

## **User experience design and testing**

### **Assignment – 1**

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The app that I have chosen is **google maps**.

#### **User experience aspects of the product I liked :**

1. When a user who has chosen to navigate using the public transportation method starts their ride, the bus logo goes through the different stops to give the user the right picture of where they are in the number of stops they need to take.
2. When searched for a restaurant through google maps, the app lets you add in a picture of the place to show it is at real time. This is convenient for people who are looking in to visit the place to gauge the real time traffic in the place.
3. When you are trying to navigate using the public transport option, the user gets to choose the depart time and lets you see the different option based on the depart time.
4. When travelling from source A to destination B, the maps give you multiple path options suggesting the one with least ETA but there are also options which would save you on toll money. This option is great for someone looking for an alternative or looking to save money irrespective of the travel time.
5. The maps re-routes you when the chosen path has heavy traffic and if there is another path which would take you to your destination in lesser amount of time.
6. The maps also has a very convenient option which when set up reminds you to leave on time to a destination!

### **Improvement that I would suggest :**

1. When travelling on a highway or roads which usually have median deviations very rarely or very far, when the user searches for a restaurant nearby it would be very convenient if the map shows which side of the road the restaurant is. This would make the whole process of search very easy and gives the user a chance to make a better decision too.
2. When the user has chosen to navigate via walk option, it would be favorable if the map also shows which side of the road to walk on. This could also mean that the maps shows a path which could make the user cross the road least number of times.
3. The one thing the google maps is lacking is the customer support option from the app. Adding a 24/7 customer support helpline which would help the users with any query and in suggesting places (restaurants, cafes etc.) would be extremely suited for people who might have a hard time with technology.
4. Suppose a user has already started navigating with the public transport option suggested by the maps and the public transport gets delayed for some reason then a push notification could be sent out which would be very convenient to the user.
5. Since the maps has all the data about the traffic and vehicle movement, it could also go ahead and suggest where the vehicles could park. It could show where there are empty spots to do street parking and could suggest public parking when the street parking is full.

**Use cases :**

Use case 1	Customer support helpline
Actor	People who want to navigate using maps
Basic flow	When the user of the application needs help with accessing any feature of app or just need recommendation then the user can go to the customer service option and put in the query they have and get it helped or resolved.

Use case 2	Show which side of the road is the restaurant
Actor	User who needs to get to a restaurant on their side of the road
Basic flow	The user want to get to a restaurant which is near to them while they are travelling and also on the same side of the road so its convenient and they don't need to take a U turn to get there. The user searches for the place and then the maps gives them a list of options and also says which is on their way and the user chooses that restaurant.
Alternate flow 1	If the user notices that there is no restaurant which is on their way, then they can choose any other options
Alternate flow 2	If the user notices that their priority is the one which is close by and does not matter which side of the road, then they also have an option to navigate there.

Use case 3	Show which side of the road to walk on
Actor	User who has chosen to navigate to a place by walking
Basic flow	The user needs to get to a place by walk. They use the maps and it gives them a path which is very convenient and lets them also know which side of the road to walk on so they cross road very less.
Alternate flow 1	If the maps notices that the most convenient path is dangerous (construction etc.) then suggest another path even though its making the user cross multiple times
Alternate flow 2	If the user does not want to take the path which is most convenient, then always give options.
Alternate flow 3	If the user

Use case 4	Send push notifications
Actor	User traveling through public transportation
Trigger	User needs to go to someplace using public transportation and there is a delay in the chosen transport
Subject area	Public transport
Prediction 1	The user needs to go to someplace
Prediction 2	There is a public transport to a place where the user needs to go
Basic overflow	The user needs to go somewhere using public transportation which is determined by the maps. The chosen transport is late. The maps sends a push notification regarding the same.
Alternate flow – notification has been sent with alternate routes	There is a delay in the transport the user has chosen, the maps sends out a push notification regarding the same and suggests alternate routes the user can take.
Alternate flow – there is not alternate path – the chosen path even though its late is the fastest transport available	There is no other public transport which could get the user to their destination sooner than the one they have chosen. The maps now suggests other paths which maybe slower but still give it out as an option.

Use case 5	Parking suggestion
Actor	User traveling with their own vehicle
Trigger	User needs to go to someplace and needs to park their vehicle
Subject area	Parking areas
Prediction 1	The user needs to go to someplace
Prediction 2	The user needs to park their vehicle in street or public parking
Basic overflow	<p>The user needs to go somewhere and needs to park their vehicle on reaching the destination.</p> <p>The maps which has all traffic data, can also suggest the user where they could park.</p>
Alternate flow – no street parking available	There is no street parking available, hence the maps suggest nearby public parking.
Alternate flow – update user when they can probably find an empty parking space based on another vehicle which are parked	When there is no street parking available, the maps can also suggest the user when it can become available based on the vehicles which are parked in that place and comparing them with the max time a vehicle is allowed to be parked there.