**PROJECT SCOPE DOCUMENT**

**INTELLIGENT POST-LOCKDOWN MANAGEMENT SYSTEM FOR PUBLIC TRANSPORTATION**

**PROJECT SUMMARY:**

Post-Lockdown, it will be difficult and risky to allow public transportation without any safety measures. There must be a proper mechanism to maintain social distancing and manage the frequency of public transport services. Thus, there is a need for an application that will schedule the timing of transportation, avoid over-occupancy, and maintain social distancing.

There is a certain insecurity among people who use public transport in recent times. This app will assist users, assure and make them aware too.

The following points will be considered during app development:

- Contactless ticketing options like passes or digital payments
- Avoid over-occupancy of transport services
- Maintain social distancing by allocating distant seats to users
- Safety check whenever the user books a ride
- Proper guidelines about sanitation, mask while boarding
- Verification of booking at the time of boarding

**PROJECT REQUIREMENTS:**

- The web-app must be an integrated version of all the transport services
- It must be easy-to-use, convenient, safe for users
- It should book rides efficiently and avoid over-occupancy of the transport
- It should follow social-distancing and schedule transport timing, seats accordingly

**FUNCTIONAL REQUIREMENTS:**

- The web-app must allow admins and users to register/login
- Users should be able to access all public transport services from web-app
- The app should take the source, destination input and provide the available timing for transport

- The app must properly assess the risk associated with users before booking
- The app must provide convenient ways for payment
- Users should be able to book their ride, get a confirmation and QR code which they will have to get verified while boarding
- The app must allocate distant seats to users

## TECHNICAL REQUIREMENTS:

- The web-app must cater to the users' needs and provide appropriate responses
- The related data collected from users should be kept safe and secure
- There must be proper navigation between events of web-app
- It must be capable to handle any errors/issues
- The web-app must be efficient

## SOFTWARE REQUIREMENTS:

- Python3
- IBM Cloud
- IBM Cloudant
- IBM Watson Assistant
- Node-RED

## PROJECT DELIVERABLES:

- Creation of GitHub and IBM Accounts
- Creation and Activation of Necessary IBM Cloud Services
- Collection of Relevant Transport Data and Organization in the Database
- Creation of Corona Symptom-Checker Bot
- Creation of User Interface with Node-RED

## PROJECT TEAM:

- Raj Mesta
- Shubham Shinde
- Prasad Mistary
- Shalaka Thorat

**PROJECT SCHEDULE:**

| TASK NAME | ASSIGNED MEMBER | SCHEDULED DATE |
|---|---|---|
| Project Planning | Shalaka Thorat | 20-21 June 2020 |
| Exploring IBM Cloud Services | All Members | 21-22 June 2020 |
| Data Collection for Cloudant | Prasad Mistary | 23-24 June 2020 |
| Corona Symptom-Checker | Raj Mesta | 23-25 June 2020 |
| UI Creation using Node-RED | All Members | 25-28 June 2020 |
| Submission of Project Codes | All Members | 29 June 2020 |