

## CS673 Meeting Minutes

Team Name: Bug Busters

Date: 02/18/2025

Time: 2 hours

Location: online

Facilitator: Lei Zhu

Minute Taker: Yuheng Xia

Attending: Lei Zhu, Boyuan Ge, Yuheng Xia

Objective (or Agenda):

Discuss whether to switch the project to web and discuss project architecture.

Current Status (include the reference to related documents):

1. We initially hoped to develop a dual app for iOS and Android, but we may not have that much time.
2. We need to determine the technologies used in the project and the basic architecture of the project.

Discussion:

1. Discuss whether to switch the project to web

In these two weeks of courses, we have learned that a product cannot pursue a perfect product without considering its developers and development time. Because it is highly likely that the company will go bankrupt and the product cannot be completed. We initially hoped to develop a dual app for iOS and Android. There are two ways to develop dual end apps: one is to develop apps using native languages, and the other is to develop apps using hybrid frameworks. To develop an app using native languages, we need to develop two front-end components and learn two languages, Kotlin (Android) and Swift (iOS). But our group only has 3 people, and we need to complete the development in a relatively short period of time, which is obviously impossible. Another approach is to use a hybrid framework, where we only need to develop a front-end that can adapt to both Android and iOS. However, currently there are only React Native and Flutter hybrid frameworks available. We have a certain foundation in React Native, but the React Native framework is currently a bit outdated and may cause trouble for product maintenance in the future. We are not familiar with Flutter and need to learn, but we don't have that much time left. Therefore, we ultimately decided to turn to developing the web because this way we can use our familiar technology React, and we only need to develop a front-end that can adapt to both computers and mobile devices on Android and

iOS. Obviously, developing the web is more suitable for our developers and development time.

2. discuss project architecture:

We discussed 3 architectures: Client-Server Architecture, Multi-tier Client-Server Architecture Service-Oriented Architecture. We analyzed the advantages and disadvantages of each of them. We chose Multi-tier Client Server Architecture because we wanted our project to be more modular and better managed, but we didn't want its development cost to be particularly high. Multi-tier Client Server Architecture does not handle all services by a single server like Client-Server Architecture. And it also does not require deploying multiple services and managing them like Service-Oriented Architecture, which incurs high development costs.

3. Confirm Technical selection:

MySQL + Spring Boot for backend, React for frontend, RESTful design for API.

Accomplishments/Decisions:

1. Develop Web instead of App.
2. Change React Native to React.
3. Confirmed the basic architecture of the project.
4. Confirmed the technology used in the project(React + Spring Boot + MyS)