Template Project 1 Page

Instructions: Create a document, and edit (and delete as appropriate) the text in red during the appropriate week. Do NOT change what you have written in previous weeks! If you prefer, you may embed a Word/PDF document under each Week header. Do not link to a Google Doc; if you want to use a Google Doc you can export to PDF and embed the PDF in this page. Submit your document each week in the Project Assignment.

Week 1: Project Proposal

Planned Working Time

List at least 3 hours each week (include the date and time) **outside of class** that you will spend working on this project (with your partner, if you have a partner)

You will have and additional 1-3 hours of time during class each week to work on the project

Project Pitch

Think about how a pitch on a crowdsourced funding platform (like Kickstarter or GoFundMe) might look. You should have several paragraphs describing your project, and some "faked" screenshots. For the "faked" screenshots, you should mock-up the way the program will look when it runs, without actually writing the program. At this point, your "faked" screenshots may be hand written or typed up in a text editor; they should include a sample of program text output.

Include information about how the user interacts with the program (e.g. how does the menu-driven interaction work, or is there some other type of interaction?).

UML Diagram

Include a UML diagram or other description of the classes and interfaces you anticipate needing to write, including details about fields and methods, and class/interface responsibilities.

Learning Outcomes

Briefly outline how your project will demonstrate each of the required LOs.

- LO1: Employ design principles of object-oriented programming
- LO2: Construct programs utilizing single and multidimensional arrays
- LO3: Construct programs utilizing object and classes in object-oriented programming, including aggregation
- LO4: Construct programs utilizing inheritance and polymorphism, including abstract classes and interfaces
- LO5: Construct programs utilizing exception handling
- LO6: Construct programs utilizing text file I/O

Timeline

Create a timeline of goals to accomplish each week. You may start with the sample timeline template below, but should fill in project-specific details.

	Sample Project Timeline Goals
Week 1	 Write the project proposal. Plan the code. Determine classes (with fields and methods) and interfaces and their responsibilities. Begin writing project page.
Week 2	 Write code for classes X, Y, Z. Develop test cases and test code as it is written. Determine where exception handling is needed to ensure the program fails gracefully. Update project page with progress details. Submit code written so far.
Week 3	 Finish writing classes. Test, test, test, debug, and test some more. Update project page with progress details. Submit code written so far.
Week 4	 Debug any remaining problems. Create project demonstration video, including information about how each LO is used as part of the project. Submit final code on Canvas, and add videos to project page.

Note: It is acceptable for your plan and timeline to change as you write the code.

Week 1 Additional Deliverables:

- Deliverable 2 (Middle Developer Explanation): Explain your Object Oriented project design in a video (each partner explains separately). Submit in Project 1 Middle Developer Explanations (Make video at home) (https://sdccd.instructure.com/courses/2437335/assignments/19657994) and also consider embedding the video in the project page.
- Deliverable 3 (optional, on the Canvas <u>Project 1 submission</u>
 (https://sdccd.instructure.com/courses/2437335/assignments/19658035): If you have started writing code, submit the code you have written so far, even if it is not complete and/or has compiler errors.

Week 2: Updates

Work on your Week 2 goals from your project timeline.

Week 2 Deliverables

Deliverable 1 (on the Canvas Project 1 submission

(<u>https://sdccd.instructure.com/courses/2437335/assignments/19658035)</u>): Submit the code you have written so far, even if it is not complete and/or has compiler errors.

Deliverable 2 (here): Update your Canvas Project 1 page from Week 1. Please add to the page - do not delete any content from Week 1:

- Share a screenshot of the text interaction with the user.
- Add a journal-like entry about your experience writing code this week to your Canvas final project page:
 - What design changes have you decided to make, and why did you make them?
 - What challenges have you encountered?
 - What do you still need to do to complete the project?
- Update your timeline goals, if needed.

Week 3: Updates

Work on your Week 3 goals from your project timeline.

Week 3 Deliverables

Deliverable 1 (on the Canvas Project 1 submission

(<u>https://sdccd.instructure.com/courses/2437335/assignments/19658035)</u>): Submit the code you have written so far, even if it is not complete and/or has compiler errors.

Deliverable 2 (here): Update your Canvas Project 1 page from Week 1. Please add to the page - do not delete any content from Week 1 or Week 2:

- Share a screenshot of the text interaction with the user.
- Add a journal-like entry about your experience writing code this week to your Canvas final project page:
 - What design changes have you decided to make, and why did you make them?
 - What challenges have you encountered?
 - What do you still need to do to complete the project?
- Update your timeline goals, if needed.

Week 4: Project Wrap-up

Finish writing any other necessary code and debug (although hopefully you were debugging as you wrote the code!).

Week 4 Deliverables

Deliverable 1 (on the Canvas Project 1 submission

(<u>https://sdccd.instructure.com/courses/2437335/assignments/19658035</u>): Submit the code you have written so far, even if it is not complete and/or has compiler errors.

Deliverable 2 (here): Update your Canvas Project 1 page from Week 1. Please add to the page - do not delete any content from Weeks 1, 2, or 3:

- Share a screenshot of the text interaction with the user.
- Add a journal-like entry about your experience writing code this week to your Canvas final project page:

- What design changes did you make during the project, and why did you make them?
- What challenges did you encounter?
- What could you do to expand on and improve your project?
- If you were to start the final project from scratch, what would you do differently?
- Optionally, you may choose to share your code with your classmates by linking to your Eclipse project here.

Deliverable 3 (here): Share your video demonstration of your project and explanation of how and why the project utilized the concepts from the Learning Objectives. Aim for your video to be around 5 minutes, and do not exceed 10 minutes in length. Each partner must create their own video to demonstrate Senior Developer proficiency.

If you have not previously demonstrated Middle Developer proficiency for a LO, use your project code to make a video for that LO. Senior Developer proficiency will not be evaluated until Middle Developer proficiency is demonstrated.