

ASE 420 Homework 4 (Team Projects)

- 25 points in total
- Use the 'TeamName-HW#' directory as a template directory and use grading_team.docx for evaluations.
- Change the directory name; for example, **TeamA-HW#** is the directory name if the team leader of TeamA submits the homework (# should be replaced with the HW number).
- Zip the directory to make a zip file, for example, **TeamA-HW#.zip** (# should be replaced with the HW number), to submit them on Canvas.

Download and Read HW8

- The team project structure is similar (almost the same) to the Individual project.
- Use HW8 to understand (1) the GitHub project structure and (2) deliverables.

Make a plan for the Team project

This is a team effort, but only the team leader submits the deliverables.

Business Logic

We develop the Tetris application using Python/PyGame.

Requirements

Each team member develops at least three features. For example, they can add sound when the users click a keyboard. Each team member makes requirements for the features.

Prototype

HW3 requires students to read and understand the prototype code.

Design

When students successfully finish HW3, they refactor the prototype into an OOP-based application. Meet to decide what OOP design they use and use the design to add features. Make a UML class diagram (if necessary, make an object or sequence diagram) for the design.

Code Review

Each team should meet regularly to discuss their code and remove the code smell.

Redesigning, Refactoring, and Revising Tests

Students redesign, refactor, and revise tests whenever necessary. Write down all the code smells your team members sensed and how they could remove the code smell through refactoring and applying design patterns.

Presentation and Documentation

Make design documents that include all the documents the team makes. Make a manual to explain the features to clients. Make a PPT or PDF slide file for the presentation.

Todo

1. Set up your Team GitHub repository.
 - Use GitHub to make design/code/tests/documentation in a team.
 - The team leader's GitHub repository is used.
 - Each team member forks from the leader's repository to contribute and make pull requests to merge their contributions.
2. Check your Canvas project pages - team, leader, and member pages.
 - Use Canvas pages as a tool for scheduling and information sharing.
3. Make team rules.
4. Choose other team project tools, including communication, documentation
 - Each team uses VCS for team project development.
5. Setup Schedule
 - Make milestones and a deadline
6. Write your plans on the Canvas project page (both team leaders and members).

- You should let stakeholders know what you are working on
7. Start the project following your plan.
- Don't change the original plan, but keep a record of the changes and progress.

Deliverables

1. For Individual Project (HW8), each team member makes their page and reports it to the team leader.
 - Team leaders check them and grade them.
2. For Team Project, each team member makes their project page and reports it to the team leader.
 - Team leaders check them and grade them.
3. Team leaders upload the grading report (grading_team.docx) on Canvas (HW4).