

## Project Status Report II - October 3, 2023

Github link - <https://github.com/Shanthaaa/CS673-project-team-2>

### *Team Members -*

1. *Yuchen Zheng - Backend Developer*
2. *Xinyu Yang - Frontend Developer*
3. *Yuan Gao - UI Designer*
4. *Chandana Nandan - UI Designer and Document Writer*
5. *Shanthakumar Sivakumar - QA and PM*

### **Yuchen Zheng (Backend Developer) -**

This week, I focused on expanding the work I started last week. I have made significant progress in the development of our backend components. Here's a summary of my contributions

`api.py` - I have written and expanded the code for the ``api.py`` module, which is responsible for handling API requests. It is closely integrated with the ``algorithm.py`` module.

`config.py` - The ``config.py`` module has been set up to provide the fundamental application framework. Any future additions or changes to the application can be made in this area.

`error_handler.py` - In this module, I have listed several common errors and provided the necessary code to handle them. This can be further expanded or modified as needed.

The code updates have been pushed to our GitHub repository. I've also optimized the code format and added basic comments to enhance code readability.

### **Xinyu Yang - (Frontend Developer)**

I have been focusing on frontend development, particularly working with Three.js within the React framework.

Here are my key accomplishments -

Learning - I spent time learning how to integrate Three.js into our React application. I gained proficiency in using tools like axes helper and orbit controls to manipulate objects and set their positions.

UI Development - I have constructed a basic index page for our user interface. While it currently resembles a Rubik's Cube, it's not yet interactive.

### **Yuan Gao - (UI Designer)**

During this week, I delved into web design and development. My efforts have been focused on enhancing the visual elements of our project's webpage.

Here are the highlights -

Inspiration - I explored various web pages with a similar style to draw inspiration for the structure of our project's webpage.

GIF Animation - I have been working on creating a GIF animation for our project's cover page. The goal is to add dynamic elements to prevent a static appearance.

To achieve this, I've been researching the feasibility of using AI tools to generate relevant images and videos, although I haven't achieved the desired results yet.

Login Page Design - I have nearly completed the design of the login page.

### **Chandana Nandan - (UI Designer and Document Writer)**

This week, I made significant progress in both the user interface (UI) design and documentation aspects of our Rubik's Cube Solver and Simulator project.

#### **1. UI Designer -**

I actively contributed to the learning of the user interface (UI) for the login page. Did the screening part in framing the designs and ensuring that the visual elements align with the project's objectives. Contributed to create a user friendly and visually appealing interface , closely with the UI design team.

We had an internal meeting to thoroughly understand the design tool and its capabilities between Yuan Gao and me. This knowledge exchange session helped streamline the UI design process and ensure consistency in the visual appearance of the application.

**2. SRS Documentation Work** - I made sure to document the project's requirements and progress.

Took the lead in preparing the Software Requirements Specification (SRS) document, which serves as a comprehensive reference for the project's functionalities, constraints, and specifications. I ensured that the SRS document was meticulously crafted on the notes and discussion according to the class discussion while meeting high quality standards.

Also I created a Rubix cube page process image and Rubik's Cube data diagram, helping to visualize the data structures and relationships within the project.

This diagram aids in conveying data flow and organization to the development team.

**3. Meeting and Communication** - I actively communicated within the team. Organized and conducted meetings between UI team member to discuss project updates, challenges, and solutions.

Made sure to take the notes and status of each team member to create a status report. Documented the minutes of these meetings ensures that all team members have access to the latest information and decisions.

**4. Project Status Report** - I was responsible for preparing the project status report. This report serves as a critical communication tool to understand the progress and contributions of each team member.

I compiled and presented the status updates, ensuring clarity and transparency.

### **Shanthakumar sivakumar - (QA and PM)**

**Team Meetings:** Successfully organized and conducted our weekly team meeting. These session ensured that everyone is well-informed and prepared for the upcoming development phase.

**User Stories:** Meticulously crafted detailed user stories for all four web pages. These stories serve as the blueprint for our development team, providing a robust foundation to kick-start their work.

**Collaborative Scope Definition:** Engaged closely with our developers to define and finalize the project's scope and objectives. This collaborative effort sets the stage for a seamless and efficient development process.

**Interface Design Document:** Initiated discussions with our developers regarding the interface design. I have requested a comprehensive document emphasizing the need for a user-friendly and visually appealing website.

QA Framework: Established the groundwork for our upcoming QA cycles. Outlined meticulous testing methodologies and strategies to be implemented once the development phase commences.

Preliminary QA Checks: Conducted initial QA checks ensured alignment with our project requirements and quality standards.

## **Minutes of meeting**

Meeting Minutes - October 1, 2023

Time - 9.00pm - 10.00 pm EST

### **Attendees -**

Chandana Nandan,  
Shanthakumar,  
Xinyu Yang,  
Yuan Gao.

### **Agenda -**

#### **1. Design and Development Progress:**

Shared updates on the project's design and development.

Explored ideas to enhance the visual appeal and interactivity of the Rubik's Cube Solver and Simulator.

Discussed integrating dynamic elements to make the interface engaging.

#### **2. Task Review -**

Each team member discussed their recent work.

Xinyu discussed learning experiences with Three.js within the React framework and the creation of a basic index page.

Yuan provided insights into web design and efforts to incorporate dynamic elements like animations.

Chandana shared updates on UI design, documentation, including the SRS document, Rubik's Cube data diagram, and project status report.

Shantha conducted the meeting and discussed the requirements.

### **3. Future Work and Timeline -**

Emphasized the importance of adhering to the project timeline.

Discussed upcoming tasks, including completing the Rubik's Cube manipulation features and enhancing the user interface.

Coordinated efforts to ensure that everyone's work aligns with the project's goals.

Agreed to meet again on October 7, 2023, to review progress and address any challenges.

### **Action Items -**

Yuchen to continue backend development, focusing on algorithm integration and error handling.

Xinyu to further develop the user interface, with an emphasis on Rubik's Cube manipulation.

Yuan to refine the design aspects, exploring dynamic visuals for the project.

Chandana to continue UI design and documentation efforts.

All team members maintain effective communication and meet deadlines to ensure project success.

Next Meeting - October 7, 2023.

Overall, the team has been actively working on their respective tasks, and we're making steady progress toward our project goals.