RAILWAY COMMODITY RESERVATION SYSTEM PROJECT REPORT

Software Engineering lab(CSD-327)

Created By-

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INTRODUCTION

Rail communication is Associate in Nursing old-age and proved to be the safest mode of transportation. Further, Indian railway is one amongst the biggest railway networks in India. We tend to square measure aware that for the Indian railways, there are a variety of traveller reservation systems identified to the rail passengers and out of that the IRCTC RPS is that the most refined one and therefore the hottest among the general public. In parallel to public transportation, Indian railways also are significantly effective for artifact transportation.

GOAL

To create a social media web application project using modern software development design tool techniques and paradigms.

APPROACH

For the application, we have taken an **Iterative approach** where multiple releases will be made by us and we will create and update requirements as we progress. Initially any feature feasibility will be discussed and its requirements will be looked into. A method will be proposed to implement that feature. After successful implementation, the functionality will be extensively tested to check any bugs and errors. If any encountered, the the whole process will be re-evaluated and tested again. When cleared we will move on to the next feature and repeat the same process. After all features have been implemented, the application will be deployed.
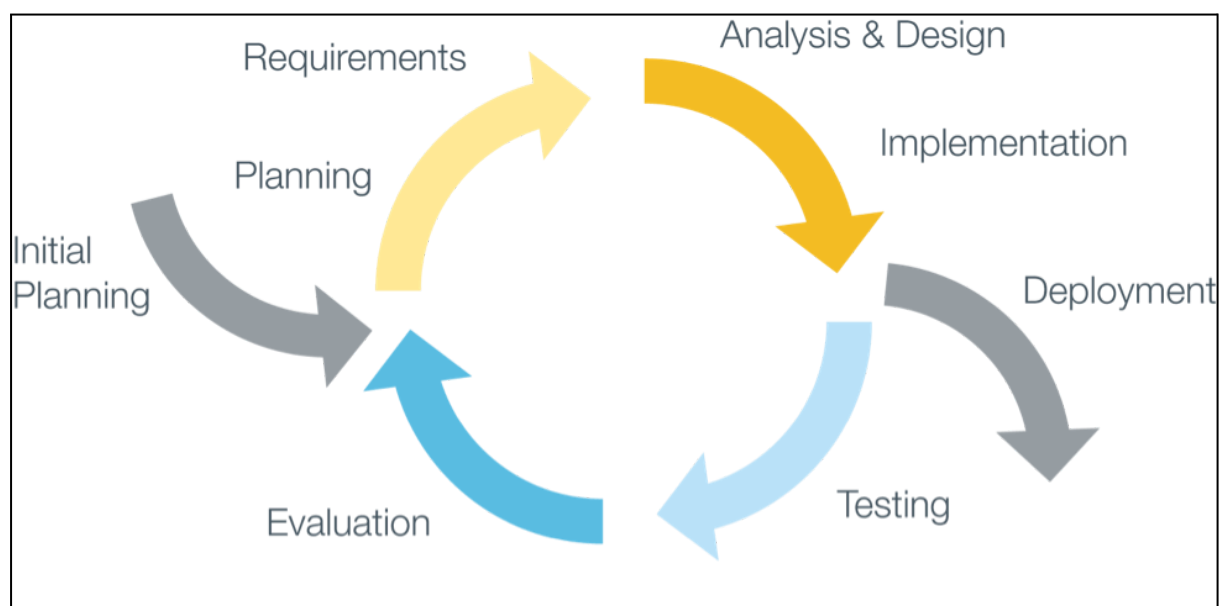
TECH STACK

We will be using Vanilla HTML/CSS and EJS for frontend development and Firebase for Backend development storage. Both are modern frameworks used in the recent years to create full stack applications. **EJS** will be used for generating HTML markup with plain Javascript interface for most of the functionality and Web Hooks will be used for communicating with the backend. We will using the firestoreHosting will be done through the **Heroku hosting**, otherwise other means will be used depending on the needs.
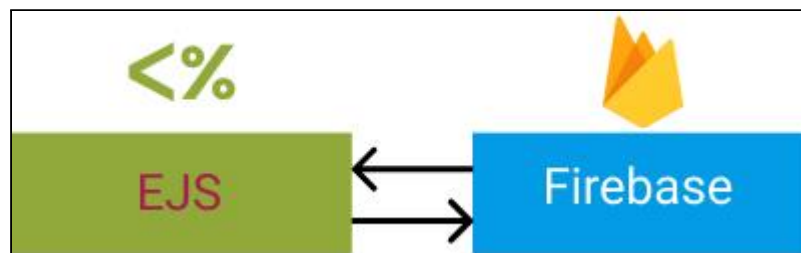
WORKFLOW AND APP LAYOUT

Following is the workflow for setting up the work environment, different features -

● Setting up of the base of the project and setting up a work environment.

● Creating a version control system for the project for efficient releasing and development in later stages.

● Authentication, more specifically Signing In with google.

● Creating a search page , all trains page and booking page. All the logging in activities and bookings must be saved to the database properly

● Ticket cancellation

● Signing out of the current session.

Following is an activity diagram showing the app layout and various features
of our Railway booking Web Application -

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                        │ Sign in with Google │
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  │ Sign Out  │          │  Give Input  │        │ Check booked Ticket │
  └───────────┘          └──────────────┘        └────────────────────┘
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        │                ┌──────────────┐        ┌────────────────┐
        │                │ Choose Train │        │ Cancel Ticket  │
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        │                ┌──────────────┐
        │                │ Book Ticket  │
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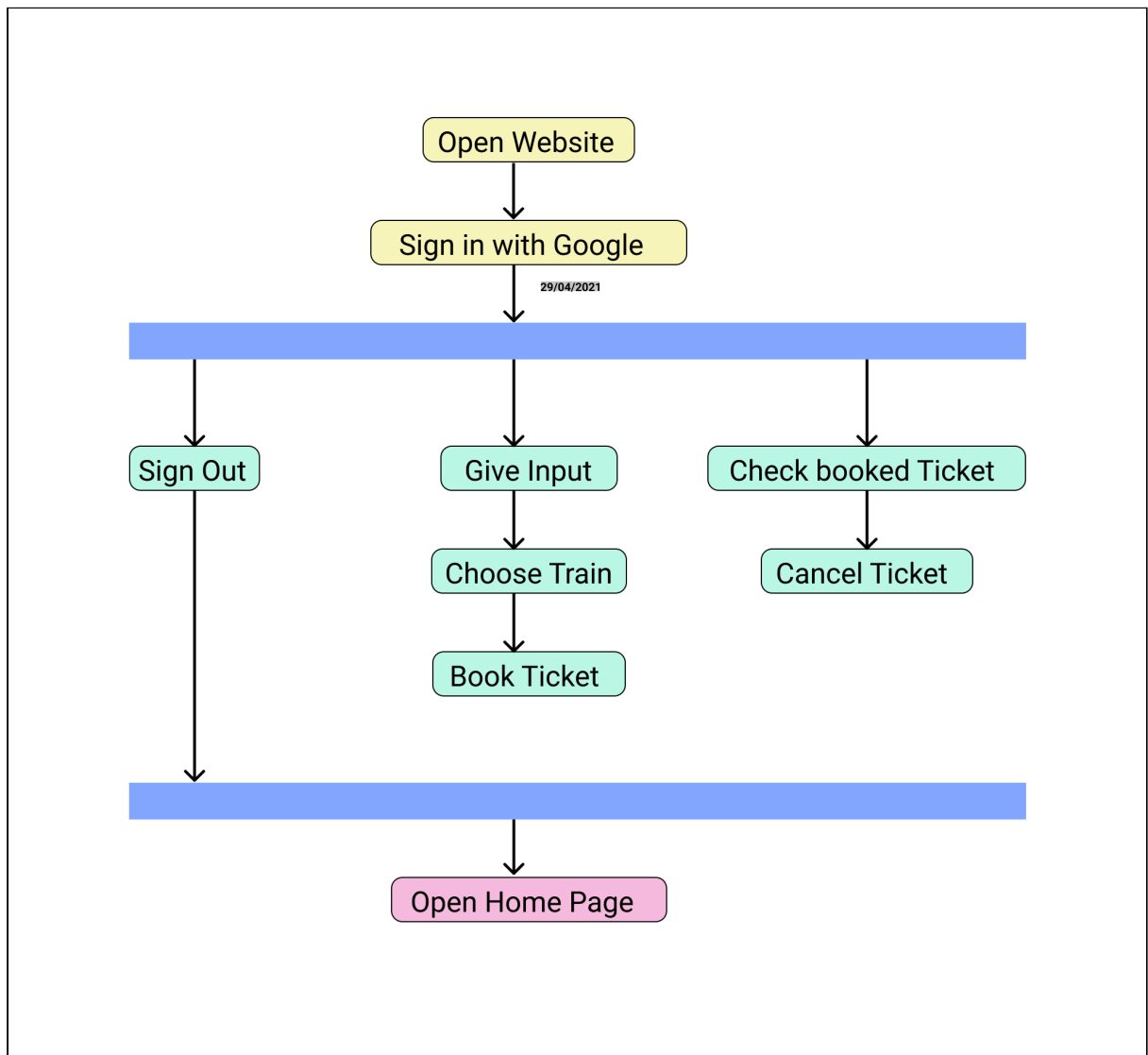
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