status report should generally cover your progress where the finish line is in view. You should only have a few tasks remaining. Here is where you can also convey some of the main project hurdles or issues that you are encountering. Not all projects go perfectly as planned and you should decide if you are going to not be able to complete any requirements.

- Status report #2
  - Updated screenshots of UI progress/interaction designs
  - Tasks completed/progress towards milestones
  - Tasks remaining
  - Something learned so far
- Current unknowns or issues
  - Do you feel like there are any requirements that cannot be completed before the due date?

## Final Status Report (End of Project)

The final status report will be a debriefing of everything you have accomplished during the project. You should include some of the successes and issues you have ran into and anything that you did to combat those issues. Two to three paragraphs.

#### **Presentation (100 Points)**

You will need to give a presentation of your project to your fellow students. Your presentation should focus on the following:

- 1. Project description. What does it do? Why did you pick this project?
- 2. Project demonstration: show-and-tell
- 3. Lessons learned during development: What roadblocks or issues did you run into? Any helpful tips to give to your fellow students to learn from any mistakes?

Your presentations should be 5-10 minutes long. If you take less than 5 or more than 15 minutes, I will take points off.

Presentations will take place during dead week both during the labs and class time.

Due to the circumstances of the class being online, you will have to present from your own computer via the video conferencing platform selected by the instructor. You will have the weekend before the presentation's date during lab to test if your computer can present correctly.

It is highly recommended that everyone does a test run though of their presentation before the presentation date so any unforeseen technology issues can be addressed.

## **Reserving your Presentation Day**

Depending on the number of students we have, we may not be able to do all presentations in one day. If that's the case, you will have a choice to present either on Lecture day or Lab day of dead week. You can select which day you want to preset on in the Canvas forum post. If you do not sign up, you will be randomly assigned a day.

#### **What To Submit**

Everything will be submitted via Git in your Labs Azure DevOps repository. I expect to see regular Git commits for your project over the course of the term. Here are all the files I expect to see in your repository:

- Project
  - All source code.
  - Any specific build scripts or important files or libraries required for compiling
  - o A README file that provides instructions on how to build.
  - Two screenshots showing your user interface working.
- Documentation (Separate Microsoft Word documents)
  - Weekly Activity Logs
  - Week 2 Proposal
  - Week 3 Specifications/Requirements
  - Peer Evaluations
    - Evals you did for other projects
    - Evals you received from other students
  - Status Report #1
  - o Status Report #2
  - Final Status Report
- Presentation
  - Any presentation materials
    - Notes
    - Slides
    - Demonstration code

# **Grading Rubric and Information**

# **Documentation**

Metric	Description
Weekly Activity Log (25 points)	Created all weekly activity logs.
Project Proposal (25 points)	See Project Proposal section.
Project Specifications/Requirements (25 points)	See Project Specification section.
Project Plan (25 points)	See Project Plan section.
Check off (Mandatory) (5 points)	My stamp of approval of proposal
GUI Evaulations (50 points)	Two sets of evaluations:  Received from others Copies of ones you sent
Status Report #1 (10 points)  Status Report #2 (10 points)	A summary of what has been accomplished so far and what is left to do. A timeline of what is left to do.
Final Status Report (25 points)	Summary debriefing of what was accomplished
Project Presentation (25 points)	The presentation introduced the project's purpose and described the functionality. The demonstration correctly displayed the intended output of the project.
Total: 200 points	

# Project

Metric	Description
	Implemented all the project requirements as specified in this document.
Requirements (40 points)	Implemented all the functionality as described and agreed upon during the proposal.
Documentation (10 points)	README document containing all the project details to build and configure as described in this document.
Source Code (50 points)	Source code compiles with no errors and is sufficiently commented. Code implements all features defined in project scope. A minimum amount of error checking and exception handling preventing the code from crashing from erroneous user input and input validation.
Total: 100 points	

**Grand Total: 300 Points**