Bilkent University
Department of Computer Engineering

CS 319- Object-Oriented Software Engineering

CATCH UP

Final Report

Group 1H

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Final Report

Project short-name: project title

1 Implementation Process

After the second iteration of design report, we started to implement the project. Our software architecture is three tier architecture. Therefore, we splatted up to groups. The first group is responsible for the database and server of the website. Other group is responsible for the design and interface of the website. Each of the groups works in an integrated way to accelerate the developing process. Each group have tasks respectively: Onat, İlke and Yaren configure the PostgreSQL and AWS, connect the Amazon Cloud Service to the IntelliJ and developed the model entities, services, and repositories for the database, and controllers for the REST API. Bilgehan and Zeynep designed the interface for our web application and Yaren also did the connection between REST API and the interface of our web application. Then, we combined both parts.

During the implementation process, we always kept in contact to work in an integrated way. We used PostgreSQL for our database, AWS for our cloud service, Spring Framework for operating the database, React.js, CSS3, and HTML5. For Spring develop, we used IntelliJ, whereas for interface we used Visual Studio Code.

In conclusion, we have tried to complete promised functional and non-functional requirements in our analysis report. However, we cannot finish the coding process to implement all functionalities. For now, we did not use domains, but our application just works in local host. Even though our database works properly, we could not connect the REST APIs and interface. It is our goal to complete our code with minimum changes and shortcomings.

2 Lessons Learnt

In the implementation process, we learned about the hardships of group work, and also because of the current situation remote group work. We also experienced how hard it is to learn and combine different software languages and tools. However, it is good for us to learn and experience those technologies and hardships to adopt ourselves to future work industry.

3 Step-by-step Build Instructions

Our application does not work on any domain for now, however someone who wants to build our software can use localhost. Therefore, in order to build our project, the user should follow the steps respectively:

- An IDE that supports Spring Framework of Java such as IntelliJ should be downloaded.
- A code editor that supports writing React.js such as Visual Studio Code should be downloaded.
- Node.js should be installed.
- In order to avoid errors related to essential packages, react-router, react-icons.
- Lastly, the user has to type “npm install” and “npm start” into the terminal.

4 User's Guide

Figure 1

When a user first enters to our website, he/she is welcomed with the demonstrated page which is sign in page.

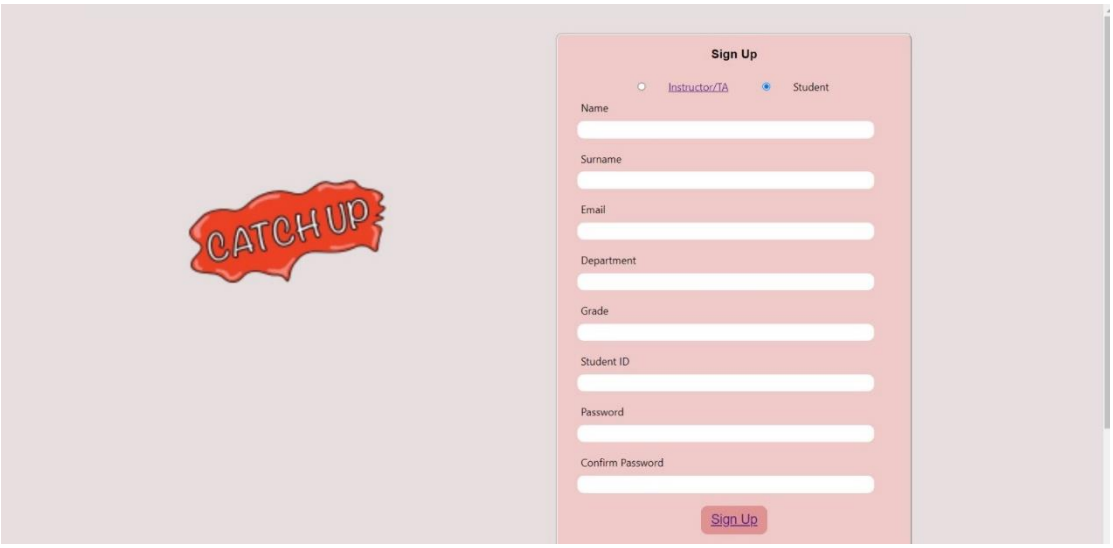

Figure 2

User can sign up to the system as student or instructor/TA through the demonstrated page.

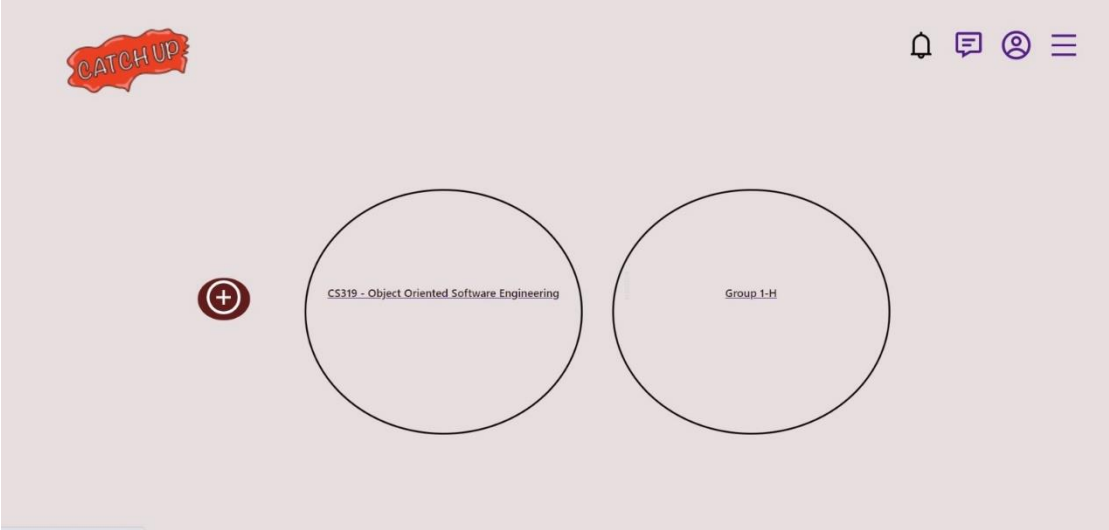

Figure 3

After that, the user encounters with dashboard page where he or she can choose the course or the group page.

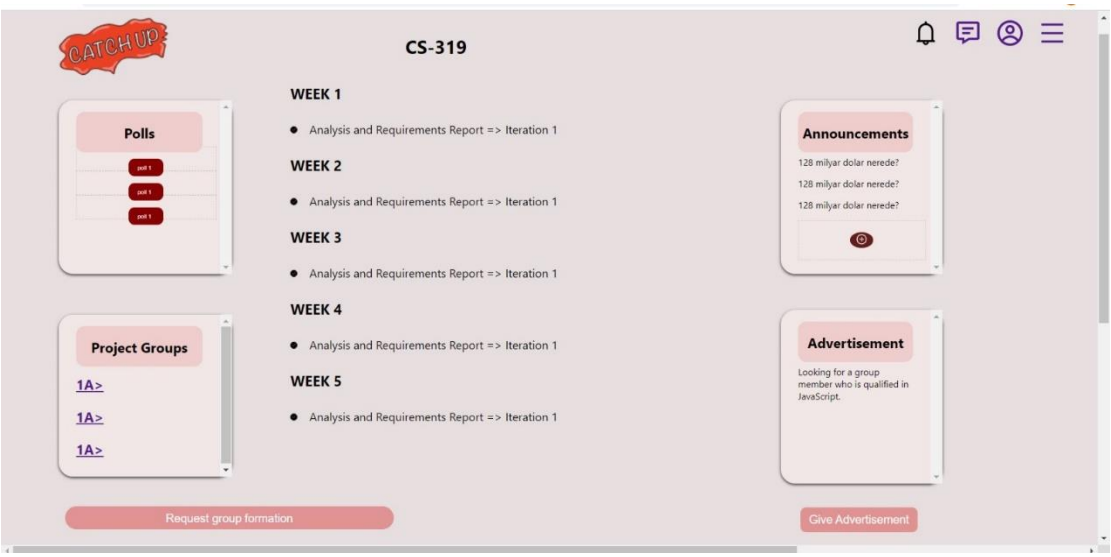

Figure 4

If the user chooses the course page at the dashboard page, the demonstrated figure will appear which is the course page including weeks, polls, announcements, assignments, and advertisements.

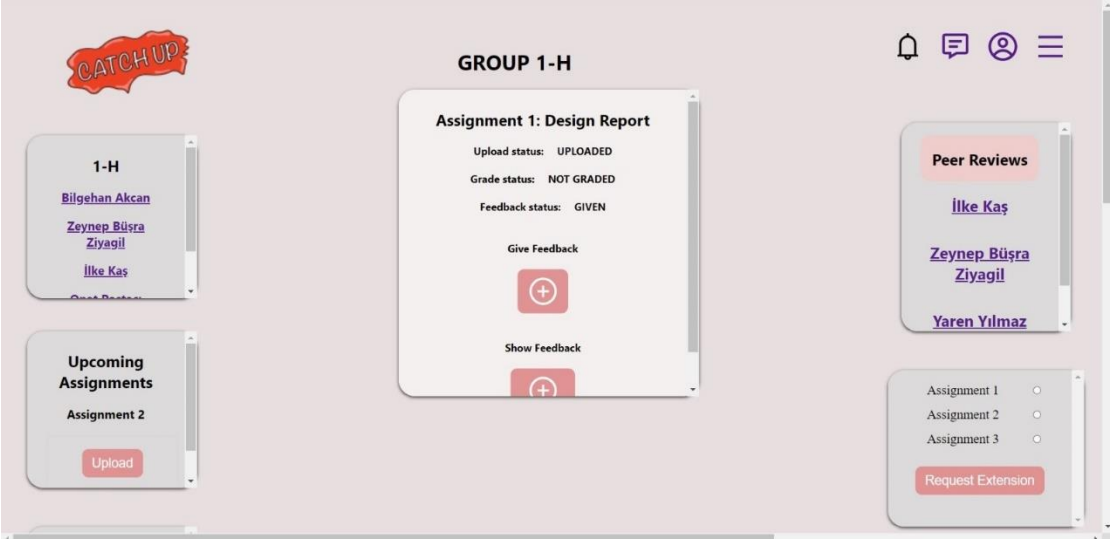

Figure 6

If the user chooses the group page from the dashboard page, the demonstrated page will appear which is the group page including members, assignments, peer reviews.

Figure 7

User can click on the profile icon above and directed to this page which is profile page including the necessary information.

5 Work Allocation

İlke Kaş

- Use Case, Class and Activity Diagrams for Requirements and Analysis Report (Iteration 1)
- Use Case, Class and Sequence Diagrams for Requirements and Analysis Report (Iteration 2)
- Design Report
- Back-end

Zeynep Büşra Ziyagil

- Sequence Diagrams for Requirements and Analysis Report (Iteration 1)
- Sequence and Class Diagrams for Requirements and Analysis Report (Iteration 2)
- Design Report
- Front-end

Bilgehan Akcan

- State and Sequence Diagrams for Requirements and Analysis Report (Iteration 1)
- State, Sequence and Activity Diagrams for Requirements and Analysis Report (Iteration 2)
- Design Report
- Front-end

Yaren Yılmaz

- Use Case, Class and Activity Diagrams for Requirements and Analysis Report (Iteration 1)

- Class, Use Case and Sequence diagrams for Requirements and Analysis Report (Iteration 2)
- Design Report
- Back-end

Onat Postacı

- Use Case, Class and Activity Diagrams for Requirements and Analysis Report (Iteration 1)
- Activity, State and Class Diagrams for Requirements and Analysis Report (Iteration 2)
- Design Report
- Back-end