SP-6 Red Time Mileage Tracker (w GPS)

Software Requirements Specifications, Senior Project, Section 2, Fall 2024, 08/27/2024, Professor Sharon Perry

Project Team

Roles	Name	Major responsibilities	Contact (Cell Phone)
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1.0 Introduction

1.1 Overview

The Time Mileage Tracker with GPS is a mobile app enabling employers to ensure employees are efficiently managing time and mileage. Employers can access data on employees' activities to verify time and mileage reports. The app aims to improve productivity, reduce user input errors, and provide accurate records for employers.

1.2 Project Goals

To develop a web application that employers can use to track their employees' mileage to assist in optimizing driver routes, reducing spending, and reimbursing drivers.

1.3 Definitions and Acronyms

GPS- Global Positioning System

iOS- iPhone Operating System

Wi-Fi- Wireless Fidelity

MB- Megabyte

RAM- Random Access Memory

SSL- Secure Sockets Layer

HTTPS- Hypertext Transfer Protocol Secure

JSON- JavaScript Object Notation

Email- electronic mail

1.4 Assumptions

The users will be provided with company devices that meet the requirements of the application

2.0 Design Constraints

The application supports different user roles which have different access levels and proper user authentication.

2.1 Environment

Internet connection of WI-FI or cellular data is required, as it is a web-based application that uses GPS

2.2 System

Android device with version 8.0 or later

IOS device with version 16.0 or later

3.0 Functional Requirements

3.1 Login

Create account

Login With Username and Password

Password recovery

Admin Login

3.2 Display Home Page

Options from Home Page

3.3 Navigate to GPS tracking Page

3.4 Navigate to admin page

3.4.1 Admin reports

4.0 Non-Functional Requirements

4.1 Security

SSL and HTTPS will be used to maintain security when transferring the GPS data to the admin application page

4.2 Capacity

Data will be sent over the internet to the external database to be stored for later viewing

5.0 External Interface Requirements

5.1 Software Interface Requirements

Data Formats: will include JSON to store and maintain the session of a user tracking history that JSON will be sent to the database for storage

5.2 Communication Interface Requirements

Web Sockets: Will be used to transfer and transmit data to and from the device within the web application