Design Document

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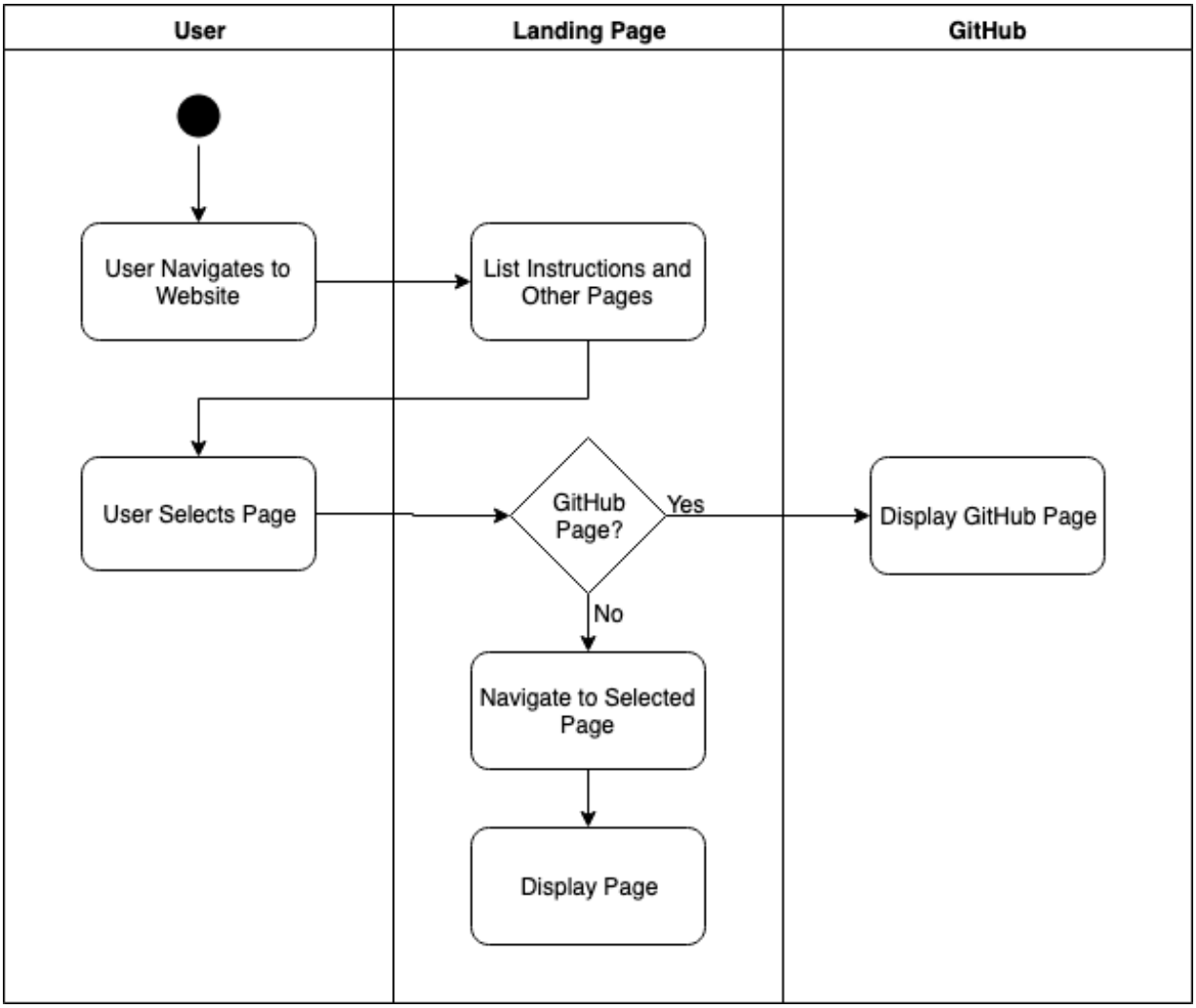
Activity Diagrams

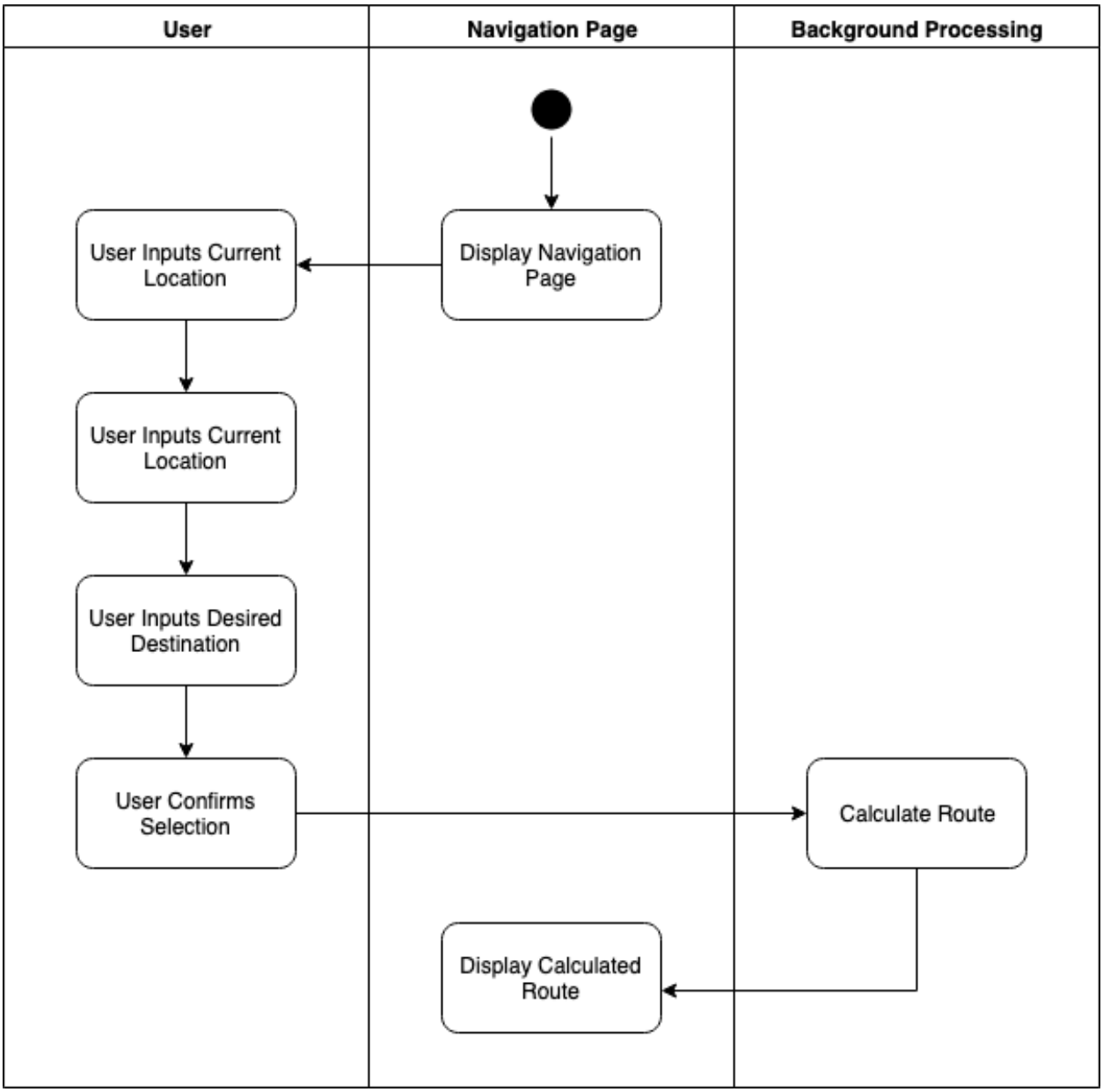
Landing Page

The main page for information regarding how to use the tool, with links leading to the other pages. The page also links to the GitHub page with a more technical readme.



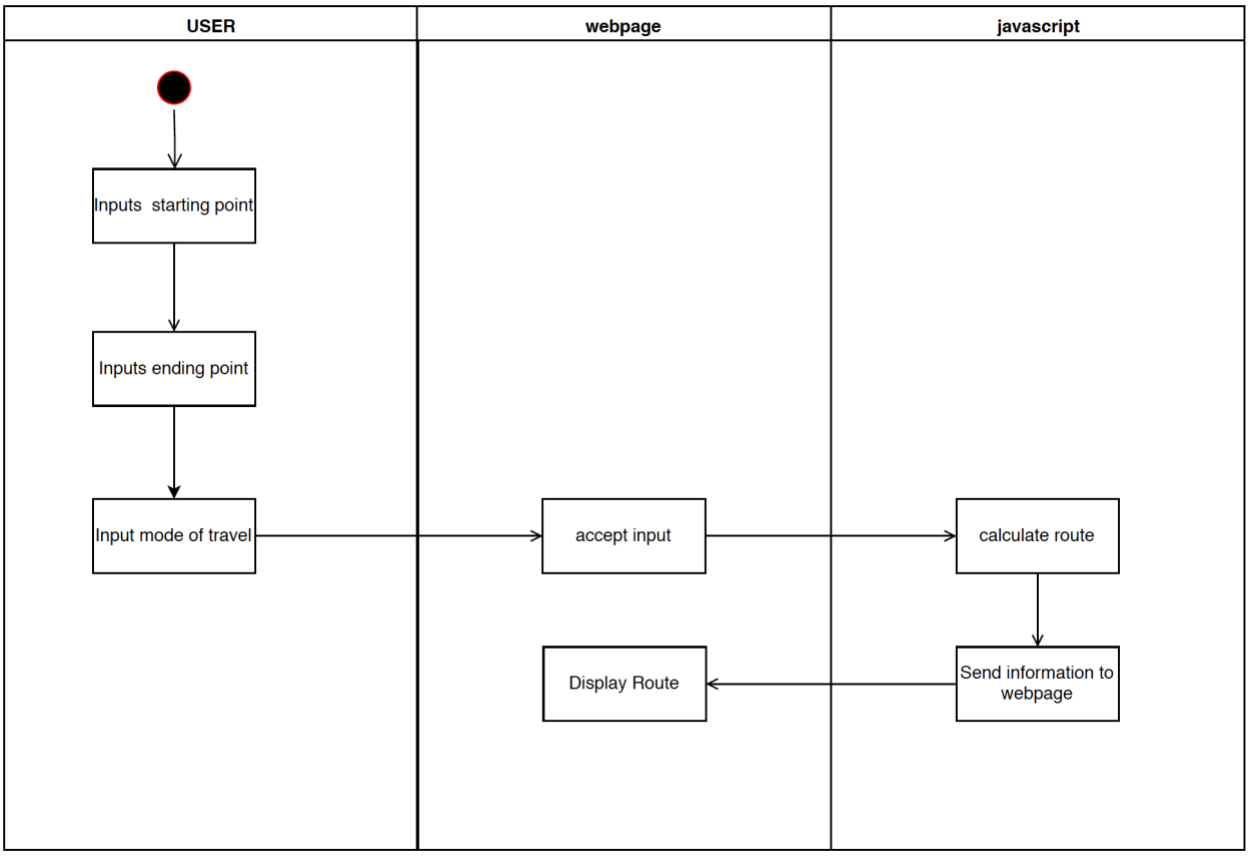
Navigation Page

The Navigation page gives a short description of what the page is for and how to use it. From here, users can select where they are and where they'd like to go, then calculate the shortest route.



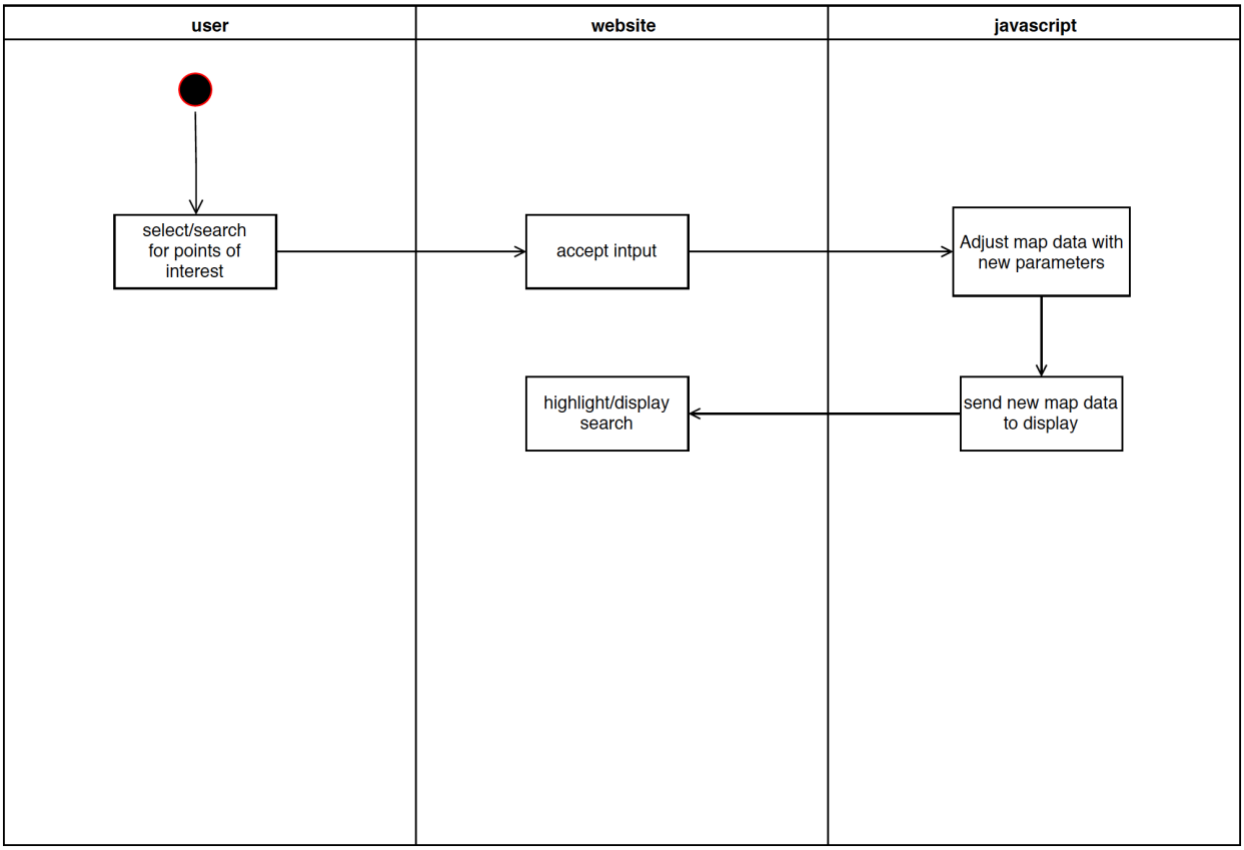
Cardio Route Page

The Cardio Route page will allow the user to calculate a route for their desired form of cardio exercise (e.g., running, jogging, or biking).



Points of Interest Page

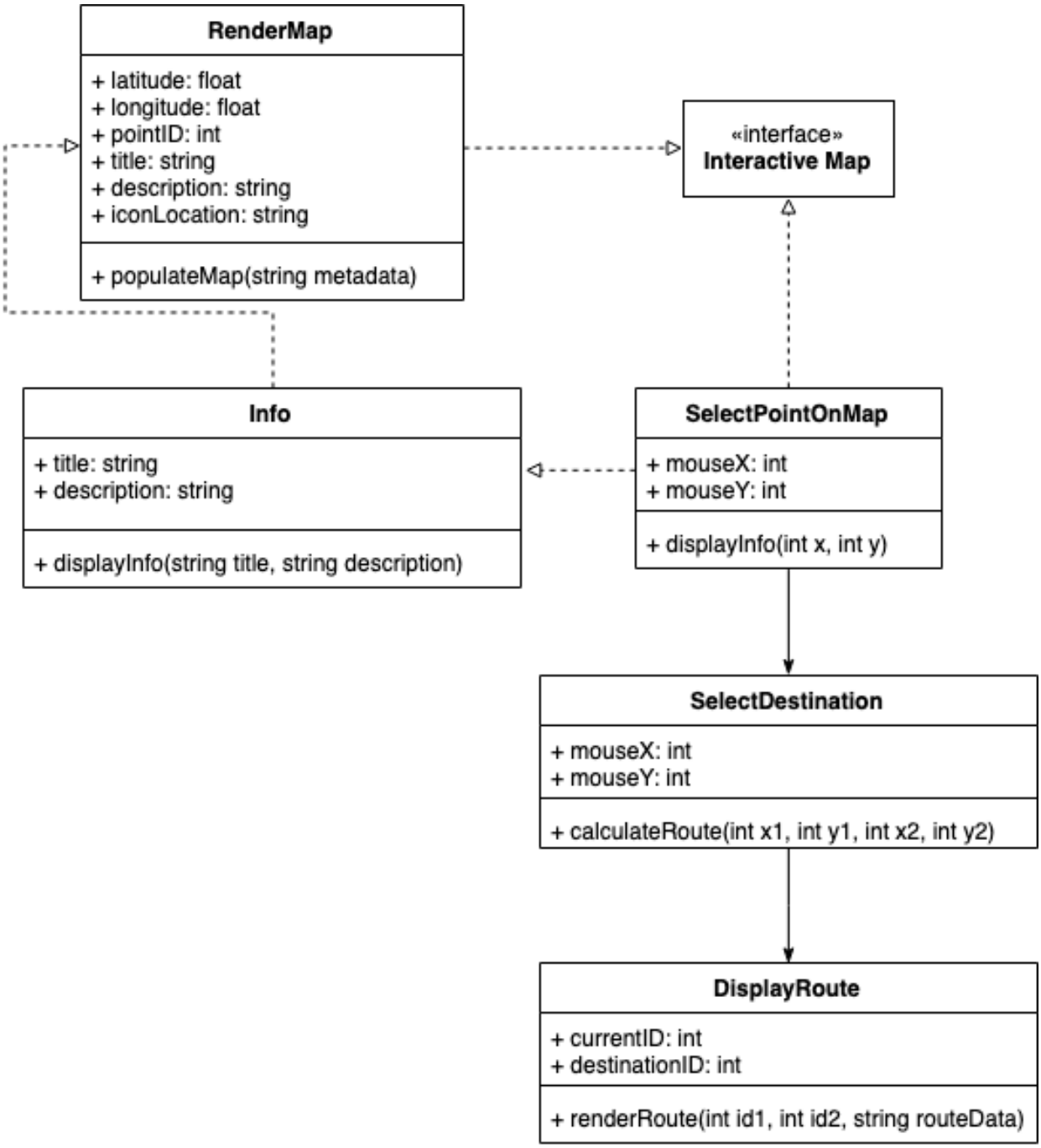
The Points of Interest page will allow the user to search for and/or select a more specific location (e.g., restroom, vending machines, student services office).



Structural Model

Class Diagram

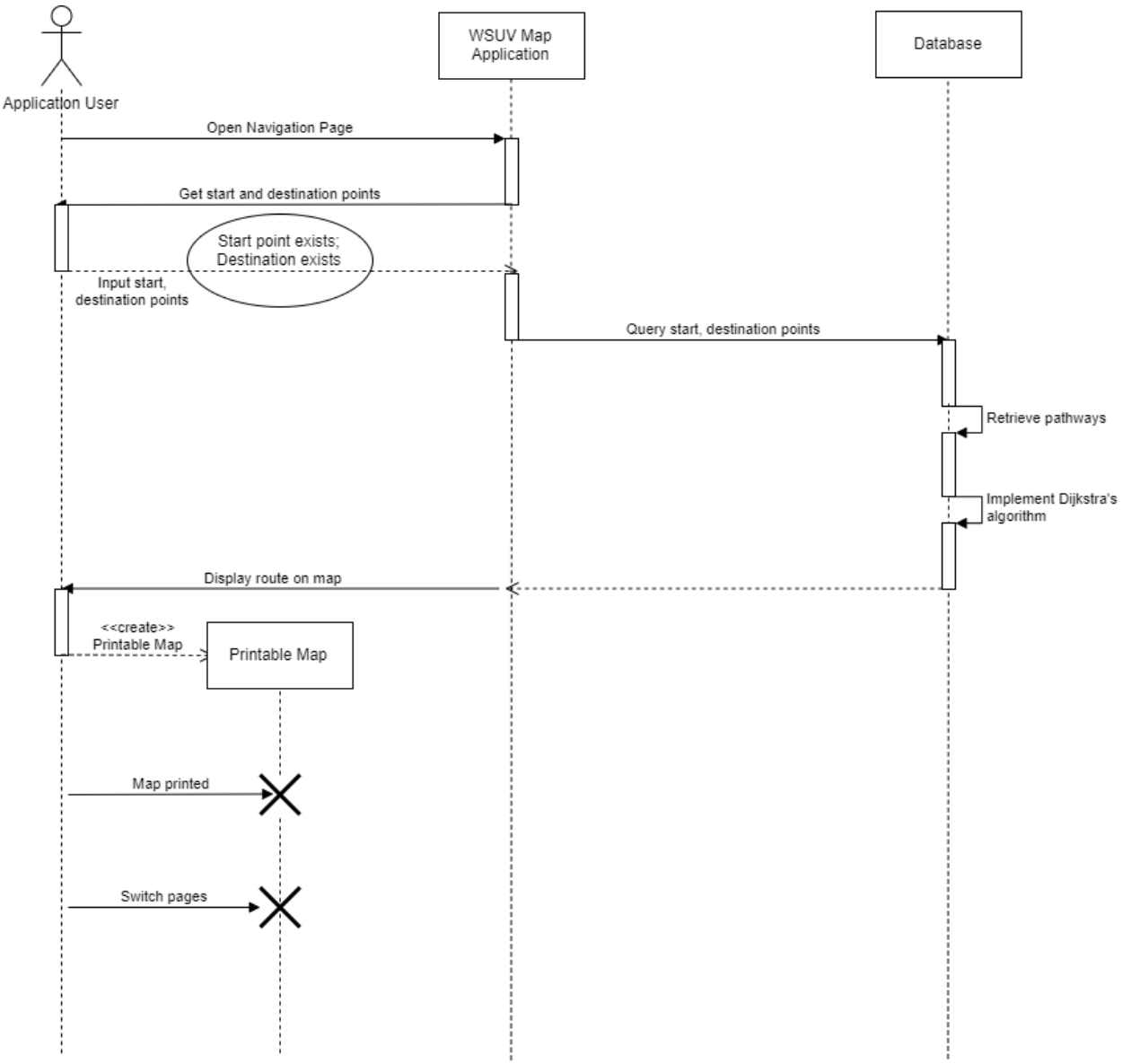
The main attributes and operations for each class. There is a metadata file required to show the point info, as well as the distance data for each path, so it doesn't need to calculate the distances each time the user selects a route. The only calculations done are by calculateRoute(int x, int y), where it concatenates x and y to find the ID of the first and second routes, then skims the list for the shortest distances between them.



Behavioral Models

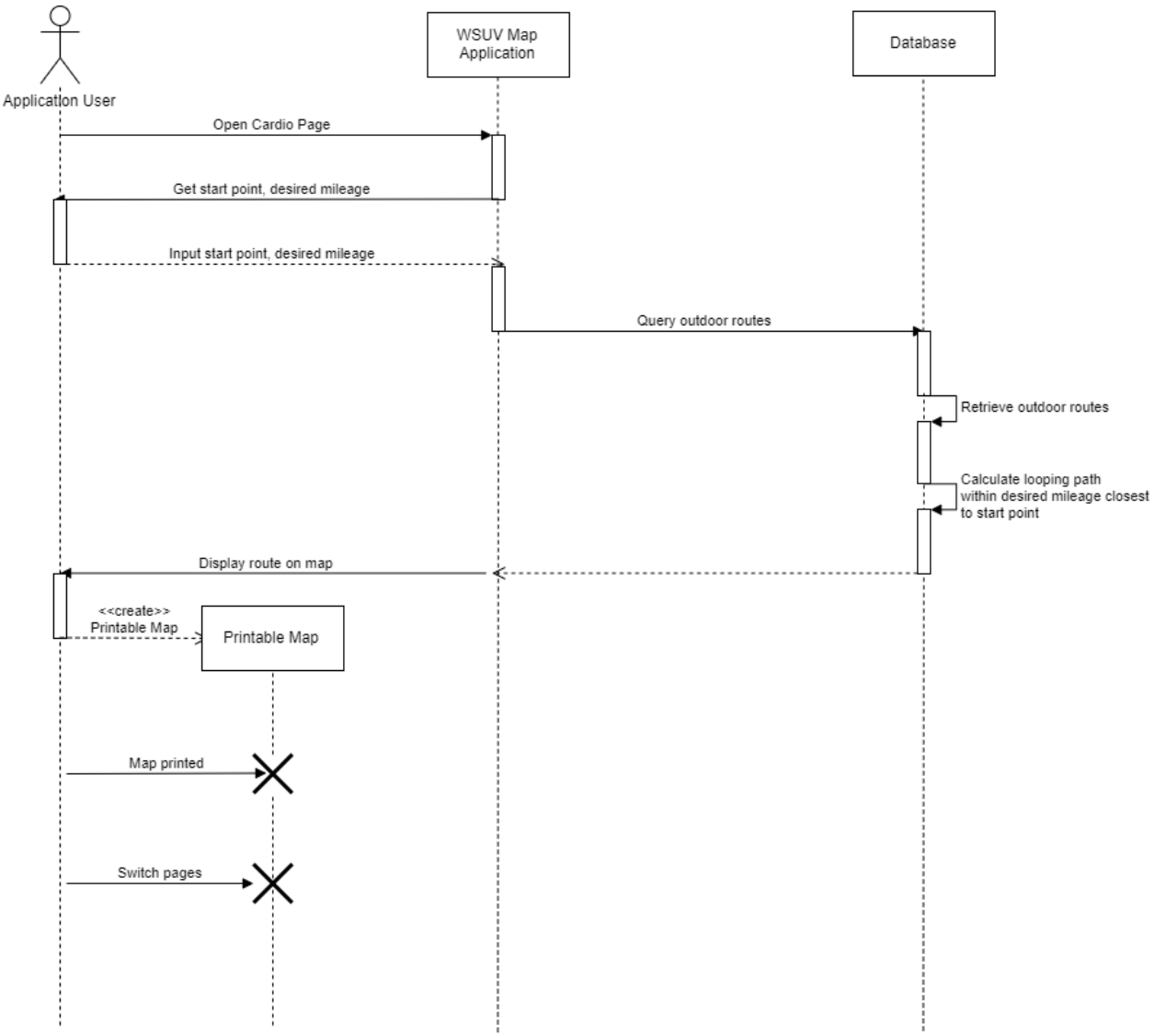
Sequence Diagram: Navigation

Sequence diagram that depicts interaction between user, WSUV Map, and database to route from a start point to a destination point.



Sequence Diagram: Cardio

Sequence diagram that depicts interaction between user, WSUV Map, and database to create a cardio route loop near a designated start point.



State Diagram: Pages

State diagram that depicts transitions between WSUV Map pages.