Use Cases
1. User wants to go somewhere – MACRO
    - Cultural event (see 9)
    - Not a cultural event
        - Shortest-path "regular" (see 2)
        - Health-goal route
2. User wants to go to a place he or she knows the name of – MACRO
    - User enters the name or address of the location
    - Selects from a list the correct location
    - Go to Navigation (see 3)
3. Navigation – MACRO
    - The user is presented with a navigation screen according to his or her preferences
        - Handicap
        - Non-handicap
    - Progress towards the goal destination should be shown in distance remaining
    - Show speed?
4. Health-goal route
    - The user selects certain goals he or she wishes to reach, including:
        - Total steps taken/Distance traveled
        - Steps/Distance traveled on stairs
        - Elevation distance traveled
    - Progress towards each selected goal should be displayed during the route
    - Uses AR or Non-AR mode according to preferences (see 7 and 8)
    - Show speed?
    - There are two types of health routes
        - Circuit: The route should be a circuit so that the user can easily follow it.
            - Specifically, this means the route should not cross itself if at all possible.
            - It was hypothesized that a route that crossed over itself could be confusing.
        - "Out and back"
            - The route goes out a portion of the distance and comes back along the route towards the start until the goal is reached
            - Tries to make the distance as close to half as possible given the parameters
    - Constraints:
        - Vertical distance < total distance
        - Non-handicap (for initial release)
        - Even when vertical distance < total distance, there still might not be a possible route with the given parameters.
5. Handicap Navigation – MACRO
    - The shortest handicap accessible route is calculated to the destination
    - Uses AR Navigation (see) unless non-AR mode is selected by default in preferences or the user switches to Non-AR mode at any time during the navigation
6. Non-handicap Navigation – MACRO
    - The shortest route is calculated to the destination; this route may or may not be handicap accessible.
    - Uses AR Navigation (see) unless non-AR mode is selected by default in preferences or the user switches to Non-AR mode at any time during the navigation
7. AR navigation
    - Uses the AR-navigation view to guide the user to the destination.
    - The user may switch to non-AR mode at any time

8. Non-AR navigation (Map View)
   - Uses the "map view" to guide the user to the destination.
   - The user may switch to AR mode at any time.
9. User wants to go to a Cultural Event
   - The user selects the cultural event he or she wishes to attend from a list of available events (display of list and date range and such TBD)
   - Once the event is selected, it is set as the destination and the user is directed as according to Navigation (see 3)
10. User wants to check health statistics
    - User selects the health statistics tab from the screen (where and how and virtually all details of this use case are TBD)
11. User wants to change his or preferences
    - ○ User wants to change some defaults
      - Selects Non-ar or AR-mode as default mode (initially AR-mode)
      - Handicap or Non-handicap (initially non-handicap)
      - Shortest-path or health-goal as default (initially shortest-path)
      - Default health goals:
        - Steps/distance traveled (no initial value or zero)
        - Same or different route each day (initially different route)
        - Stairs climbed and descended (no initial value or zero)
        - Elevation change (no initial value or zero)
    - ○ Constraints:
      - Persistent across multiple launches
      - All health goals >= zero or nonexistent
      - Handicap default precludes health-goals navigation default and therefore implies shortest-path