Product Report Document

for Construction Disruption

System Name

Fair Journey

Expected Audience

Disabled people with mobilization issues in Melbourne

Version No. 1

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Presented by TP101

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1. Introduction

1.1. Purpose

The purpose of this document is to provide detailed information about what is developed, implemented and delivered for the project sponsors thereby outlining the support and maintenance of the Fair Journey website application system.

1.2. Scope

This report documents how the application has been implemented in a working environment. It defines steps to implement it, manage and test how well the application is performing to ensure it is effective, reliable, feasible, valuable and usable.

1.3. Project Overview

The main idea of this project is to identify the locations experiencing construction disruptions due to the construction of buildings, revamp of buildings and roads, obstructed roadways and footpaths due to these construction activities. Melbourne city has ongoing development of roads, railways, buildings and more. Hence there is disruptions majority of the time in various locations around the city.

Our Website: https://fairjourney.me/

2. Proposed System

2.1. Importance of Fair Journey System

The website displays accessible public toilets across the Melbourne CBD, especially near places where the user plans his journey. It is going to be significantly useful for our target users as it has several features like showing the road construction information, road surface information, planning alternative routes, pedestrian volume, my location, accessible public toilets and elevators information, generating .pdf files containing route information and directions, educational articles, weather information and events in Melbourne to help them understand and plan their travel using Fair Journey website.

2.2. Benefits of Fair Journey System

The fair journey web application will make a vast difference for the target users as they provide real-time information about the recent disruptions by highlighting the locations and differentiates it from the other roadways present on the website. The users will be able to easily decide if they can access those pathways with their supporting device during such obstructions. This one-stop access to the website will benefit the users to plan their travel activities in advance and help them have a hassle-free journey.

2.3. Target Audience

The Fair Journey project demonstrates to help notify the users with long-term and temporarily disabled people with mobility issues, especially who are traveling all by themselves. The target audience experience difficulties due to unawareness of the city disruption conditions due to the various reasons described in the above section. This can be challenging as they use wheelchairs, rollators, scooters and many other supporting devices for mobilization and experience difficulties on damaged surfaces.

2.4. Application Management

Skilled and professional laborers are required during the implementation stage and delivery stage in future. Once the website is hosted on to the server, it can be independently accessed by the end users. The support document will comprise the training manual explaining more about the process of executing the functionalities of the system.

The application is very simple and user-friendly while being very resourceful and innovative about the functionalities it exhibits for the target users. It does not require any human interaction and hence it is very much self-learned and executed according to the user's needs. The website requires user credentials/admin credentials in the non-guest mode, however, for a real-time end user, the system is easily accessible on one click of the website link. Below are the details of maintaining resources for future enhancement.

Roles	Number of Resources	Skills Required	Cost to set-up
Software Developer	1	Django, Python, CSS scripting	Logo design, icons for website
Business Analyst	2	System analysis and design, User Interface and Usability, gathering requirements and convert them to functional spec	Cost of analysis depends on the system complexities.
Network/Security Engineer	1	System administration, understanding architecture, administration, operating systems, develop cyber security designs	High risks involved in the security threats
Software Test Engineer	2	Functional testing, Integration testing, system testing, acceptance testing, regression testing, defect lifecycle, impact analysis	Produce a defect-free system

3. Data Sources Access Information

The Fair Journey application makes use of the datasets from two main sources in Melbourne that are available openly and upon request to data. The dataset is available in different formats like .csv and API formats. These data are updated in several frequency conditions such as hourly, daily, weekly and few of them monthly too. The project is using most updated data and ensures there are regular updates to provide the right information at the right time. We have accessed data from:

1. Victoria Roads
2. City of Melbourne

More details about the data sources, frequency of source updates and system updates, its granularity and access details and copyright details are available in the Maintenance documentation.

4. Risks and Impacts

- In the Fair Journey project, all data and information about the construction of projects come from open datasets or open data API belonging to VIC governments and VIC road.
- The accuracy and real-time data will be determined by the frequency of updating the data from governments and VIC road.
- Once the government or VIC road postpone data update or no longer provide data API, the whole system may provide lagging or wrong notification to clients or cannot provide normal functions for clients.

5. Security Concerns

- Redirection HTTP to HTTPS, users can type both https and HTTP header to access the websites, however, the system will automatically redirect HTTP to https to make secure connections.
- Firewall system blocks all the connections except the authorized one, decreasing the amount of information that malicious users can be retrieved by scanning tools.
- Delete the default admin username for project fair journey and change it to another one, which is harder for malicious users to guessing or crack the admin credentials.
- Implement login portal as a first entry in websites to restrict only the validated users can view the websites now.

6. Testing Details

Every component in the website is tested rigorously against the user stories specification, the acceptance criteria and ensured data flow between individual interfaces and each feature are working as per the specification. The following table describes testing activities carried out by the TP101 team. The website has been tested by a non-team member to identify the usability of the application and capture the ease of navigation to help TP101 with further improvisation process by providing constructive and value-added feedback. More details of testing are enclosed in the support document and maintenance document.

7. Future Enhancement

- Enhance the website features to work more rigorously and effectively on phone browsers.
- Enhance the ETA for users using mobilization support. Currently, the system shows ETA for pedestrians.

8. Team Details

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