[CS304] Team Project - Sprint 1 (10 points)

> Presentation: week 9 lab session (no rearrangement)

Part I. Architecture & UI Design (2 points)

Please write a report that includes the following information.

1. Architectural Design

Please describe the software architecture of your team project. The description should include:

- Diagrams: any type of diagram is okay, as long as it clearly illustrates the architecture (e.g., components, role of each component, the interactions between components, etc.)
- Natural language description: necessary explanations of the architecture (e.g., why you use this architecture, hidden assumptions that the diagram doesn't show, etc.).

2. UI Design

Before you start implementing UI, it's better to have a concrete UI design to guide implementation and facilitate communication.

Please provide the UI design for **primary user interfaces** for your system, e.g., the webpages for primary features of the system, the UI for IDE, the UI for each level of the game, etc.

You DON'T have to provide UI design for common interfaces like user login page. You should provide UI design for the primary user interfaces with respect to the notable features of your own team project.

You should include images as the UI design output in the report. You could use any tools for this purpose (you could even draw sketches by hand). Yet, we recommend you to explore **wireframe tools** that are widely used by professional UI/UX designers.

Note that UI design is different from UI implementation, and they will be graded separately. You should have a separate UI design even if you've already implemented your UI. You should not take the UI implementation (or the snapshot of it) as UI design.

Part II. Process & Collaborations (2 points)

1. Github Project board for the 2nd sprint

Based on the current progress, update the **GitHub Projects** board for the second sprint (week 15/16). Specifically, you may update the user stories, tasks, priority, assignees, start time and duration to guide the next sprint.

2. Git collaboration

Please demonstrate how your team collaborate using `git`. We'll check the commit distribution and branches on GitHub. In particular, on your GitHub team repo page, click `Insights -> Contributors`, you could see

the commit stats for all team members; click `Insights -> Network`, you could see the commit history in branches.

Please follow git best practices. Bad practices (e.g., only 1 branch, only 1 giant commit, only 1 contributor, meaningless commit messages) will incur score penalties.

Part III. Sprint Review (5 points)

It's time for your team to showcase your work to customers and other stakeholders! This is your opportunity to present what you have accomplished so far.

While you may briefly explain the system architecture and UI design, remember that customers are most interested in seeing a working product. Run your project and demonstrate the features you have implemented, highlighting how they align with user needs.

Keep in mind that stakeholders expect steady progress, and they might be unhappy if your progress is slower than expected. For instance, if you plan to deliver 5 notable features for the product but can only demonstrate one functional feature by the end of Sprint 1, stakeholders might raise doubts about your team's ability to fulfill all requirements before the final deadline.

The sprint 1 review will be held on **the lab session of week 9**:

- Each team will give a 10-minute presentation. You may prepare slides, which are, however, not required.
- Every team member needs to show up in the sprint review.

No score will be given if you missed the sprint review.

Kick-out notification: if you want to kick out a team member, please also mention the reason during the sprint review.

Part IV. AI Usage (1 point)

1. AI usage for design

Complete this survey to report your AI usages for architectural and UI design. One submission per team is enough.

2. AI usage for coding

For any code generated by AI, you should add the following information with the exact format.

```
AI-generated-content
tool: xxx
version: xxx
usage: xxx
```

Below is an example of how you should describe your AI usage in Java.

```java
public class FibonacciExample {
    /**
     * AI-generated-content
     * tool: Copilot
     * version: latest
     * usage: I selected the fibonacci method and ask Copilot to generate a main
method for it.
     * I slightly adapt the generated code by modifying the value of n.
     */
    public static void main(String[] args) {
        int n = 10;

        for (int i = 0; i < n; i++) {
            System.out.print(fibonacci(i) + " ");
        }
    }

    /**
     * AI-generated-content
     * tool: ChatGPT
     * version: 3.5
     * usage: I used the prompt "generate a fibonacci Java program", and
     * directly copy the code from its response
     */
    public static int fibonacci(int n) {
        if (n <= 1) {
            return n;
        } else {
            return fibonacci(n - 1) + fibonacci(n - 2);
        }
    }
}
```

You could use **comment** to add such description to any code, configurations (e.g., in `xml` format), and documentation (e.g., in `markdown` format), which all support comment. You must use **the exact string "AI-generated-content"** to start the description.

You don't have to add the comments if you didn't use AI in the code. However, any code without such comments, if detected to be similar to other code during duplication detection, will be treated as plagiarism and incur 100% score penalty.

Submissions

1. Submitting the design report (Part I)

The design document should be submitted by each team to your team repo on GitHub.

- Upload the design document, with the name `design-teamID.md`, to the team repo.
- The file format of design document should be `.md`. Other file format such as `.docx`, `.txt` will NOT be accepted.

2. GitHub Projects & Insights & Code (Part II & III)

The **GitHub Projects** board should be updated in your team project repo. We'll directly check the `GitHub Projects` board and the `Insights` page of your team repo. Similarly, we'll check your code and commit history directly on GitHub. You don't have to submit additional report for this part.

3. AI usage survey (Part IV)