Project Indigo

Specifications

Version 0.1 (minimum viable product)

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# General overview

The application is used to record the time of a planned itinerary on public transportation. The user should be able to measure the time of every sub-step of the journey.

In the application one can create new itineraries.

After selecting an itinerary, the user can start recording.

The recordings can be aggregated for further research in public transportation. This however is not part of the application as it is not ergonomic to use a mobile device for spreadsheets and complicated statistics.

# GUC - General use case

A description for the general usage of the application, dealing with the startup of the application, and how to proceed to the specific use cases.

1. After opening the application, the user should be able to choose between creating a new itinerary or creating a new itinerary.
2. Choosing to create a new itinerary it should redirect to the menu: “Creating a new itinerary”.
3. Choosing to record for an already existing itinerary it should redirect to a menu for choosing an itinerary.
4. After choosing an itinerary from a list of all possible itineraries, the recording can begin. The itineraries are identified primarily by the start-end points and secondarily by the intermediate routes.
5. The itineraries can be searched by start or destination points.

# REI - Recording on an existing itinerary

A description on how to record an itinerary using an already existing itinerary.

1. Every button press records the time with second precision, meaning every record is hh:mm:ss.
2. Every recording stores its time precisely, with the day of the week as well.
3. After choosing to record an itinerary, a button appears to start the recording.
4. At every step of the recording there should be a button to terminate the recording prematurely. Pressing this button will discard the current recording, and return to the opening screen.
5. At the stop a button appears for boarding the vehicle.
6. If there is more than one option for boarding multiple buttons appear, one for every possibility.
7. After boarding the application displays the current route,
8. and the next stop on the top.
9. After the boarding for the next stop two buttons appear: one for pulling into the stop,
10. and another for going past the stop.
11. After choosing either button, the itinerary proceeds to the next stop.
12. This happens for every stop, until where the itinerary exits the vehicle. At the alighting stop there is only one button for pulling into the stop and alighting.
13. After alighting there are two options: there is a new stop to get onboard similarly to REI 5, or
14. the last part of the journey can go on, with another final walk. After the walk there is another button for ending the entire recording.
15. After finishing the recording, it is saved as a finished recording, and
16. put into a database to hold all recordings.

# CNI - Creating a new itinerary

How to create a new itinerary. An itinerary has a starting point and destination. Between the start and the destination there are internal points. The itinerary starts with a walk to a stop then riding a vehicle and after alighting there can be the destination, another walk, a new ride or a walk and then another ride.

An itinerary can have variations, if the starting and destination points are the same, but the internal points are different.

1. The user can give a starting point for the itinerary.
2. After the starting point there is a walk to the next stop where one can board a vehicle.
3. The stop can have multiple choices of vehicles. The user should be able to enter each route individually.
4. Entering a route starts with entering the route’s number,
5. then the user can enter the stops one by one,
6. the last stop must be indicated to be the stop where the itinerary will get off the route.
7. After entering the last stop, the user can go and enter the next route.
8. A route can copy all the stops of another route.
9. A new stop can be inserted between two existing stops.
10. An existing stop can be removed from between two stops.
11. After entering the last stop (look at CNI 6.) the user can enter a walk to the final destination.
12. A new route can either be an alternative route to an existing route, or a route that follows the previous route.
13. In some cases, one route ends but there has to be a walk to the following route. For this reason, the final destination has to be marked as the destination.