

Product Document

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| Version Control | | | | | | | | |
|-----------------|-------------------------------|------------------------|---------|--------|--|--|--|--|
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| 15/10/18 | Roles and Responsibilities | Added additional roles | Magnito | Closed | | | | |



Executive Summary

Public transport disruption in Victoria has become a common phenomenon, especially due to some big ongoing projects, such as the Metro Tunnel Project, Level Crossing Removal Project, and the inefficient public transport services during peak hours. Commuters to the CBD often confront inconveniences for disruptions caused by these on-going projects and in-efficient public transport services, resulting in delays for reaching work and an agitated start to the day. Thus, considering the inconveniences and suffering of the commuters going to the CBD for work, we have developed an exceptional android app, Aways, in order to guide the commuters and help them to comfortably reach their workplace in the CBD. The features and benefits of Aways will be eloquently discussed in this document, presenting a competitive analysis, the future scope of the product and the support roles and responsibilities required in the development process.



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1. Product Overview

Aways was created to act as an all-round guide, providing an efficient and comforting travel experience for the commuters to the CBD while they are going for work. Thus, in the development process we have closely analysed the circumstances which a general commuter endures while going to the CBD for work, their most significant needs and means of guidance during transportation disruptions. Some of the exceptional features of Aways are provided below:

- (i) Notifying the users with live disruption notifications, based on their selected preferences of home, work, addresses and means of travel.
- (ii) Special feature for the car users, in the form of parking spot suggestions around the chosen workplace location in the CBD
- (iii) Navigation to the parking spots through voice assistance
- (iv) Rerouting service to an alternative parking spot if the initially suggested parking spot is exhausted.
- (v) Locations of Bike Share Stations and navigations to the stations

1.1 Audience

The general commuters who confront inconveniences and sufferings while commuting to the CBD for work/appointment, due to public transport disruptions. Our android app, holds special features for the commuters who are discouraged to drive to the CBD for work due to parking spot finding difficulties.

1.2 Competitive Advantage

There is no such app covering the overall aspects related to public transport disruptions, especially allowing the commuters to conveniently travel to the CBD for work. The table below highlights the unique features provided by Aways through a competitive analysis.

| Aways | PTV | Google Maps | CityMapper | Uber | Moovit | MTR |
|---|----------------------|-------------------------|----------------------|---------------------|----------------------|-------|
| Car Parking Spots & Navigation | | | | | | |
| Auto - rerouting to car parks | | | | | | |
| Automated Disruption Notification | | 0 | | | | |
| Parking Expiry Timer | | | | | | |
| Disruption Finder | Disruption Finder | Disruption Finder | Disruption Finder | | Disruption Finder | |
| Bikes Stations & Navigation | 5 | Bikes | Bikes | | Bikes | Bikes |
| Saves Favourites | | Saves Favourites | Saves Favourites | Saves Favourites | Saves Favourites | 3.0 |
| Parking Preferences | | | | | | 2 2 |
| Voice Assistance | | Voice Assistance | | | | 82 |
| Language Translation | | Language Translation | | | | |

1.3 Product Value and Limitations

Aways provides real-time updates and has been developed considering the commuters' needs in detail, starting from allowing them to set custom work timetable in order to receive automated



disruption notifications, set distance radius limitation within which to find parking spots, voice assistance for navigation, auto-rerouting to parking spots once the initially suggested one gets exhausted, parking expiry notifications, language translation for non- English speakers and even a disruption finder based on the mode of transport (car, bus, train, tram). The features were developed closely, keeping in mind the stressful circumstances a commuter might endure during transportation disruptions especially while going to work. The user of the app need not to be specifically tech-savvy to make use of its features. The app interface is made as user friendly as possible, considering the fact, that the commuters would be using it at times of stress and panic while confronting transportation disruptions.

Alongside the different benefits, there are remains a few limitations as well, as the app can only be used on android phones. There remains a risk of Crash of the API server, inconsistency in API docs and limited off-street car parking spots' datasets used in the development of the app (only 5000 live censored parking spots available in the CBD).

2. Support Roles & Responsibilities

Below is the list of support roles that the app has involved in its development process.

| Roles | Responsibility | Hours of Work/weekly | Cost/hr | |
|-------------------------------|---|----------------------|---------|--|
| Project Manager | Responsible for managing the change. Management of activities of the organization | 30 | \$65 | |
| Change Control Coordinator | Reviewing change, requests for approval or disapproval. | 20 | \$40 | |
| Quality Assurance Team | Oversee the inspection of changes. | 20 | \$43 | |
| Developer(s) | Responsible for code changes, intermediate level of ASP, NFT, Intermediate level of Web building, version control, use of AWS | 50 | \$55 | |
| Data Analysis Team | Responsible for integrity and availability of data, data wrangling, exploring, data visualization using D3 | 40 | 57 | |

3. Additional Product Material

A maintenance document is provided, which describes the maintenance personnel with the detailed information necessary to maintain the system effectively. It provides a thorough understanding of the system description $_{\text{(Support doc, Pg 13)}}$ the support environment $_{\text{(support doc, pg 13)}}$, the database characteristics $_{\text{(Support doc, Pg 13)}}$ and the testing information $_{\text{(Support doc, pg 20)}}$, all required for the app.

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A support document is also available, to allow the understanding of the requirements for the day-to-day procedures (Maintenance doc, pg 3), security and privacy concerns (Maintenance doc, pg 7), and training information (Maintenance doc, pg 8). All these to provide a clear idea of the level of support that is to be expected in developing the app.

The data sources used in the development process of the app are all open data sources, and APIs such as the PTV timetable APIs and the live sensored parking data. Details on the data used can be elaborately found in the maintenance doc $_{(pg\ 12)}$.

4. Future Scope

Aways has tremendous potential in providing further services to the commuters going to the CBD with respect to the existing ones. There remains the scope of further improvement of the features such as providing a lot more suggestions of parking spots, given there is access to privatised parking data (such as Wilsons). Incorporating features through which payments can be made using the app itself and the feature of suggesting the best mode of travel during disruptions whether by car, bus, train etc, provided there is further access to public transportation data.

5. The Aways Team

Our team, Magnito, has the perfect combination of business and technical expertise with members coming from both technical and business academic backgrounds and also having fair share of work experiences. Our developers have close to 10 years of work experience combined, and even the business team possesses fair share of experience of working as analysts and have been involved in tech start-ups and several product branding and development.

Thus, the development process of Aways involved the use of all industry standard guidelines and methodologies, in a professional work environment.

6. Conclusion

Aways was developed solely keeping in mind of solving a social concern, a problem area solving which, would make people's everyday life easier. Thus, we created Aways, considering the problem area of transportation disruption in Victoria, for which especially the commuters going to the CBD for work has been suffering the most. Aways tries to act as an all-round guide during the transportation disruptions, allowing the commuters to have a more comfortable journey experience while going to work. There are potentially future scopes in making the app more useful in terms of additional features, as we have already provided a very solid platform with the existing functionalities.

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