**Advanced Web Applications Project Documentation (TEAM2)**

**The project developers**

The project is developed by the second-year Information Technology students from Oulu University of Applied Sciences:

- \*\*Ashif Moon\*\*, [GitHub account]( <https://github.com/AshifkhaMoon>)

- \*\*Lufei Wu\*\*, [GitHub account]( <https://github.com/lufeiwu22>)

- \*\*Minyi Zhang\*\*, [GitHub account](<https://github.com/minyizhangg>)

- \*\*Ziqi Li\*\*, [GitHub account]( <https://github.com/ZiqiLi28>)

Ashif Moon: Ashif Handles the development of fundamental components for the backend driver app, and refining the UI design of the consumer app.

Lufei Wu: Lufei Wu takes responsibilities for the frontend development of the Consumer App, and API tests.

Minyi Zhang: Minyi Zhang is charge in the frontend development of the Touch Screen App, Authentication for the consumer app and React tests.

Ziqi Li: Ziqi Li holds the reins in backend development, the dashboard page for both the driver and consumer.

In the development of our team's project, each member has assumed primary responsibilities. Simultaneously, everyone is engaged in tasks such as searching and discussing details taking on distinct functions in apps. We collaborate to aid the main responsible person in problem-solving when necessary. Everyone has been active equally.

**Project Overview**

The objective of this project was to develop a parcel locker system application which in total has three apps Consumer App, Driver App, Touch Screen Simulator also a Parcel Generator Robot. The Project enables users to register, log in, send and receive parcels, and keep track of the status of their parcels in the lockers and after that a driver will pick up the parcel and deliver it to its destination. The ultimate iteration of the system is intended for deployment on the public Internet. We have successfully accomplished the framework of our Advanced Web Application Development course.

**Working application on the public internet**

**Project Video Demonstration**

[**https://youtu.be/dcpeYxDh-vM**](https://youtu.be/dcpeYxDh-vM)

(Link will be presented later)

**Test Plan**

<https://github.com/Team2-LumIEx-organization/Doc/blob/testplan/TestPlan_12.13.docx>

**Project Description**

The project has been developed by following Agile software development method and Kanban framework template in GitHub Projects has been used to implement it. Communication of our team has been constant throughout the project and the project progressed as expected. Our team has been meeting evenly on campus and remotely on Teams. Also, teacher meetings have been held weekly and everybody has been able to attend. Overall, our team has been self-organizing, communicative, and able to deliver well-functioning application based on the project requirements.

**Technologies used in the project**

User Interface:

- HTML and CSS

- React

Front-end framework:

- React.js

Backend:

- Node.js

- Express API

Database:

- MongoDB

Deployment:

- AWS

Tools

- UI Design: Figma

- Code Editor: Visual Studio Code

- Database Design: MongoDB Compass

- Version Control: Git and GitHub

**Application Architecture Diagram**

图形用户界面, 图示, 应用程序

描述已自动生成

**Interface description**

The system offers various functionalities through distinct perspectives, including:

- User Registration and Login: Users can sign up for an account and log in to access the system.

- Parcel Delivery Interface: Users can input and dispatch details for a new parcel.

- Receive Parcel Interface: Users can access information about incoming parcels.

- Parcel Status Tracking: Enables users to monitor the status of parcels within the locker system.

- Locker Interface: Simulates a touchscreen interface for lockers, facilitating user interaction with the locker system.

**Installation and Usage Guide (Local Deployment)**

Follow these steps to get started with the app development:

1. Clone the repository which you want to develop:

```bash

git clone

```

2. Navigate to the project's directory:

```bash

cd Backend /ConsumerAppFrontend /DriverAppFrontend /touchScreenSimulator ```

3. Install the dependencies:

```bash

npm install

```

4. Start the development server:

```bash

npm start

```

1 Backend -> bash npm run create-driver npm run create-locations npm run dev

2 ConsumerAppFrontend -> bash cd ConsumerAppFrontend npm start

3 DriverAppFrontend -> bash cd DriverAppFrontend npm start

4 touchScreenSimulator -> bash touchScreenSimulator npm Start

5 Robot -> bash cd Backend npm run run-robot

\*\*\*\* - Note: You might need to modify the .env files to run the Project. The above steps may need to be adjusted depending on the environment. \*\*\*\*

**The Github link of our project**: <https://github.com/Team2-LumIEx-organization>