
Software Requirements Specification

for

FindMyCoolie

Version 1.0 approved

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<date created>

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Revision History

Name	Date	Reason For Changes	Version
FindMyCoolie			1.0

1. Introduction

1.1 Purpose

Meet FindMyCoolie, a game-changing web app that makes your train travel very easy or effortless. Imagine one click connecting you with a reliable coolie who'll take care of your heavy luggage. No more struggling with bags during your journey – FindMyCoolie is here to simplify it all. Just click, connect, and enjoy a stress-free ride with the help of a dedicated coolie. Travel lighter, travel smarter with FindMyCoolie!.

1.2 Document Conventions

The document is created by keeping in mind the IEEE template for system requirement. The system features are written based on the functional point of view.

1.3 Intended Audience and Reading Suggestions

Intended Audience

Users can use FindMyCoolie for connect with coolies. Our user-friendly web app connects user with reliable coolies(porters) who are ready to assist you in carrying your bags, ensuring a hassle-free journey.

Reading Suggestions

- This SRS contains every major and minor details of the Application.
- Users should read beginning with the overview sections and proceeding through the System features to understand the proper way of using the app.
- Developers should read beginning with the overview sections and proceeding through the overall description, system features, non-functional features.

1.4 Product Scope

Navigating busy train stations with heavy luggage can be a challenging task, but with FindMyCoolie, we've simplified the process for users. Our user-friendly web app connects users with reliable coolies (porters) who are ready to assist users in carrying bags of him, ensuring a hassle-free journey. Simply input your travel details, and our app will match you with available coolies at your departure and arrival stations. Users can say goodbye to the stress of managing luggage on your own

By joining our platform, coolie will gain access to a network of travelers seeking assistance with their luggage at train stations. This means more job opportunities and a chance to showcase your skills in providing excellent service. FindMyCoolie not only connects coolies with potential clients but also allows him to build a reputation through user reviews, establishing trust and credibility. Coolie can take control of schedule, set rates, and enjoy the flexibility of working when and where they want.

1.5 References

None

2. Overall Description

2.1 Product Perspective

FindMyCoolie is a standalone web application designed to revolutionize the way train travelers connect with coolies at various train stations. This product is an innovative solution, introducing a new and self-contained service to streamline luggage assistance during train journeys. While it may integrate with external mapping and location APIs for enhanced functionality, FindMyCoolie operates independently, ensuring a user-friendly and efficient experience. The system comprises major components such as user registration, a matching algorithm, scheduling, and a review system. The context of this product revolves around providing a seamless, on-demand connection between users and coolies, transforming the travel experience.

2.2 Product Functions

- **Language Selection:** Users will have the flexibility to choose their preferred language for the platform's interface.
- **User Registration and Authentication / Login:** Allows users to register on FindMyCoolie by providing necessary details such as name, email, and password.
- **Trip Details Input:** Empowers users to input their travel details, including departure and arrival stations.
- **Real-time Location Tracking:** Provides a real-time tracking feature for users to monitor the location of their assigned coolie.
- **Ratings and Reviews System:** Implements a feedback system where users can rate and review coolie services.
- **Payment:** Allows users to make payments for the coolie services seamlessly through integrated payment gateways.
- **View Coolie Profile:** Allows users to view detailed information about a coolie.
- **Request Coolie Assistance:** Enables users to request assistance from a coolie based on their travel details.
- **In-app Messaging:** Facilitates communication between users and coolies through an in-app messaging feature.
- **Review and Feedback:** Allows users to provide feedback on the coolie's services.

- **Settings:** Provides users with the ability to customize preferences, notifications, or any other settings related to their FindMyCoolie experience.
- **Log Out:** Allows users to securely log out from the system.
- **Customer Support:** Users can access customer support services in case of any issues
- **User Profile:** Allows users to keep track of their historical interactions, ratings, and reviews, providing a comprehensive view of their FindMyCoolie journey.

2.3 User Classes and Characteristics

The different user classes involved in the software are:

Sl. no	User Classes	Characteristics
1.	Travelers	Regular users seeking luggage assistance during train journeys and utilize the platform to connect with coolies for efficient and convenient travel.
2.	Coolies	Service providers offering assistance with luggage at train stations, Use the platform to connect with travelers and showcase their skills.
3.	Administrator	Administers the platform to maintain authenticity and trust. Verifies user and coolie profiles for legitimacy, Resolves disputes and ensures compliance with platform policies, Monitors and enhances overall system security, Manages and oversees user and coolie verification processes, Collaborates with customer support to address escalated issues.

2.4 Operating Environment

The software will operate in a web-based environment, compatible with commonly used browsers. It requires stable internet connectivity for both users and coolies to access and utilize the platform effectively.

2.5 Design and Implementation Constraints

When we will design and implementing our concept of FindMyCoolie then we have to design frontend as well as backend part. In the frontend part we will use HTML, CSS, Javascript,

Bootstrap, Tailwind css, Sass, Reactjs and for backend we will use Nodejs and Express.js and for database we will use MongoDB and Constraints include adherence to security measures, compatibility with specific APIs for mapping and location services, and reliance on external technologies for seamless operation.

2.6 User Documentation

User documentation, including manuals, on-line help, and tutorials, will be delivered with the software. The format and standards for documentation will adhere to industry best practices

2.7 Assumptions and Dependencies

Assumptions include users and coolies having internet-enabled devices and coolies being responsible for their transportation. Dependencies involve reliance on external APIs for accurate location and mapping data.

3. External Interface Requirements

3.1 User Interfaces

Logical Characteristics: The user interface will feature a user-friendly design, including input fields for trip details, real-time coolie tracking, and an interactive map. It should be consistent with industry standards for ease of use.

Standard Buttons and Functions: The interface will incorporate standard buttons for actions such as requesting assistance, viewing coolie profiles, and providing feedback. Consistency with industry-standard UI elements will be maintained.

3.2 Hardware Interfaces

- Devices: Phone or Computer.
- Processor: Pentium or higher.
- RAM: 100MB or higher.
- A proper internet connection of more than 1kbps.

3.3 Software Interfaces

- Operating System: Linux, windows, Mac etc.
- Tools for Development: HTML, ReactJS, Express.JS, Node.JS, MongoDB etc.
- Programming languages: Javascript.
- Since the application will also be web-based, a proper server is required to host the Web-application.
- In addition to all the above mentioned software interfaces, separate software can be required for application frameworks, SMS and email servers and much more to come.

3.4 Communications Interfaces

In-App Messaging: The platform will feature an in-app messaging system to facilitate communication between users and coolies. It will adhere to industry standards for messaging interfaces.

Notifications: Users and coolies will receive notifications for matched requests, coolie arrivals, and other important updates. Standard communication protocols will be used for timely and reliable notifications.

4. System Features

The basic features of the software are listed below

4.1 Select Language

4.1.1 Description and Priority

The feature of language selection allows you to select any language that the user might prefer in which they want to access the application.

4.1.2 Stimulus/Response Sequences

S1: Upon launching the app for the first time,
R1: a page displays a variety of regional languages to choose from.
S2: After selecting their preferred language,
R2: After the choose the languages page will redirect to login/sign-up page.

4.1.3 Functional Requirements

REQ-1: Language Preferences – The software will provide users the option to use the application in their preferred regional language.

REQ-2: Dynamic Language Display – The software will dynamically showcase available languages based on the user's detected location.

4.2 Login/ Sign-up

4.1.1 Description and Priority

In this feature user or coolie can register himself and after the registration they can login himself.

4.1.2 Stimulus/Response Sequences

S1: When the user intends to log in or sign up, they navigate to the FindMyCoolie Login/Signup Screen.

R1: The Login/Signup screen is strategically positioned as a focal entry point, ensuring easy access for users

S2: Providing Credentials.

R2: New users are guided to input essential information, while existing users log in using their known credentials.

R3: For new signups, a verification process may be initiated.

4.1.3 Functional Requirements

REQ-1: Inputting Credentials - The FindMyCoolie platform should provide a user-friendly interface for users or coolie to enter their username, phone number, or email along with the password securely.

REQ-2: Logging In - The software must seamlessly redirect users to the homepage upon correct credential entry. In the case of incorrect credentials, an intelligible error message must be displayed for user guidance.

REQ-3: Forgot Password - FindMyCoolie must initiate a secure process when users opt for the forgot password functionality. The system should promptly send a verification code and a password reset link to the user's registered email and phone number.

4.3 Admin verification for Coolie Registration

4.1.1 Description and Priority

The Admin Verification feature adds an additional layer of validation to ensure that registered coolies on the FindMyCoolie platform are legitimate and meet the required criteria. Admin verification is crucial for maintaining the integrity of the platform.

4.1.2 Stimulus/Response Sequences

S1: A coolie completes the registration process with some documentation(Aadhar card/ Voter ID Card or other important gov id).

R1: The system notifies the admin about a new registration awaiting verification.

S2: Admin reviews the registration details.

R2: The admin decides whether to approve or reject the registration based on predefined criteria.

S3: Admin approves the registration.

R3: The coolie receives confirmation of successful registration and gains access to the platform.

S4: Admin rejects the registration.

R4: The user or coolie is notified of the rejection, and access to the platform is denied.

4.1.3 Functional Requirements

REQ: Admin Verification for User and Coolie Registration - Admins validate the authenticity of user and coolie registrations, allowing only verified individuals to use the FindMyCoolie platform.

4.4 Search for coolie

4.1.1 Description and Priority

This feature empowers users, especially travelers, to find suitable coolie services by entering information such as PNR or train name. The search functionality caters to the specific needs of users seeking assistance at train stations.

4.1.2 Stimulus/Response Sequences

S1: The user clicks on the input button.

R1: The input button becomes active, allowing users to input information.

S2: User enters PNR or train name as well as inputs the quantity of bags(small/medium/large).

R2: The system may provide auto-suggestions or relevant recommendations based on the entered information.

S3: User clicks on the "Search for Coolie" button.

R3: The system processes the entered information and presents a list of available coolies matching the criteria.

4.1.3 Functional Requirements

REQ1: Searching - Users can search for coolie services at train stations by entering information such as PNR or train name. The system should facilitate a seamless search experience, offering relevant suggestions and displaying coolies that match the specified criteria.

4.5 View coolie's profile

4.1.1 Description and Priority

This feature allows users to view detailed profiles of individual coolies, offering insights into their ratings, reviews, and service history. Users can make informed decisions before selecting a coolie for assistance.

4.1.2 Stimulus/Response Sequences

S: The user selects a coolie or clicks on "View Profile."

R: The system displays a comprehensive profile page with information on the coolie's ratings, reviews, and service history.

4.1.3 Functional Requirements

REQ: View Coolie Profile - Users can access and explore the detailed profile of a coolie before making a selection. The system should present relevant information to assist users in making informed decisions.

4.6 Request coolie assistant

4.1.1 Description and Priority

The Request Coolie Assistance feature empowers users to seamlessly request the services of a coolie within the FindMyCoolie platform. Users can specify their needs, such as assistance with luggage, and connect with available coolies.

4.1.2 Stimulus/Response Sequences

S: User selects the "Request Assistance" option.

R: The system prompts users to provide details about the assistance needed, such as the type and quantity of luggage.

S: Coolies receive the assistance request.

R: Available coolies are notified of the user's request and can accept the job.

4.1.3 Functional Requirements

REQ: Request Coolie Assistance - Users can initiate requests for coolie assistance through the platform, specifying their needs.

4.7 Coolie request cancellation

4.1.1 Description and Priority

The Coolie Request Cancellation feature empowers coolies to cancel assistance requests from users when necessary. This functionality ensures flexibility and efficient allocation of coolie resources on the FindMyCoolie platform.

4.1.2 Stimulus/Response Sequences

S: Coolie receives an assistance request.

R: The system notifies the coolie about the incoming request, providing details about the assistance needed.

S: Coolie decides to cancel the assistance request.

R: The system prompts the coolie to provide a reason for cancellation.

S: Coolie submits the cancellation reason.

R: The system records the reason and cancels the assistance request, notifying the user of the cancellation.

4.1.3 Functional Requirements

REQ: Coolie Request Cancellation - Coolies can cancel assistance requests, providing a reason for the cancellation.

4.8 Payment process – cash or online

4.1.1 Description and Priority

This feature enables users to proceed with the payment for coolie services. Users have the flexibility to choose between making a cash payment or opting for an online payment through a secure gateway.

4.1.2 Stimulus/Response Sequences

S1: The user selects a coolie and decides to proceed with payment.

R1: The system prompts the user to choose between making a cash payment or an online payment.

S2: User selects Cash Payment.

R2: The system confirms the selection, and the user can complete the transaction in cash during or after coolie assistance.

S3: User selects Online Payment.

R3: The system redirects the user to a secure payment gateway for online transaction processing.

4.1.3 Functional Requirements

REQ: Payment Process - Users can seamlessly proceed with the payment process, choosing between making a cash payment or opting for an online payment through a secure gateway.

4.9 Real-time location tracking

4.1.1 Description and Priority

This feature enables users to track the real-time location of the assigned coolie after the payment is completed. Users can stay informed about the coolie's current location, ensuring a seamless and transparent service experience.

4.1.2 Stimulus/Response Sequences

S1: User completes the payment for coolie services or user will payment in cash after server.

R1: The system activates real-time location tracking for the assigned coolie.

S2: User accesses the "Track Coolie" feature.

R2: The system displays a map interface showing the coolie's live location..

4.1.3 Functional Requirements

REQ: Real-Time Location Tracking - After completing the payment or user will payment in cash after server, users can track the real-time location of the assigned coolie to enhance transparency and ensure a smooth service experience.

4.10 In-App messaging

4.1.1 Description and Priority

The In-App Messaging feature enables seamless communication between users and coolies within the FindMyCoolie platform. Users can easily connect with assigned coolies, ask questions, and receive real-time updates.

4.1.2 Stimulus/Response Sequences

S1: User initiates a conversation with an assigned coolie.

R1: The system opens an in-app messaging interface, allowing users and coolies to exchange messages.

S2: Coolie responds to a user query.

R2: Users receive real-time responses from coolies, enhancing communication and coordination.

4.1.3 Functional Requirements

REQ: In-App Messaging - The platform includes an in-app messaging feature, facilitating direct communication between users and coolies..

4.11 Customer feedback or rating

4.1.1 Description and Priority

This feature allows users to provide feedback and ratings based on their experience with the coolie's assistance. It ensures a continuous feedback loop for service improvement and maintains transparency.

4.1.2 Stimulus/Response Sequences

S1: Coolie assistance is completed.

R1: The system prompts the user to provide feedback and rate the coolie's service.

S2: User submits feedback and rating.

R2: The system records the feedback and updates the coolie's overall rating.

4.1.3 Functional Requirements

REQ: Customer Feedback and Rating - Users can provide feedback and ratings after the coolie's assistance is completed, fostering a culture of continuous improvement and transparency.

4.12 Coolie Performance Analatics

4.1.1 Description and Priority

This feature focuses on analyzing the performance of coolies based on customer feedback, ratings, and service history. It provides insights into coolie efficiency, reliability, and overall customer satisfaction.

4.1.2 Stimulus/Response Sequences

S1: Users submit feedback and ratings after coolie assistance.

R1: The system records the feedback and updates the coolie's overall performance metrics.

S2: Coolies complete services, accumulating service history.

R2: The system updates individual coolie profiles with the latest service records.

4.1.3 Functional Requirements

REQ: Coolie Performance Analytics - The system analyzes coolie performance based on customer feedback, ratings, and service history, providing valuable insights for continuous improvement.

5. Other Nonfunctional Requirements

5.1 Performance Requirements

<If there are performance requirements for the product under various circumstances, state them here and explain their rationale, to help the developers understand the intent and make suitable design choices. Specify the timing relationships for real time systems. Make such requirements as specific as possible. You may need to state performance requirements for individual functional requirements or features.>

5.2 Safety Requirements

<Specify those requirements that are concerned with possible loss, damage, or harm that could result from the use of the product. Define any safeguards or actions that must be taken, as well as actions that must be prevented. Refer to any external policies or regulations that state safety issues that affect the product's design or use. Define any safety certifications that must be satisfied.>

5.3 Security Requirements

<Specify any requirements regarding security or privacy issues surrounding use of the product or protection of the data used or created by the product. Define any user identity authentication requirements. Refer to any external policies or regulations containing security issues that affect the product. Define any security or privacy certifications that must be satisfied.>

5.4 Software Quality Attributes

<Specify any additional quality characteristics for the product that will be important to either the customers or the developers. Some to consider are: adaptability, availability, correctness, flexibility, interoperability, maintainability, portability, reliability, reusability, robustness, testability, and usability. Write these to be specific, quantitative, and verifiable when possible. At the least, clarify the relative preferences for various attributes, such as ease of use over ease of learning.>

5.5 Business Rules

<List any operating principles about the product, such as which individuals or roles can perform which functions under specific circumstances. These are not functional requirements in themselves, but they may imply certain functional requirements to enforce the rules.>

6. Other Requirements

<Define any other requirements not covered elsewhere in the SRS. This might include database requirements, internationalization requirements, legal requirements, reuse objectives for the project, and so on. Add any new sections that are pertinent to the project.>

Appendix A: Glossary

<Define all the terms necessary to properly interpret the SRS, including acronyms and abbreviations. You may wish to build a separate glossary that spans multiple projects or the entire organization, and just include terms specific to a single project in each SRS.>

Appendix B: Analysis Models

<Optionally, include any pertinent analysis models, such as data flow diagrams, class diagrams, state-transition diagrams, or entity-relationship diagrams.>

Appendix C: To Be Determined List

<Collect a numbered list of the TBD (to be determined) references that remain in the SRS so they can be tracked to closure.>