Team Phat Phoenix Pathfinding Application Guide

For Hospital Visitors, Administrators, and Employees

Practical Task Guide

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Contents

1. Preface

1.1. How to Use This Guide

Purpose of This Guide:

The Team Phat Phoenix Pathfinding Application Guide is meant for one-time hospital visitor users and experienced hospital employee users. It details the pathfinding process to get directions as well as maintenance functionality for service requests, employees, and the map.

Audience:

This guide is intended for hospital visitors and employees at any knowledge level of computer interfaces.

Assumptions:

This guide assumes that the Kiosk application is running and opened to the starting 'Home' screen.

Text Conventions:

- **Bold** indicates user action. For example:
  - Click the **Back** button in the upper left corner.
- A right arrow bracket (>) separates successive commands from any drop-down or shortcut menus. For example:
  - Select **Find Your Destination/Destination Node/Find Path**
- Non-bolded words within the right arrow bracket command flows indicate user choice for a specific task, such as which Administrative option to monitor, but do not harm the overall outcome of the command flow.
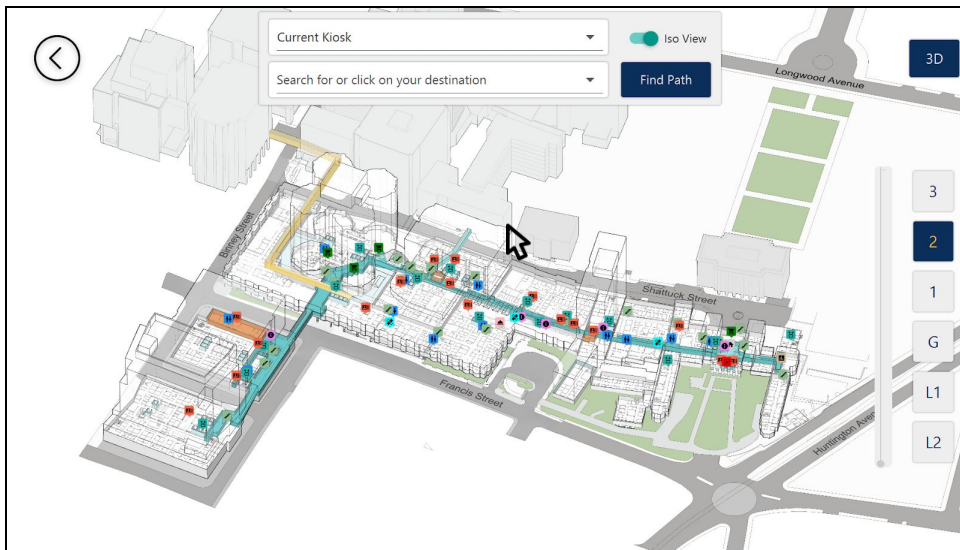
2. Finding Your Way

2.1. Create a Path

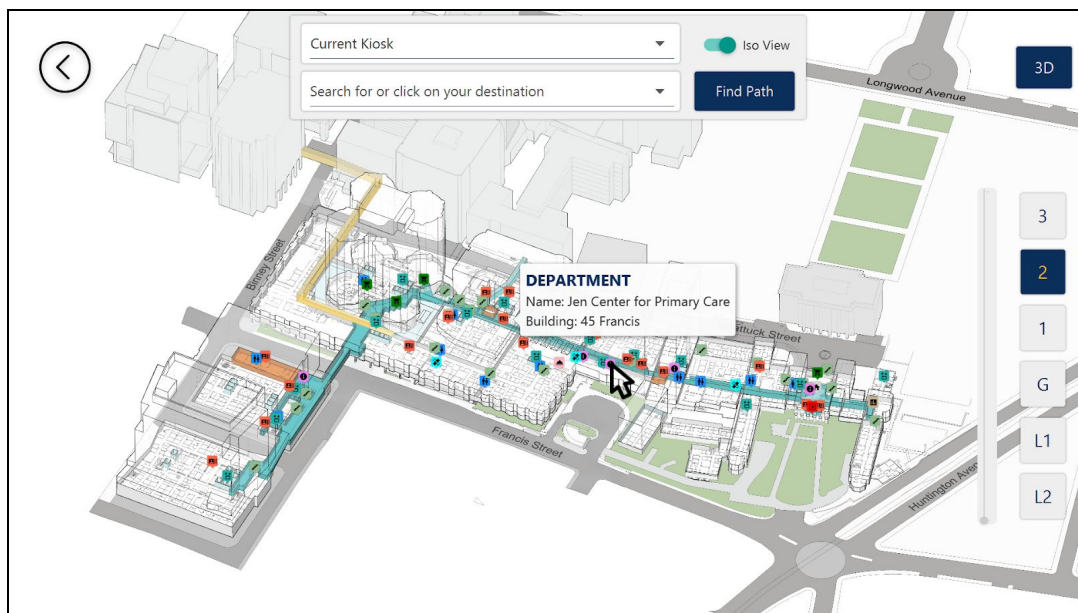### 2.1.1. Generate a Simple Path

To generate a simple path from the Kiosk home screen:

1. Using the mouse, left click anywhere within the **Find Your Destination map box** on the home screen.
    - ○ This will bring up the initial 3D map screen of Brigham and Women's Hospital with the start location at the current kiosk.

2. Use the mouse scrolling wheel, or the slider on the lower right of the screen to **zoom in**. Click the **map** and drag the mouse to pan around for your destination.
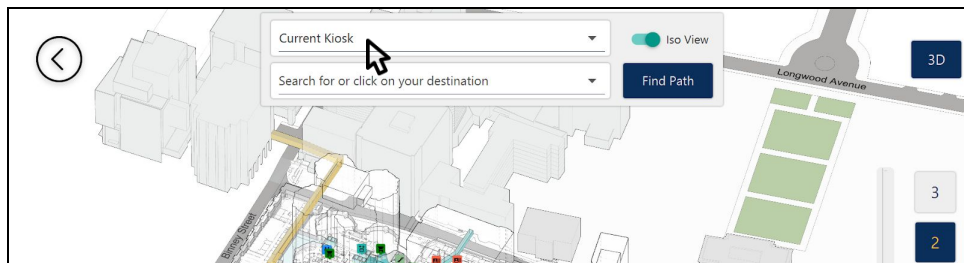

3. Left click **Destination box>**the destination Node.
   ○ Repeat steps 2-3 to pick a different destination Node.

4. Click the **Find Path** button to generate an animated path from the current kiosk to a selected destination.

2.1.2. Create Path with Different Start and End Points

To generate a path with different starting and ending points:

1. Using the mouse, left click anywhere within the **Find Your Destination map box** on the home screen.
   ○ This will bring up the initial 3D map screen of Brigham and Women's Hospital with the start location at the current kiosk.
2. Use the mouse scrolling wheel, or the slider on the lower right of the screen to **zoom in**. Click the **map** and drag the mouse to pan around for your start location.

3. Left click **Start Location>**the start Node.
   ○ Repeat steps 2-3 to pick a different start Node as well as the destination Node.
4. Click the **Find Path** button to generate an animated path from the current kiosk to a selected destination.

2.1.3. Navigating Pathway

To navigate a generated pathway:
1. Using the mouse, left click the anywhere within the **Find Your Destination map** box on the home screen.
   ○ This will bring up the initial 3D map screen of Brigham and Women's Hospital with the start location at the current kiosk.
2. Use the mouse scrolling wheel, or the slider on the lower right of the screen to **zoom in**. Click the **map** and drag the mouse to pan around for your start/end locations.
3. Set the start and end nodes by clicking on the **text boxes** and clicking on the specific **Nodes** for start and end locations, then click **Find Path.**
   ○ This will generate an animated path with a series of steps underneath.
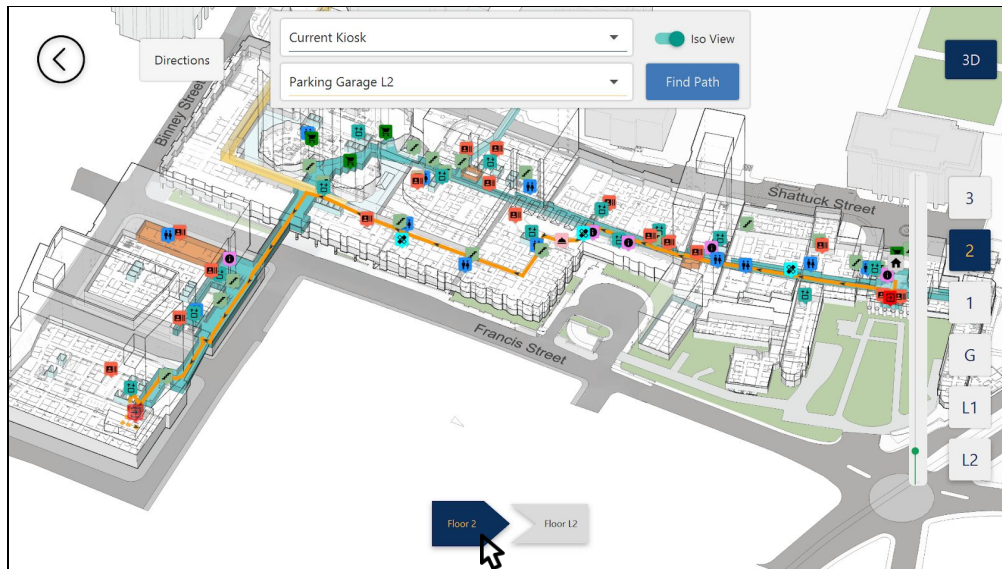
4. Click on the **far left step** to see the first part of the directions (if the path spans multiple floors).
   ○ Directions are sorted by step from left to right, so click on each step to navigate to those visual instructions. Each step will span a singular floor.
   ○ Alternatively, click on the elevator/stair on the current floor to navigate to the next step of the directions.
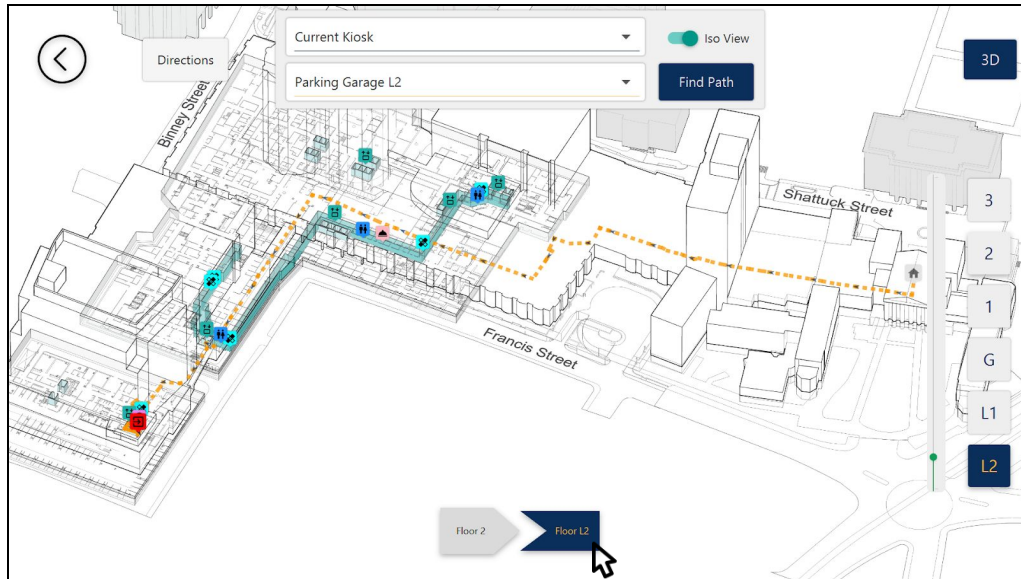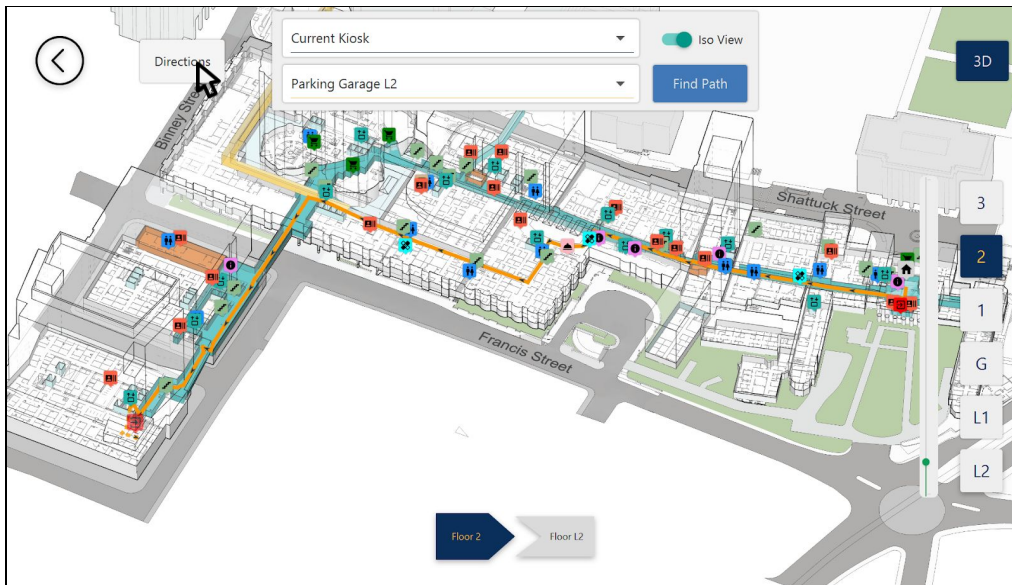
5. Follow the **direction of the arrows** along the path in each step to navigate to your destination.

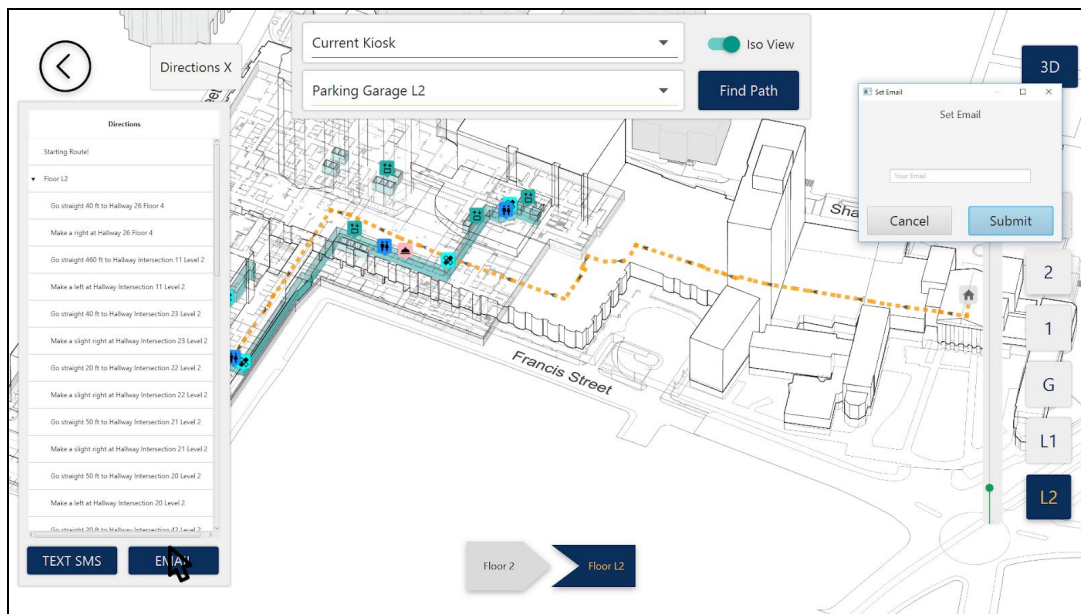### 2.1.4.   Receiving Path By Email

To receive path instructions via email:
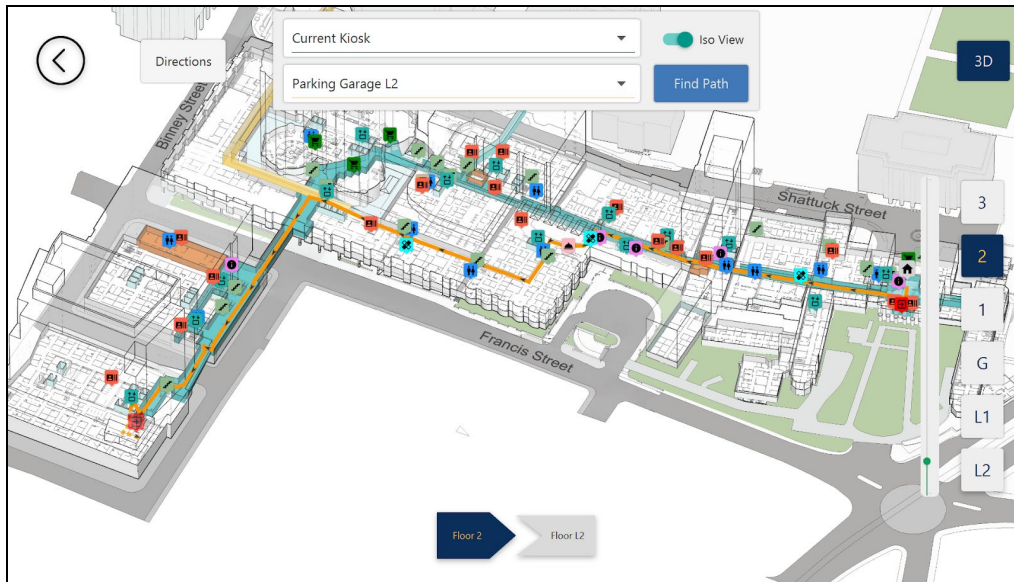
1. Generate a path based on clicking your **start** and **end** nodes and **Find Path** on the map page.

2. Click on the **Directions** icon in the top left corner of the screen.

3. Left click the **EMAIL button** in the popup window**.**
4. Enter your email address and click **Submit.**
    ○ You will receive an email of text instructions to the destination.

2.1.5.   Receiving Path By Text

To receive path instructions via email or text:

1. Generate a path based on clicking your **start** and **end** nodes and **Find Path** on the map page.
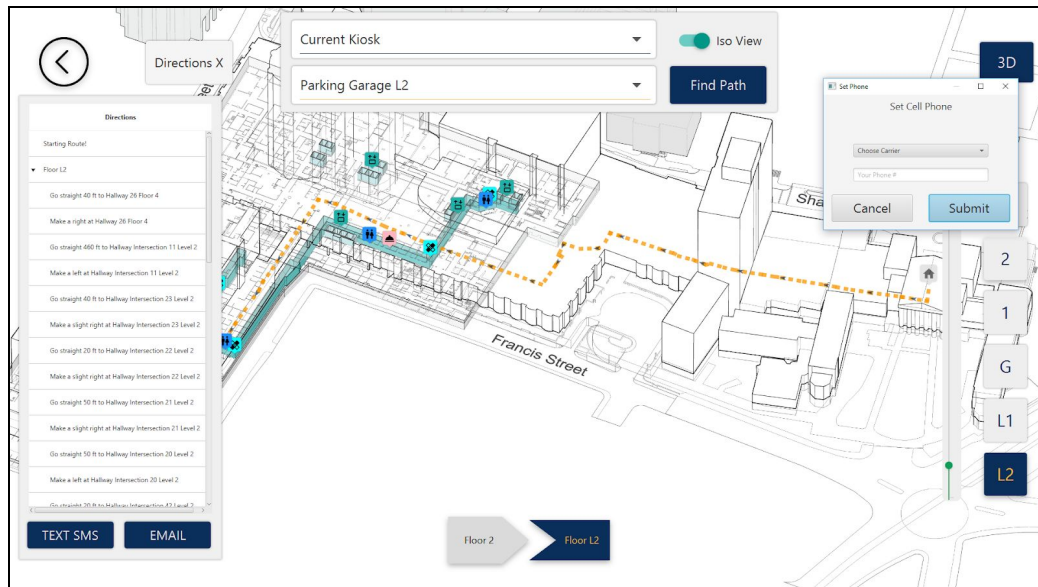2. Click on the **Directions** icon in the top left corner of the screen.

3. Left click the **Text SMS button** in the popup window**.**
4. Enter your **service carrier** and your **phone number**, then click **Submit.**
   ○ You will receive an text of text instructions to the destination.

2.1.6.   Map Legend

Location Name	Map Icon
Kiosk	🏠
Conference room	📊
Department	👤‖
Information desk	ℹ

Laboratory	
Restroom	
Restaurant	
Stairs	
Exit	
Gift Shop	
Elevator	

2.2.   Additional Features

2.2.1.   Switch Between 2D and 3D Maps

To switch between 2D and 3D Wireframe Maps:

1. Using the mouse, left click anywhere within the **Find Your Destination map box** on the home screen.
   - This will bring up the initial 3D wireframe map screen of Brigham and Women's Hospital with the start location at the current kiosk.
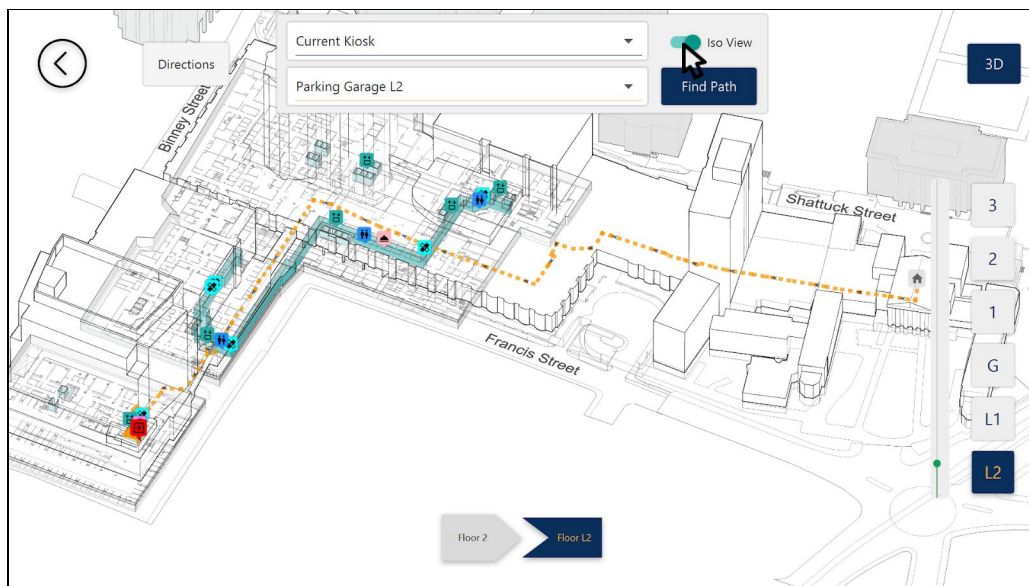
2. Click the **Iso View toggle button** in the upper middle of the screen.
   - This will toggle the view from the 3D wireframe map to the 2D map.
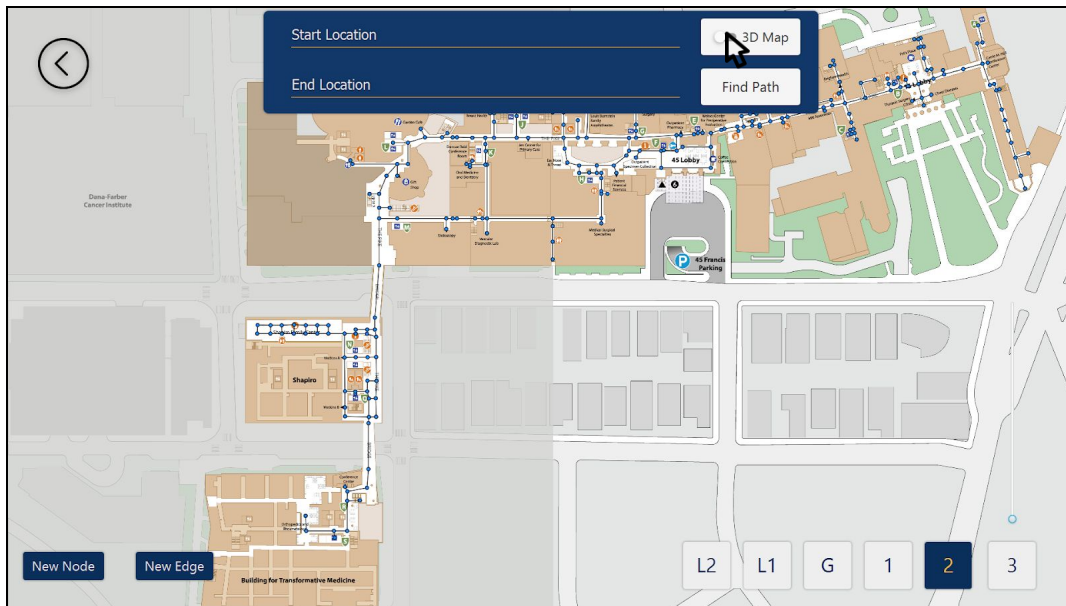
3. Click on the **same 3D Map bubble toggle** to revert back to the 3D wireframe view

2.2.2.   Searching for Destinations

To search for specific destinations in the start or destination:
1. Using the mouse, left click anywhere within the **Find Your Destination map box** on the home screen.
    - This will bring up the initial 3D wireframe map screen of Brigham and Women's Hospital with the start location at the current kiosk.
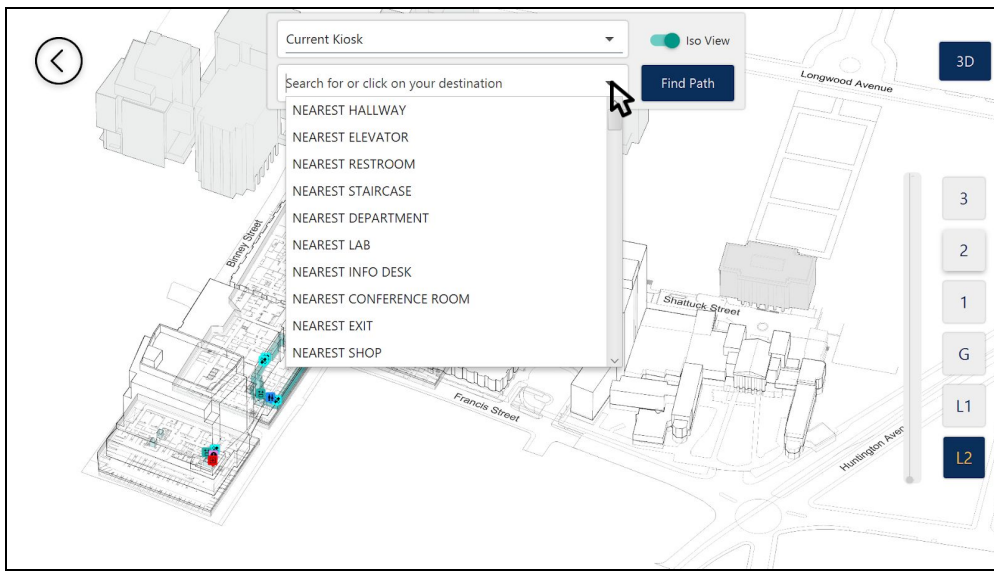
2. Click the **Drop down arrow** next to the Start location and select a location based on the name.
   ○ Alternatively, click on the **Text field** for the Start location to type in a specific location name or the nearest common location.
   ○ Repeat Step 2 for the End location to search for a location as well.

2.2.3.   Using 3D Model for Navigation

To use the 3D Model for navigation features:

1. Using the mouse, left click anywhere within the **Find Your Destination map box on the home screen**.
   ○ This will bring up the initial 3D wireframe map screen of Brigham and Women's Hospital with the start location at the current kiosk.
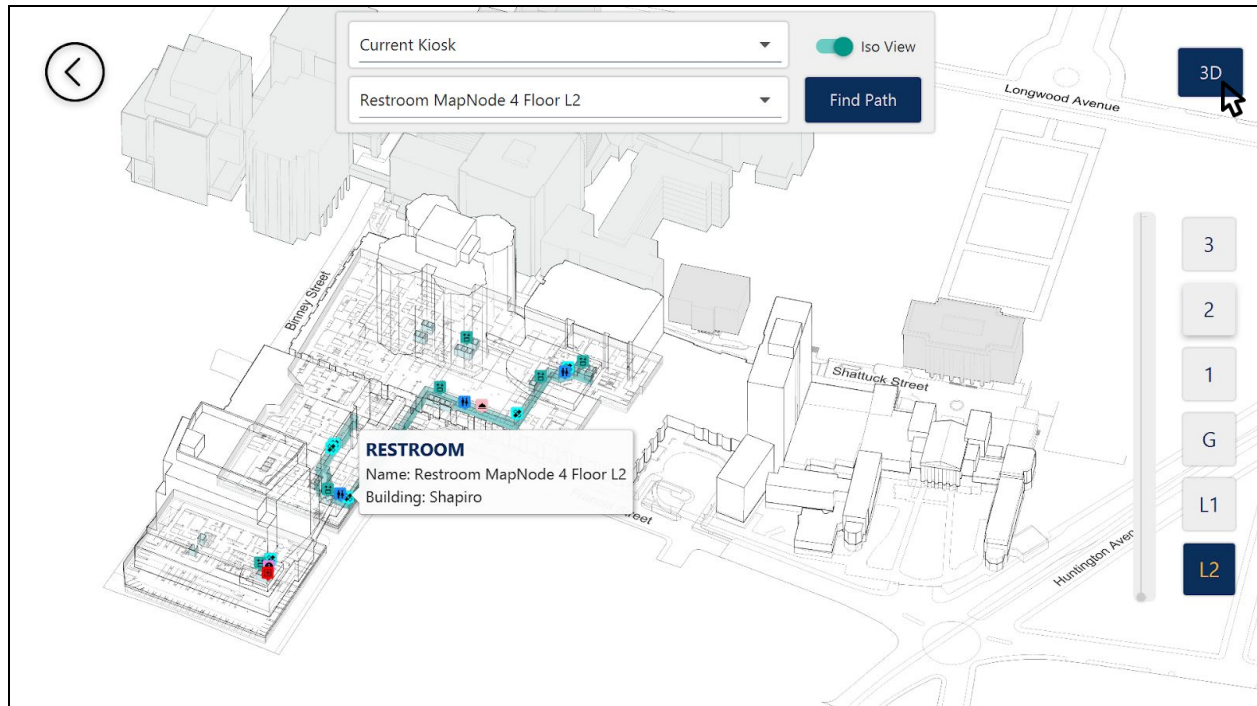
2. Click the **3D Box** in the top right hand corner of the window to navigate to the 3D model.
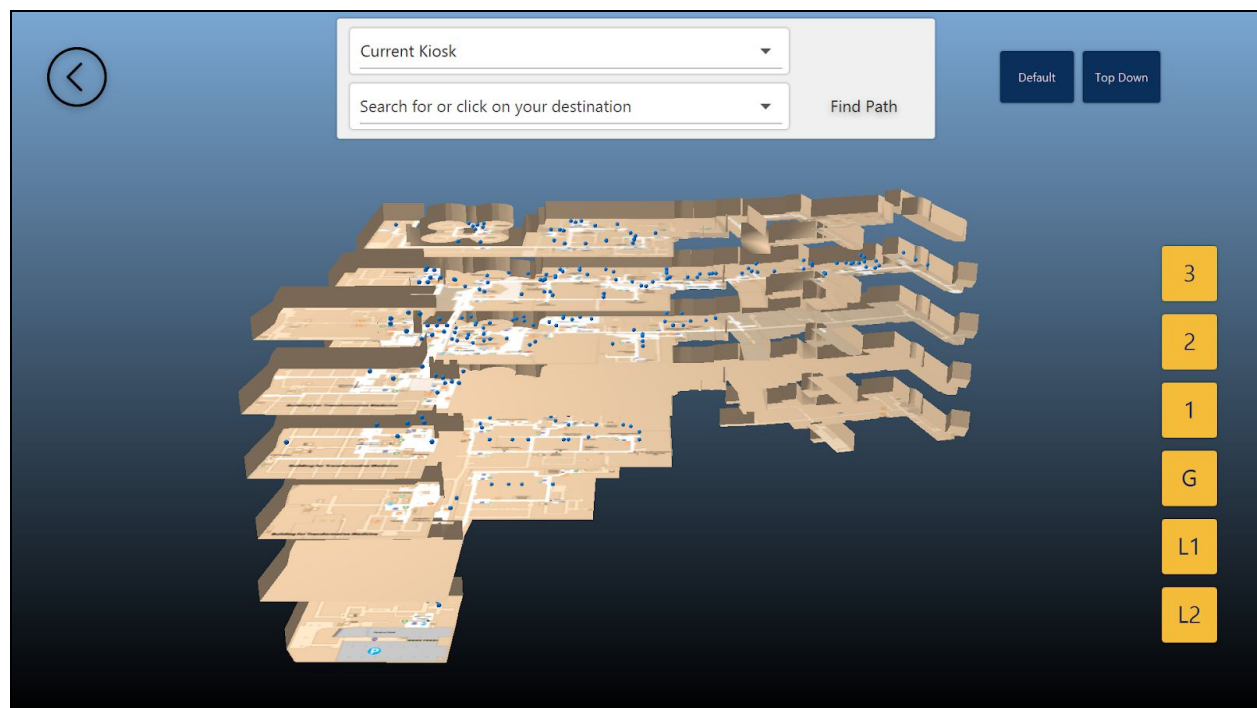
3. Left click and drag the map to pan the view of the model.
4. Right click and drag the map to rotate the view of the model.

- ○ Click the **Default button** to revert back to the original 3D Model view without zooming and panning changes.
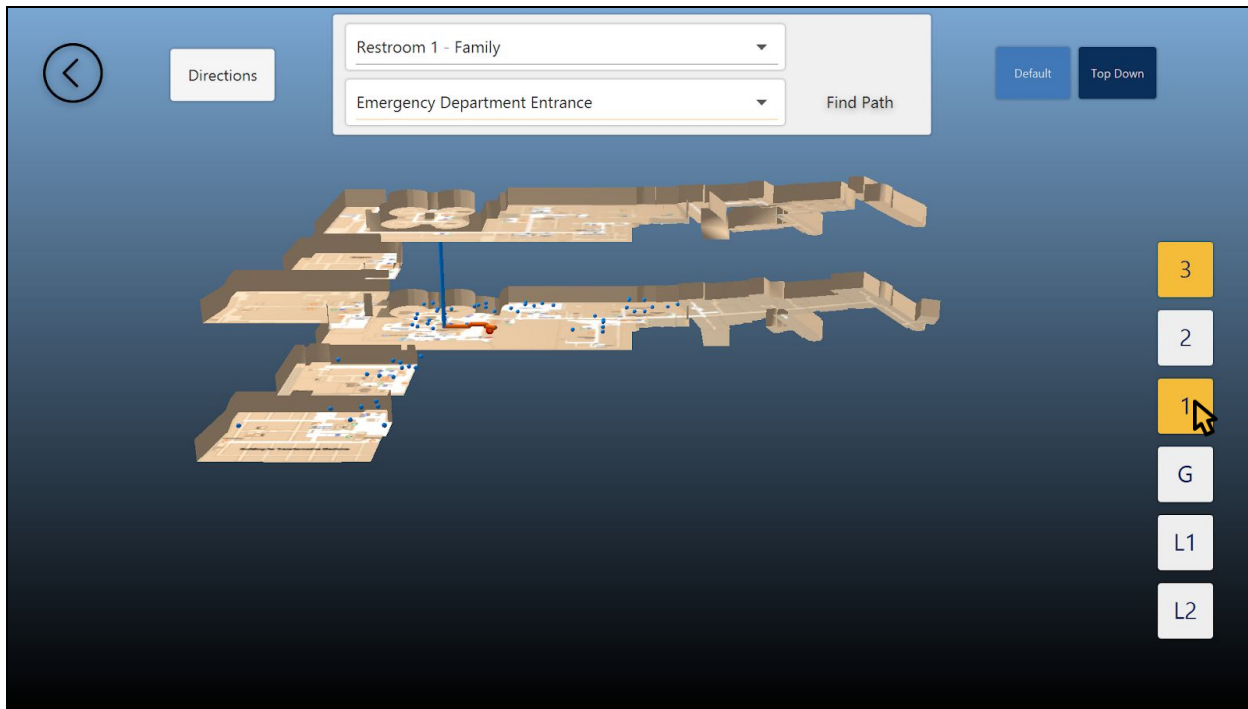
5. Click any of **the floor buttons** on the right hand side to toggle their view in the model, gray color means the floor is not visible while yellow color means the floor is visible.
6. Functions for zooming with the mouse wheel, clicking on nodes for locations, and searching nodes for locations are still present for navigation.

3.   Administrative Features

3.1.   Logging In

3.1.1.   Typed Login

To access login screen from typed credentials:

1. Click on **the text field** for the login in the top right corner of the screen and type in your username.
2. Click on **the text field** for the password in the top right corner of the screen and type in your password.
3. Click the **Login** button.

3.1.2.   Card Reader Login

To use the card reader to login:
1. Click on the **the text field** for the login in the top right corner of the screen.
2. Swipe your ID card through the card reader.

3.2.   Modifying the Map

3.2.1.   Add Edges

To add an edge to the map as an administrator:

1. Enter your **login credentials** or swipe your **ID card** through the card reader to login as an administrator.
    ○ Note: Only administrators can add Edges.
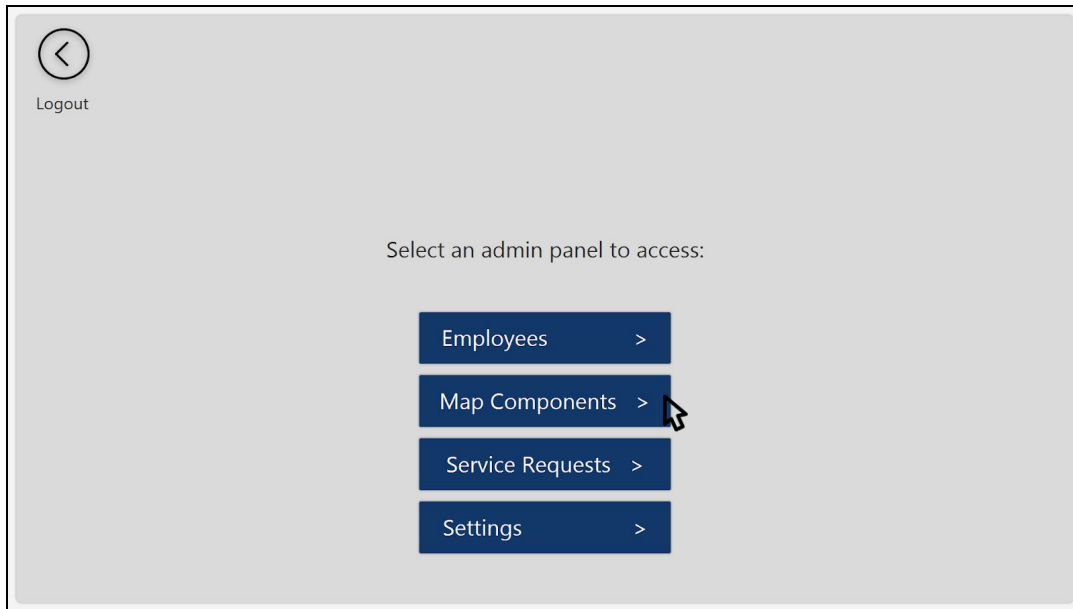
2. Left click the **Map Component** button on the Admin home screen.

3. Click on the **New Edge** button in the lower left corner of the screen.

4. Click on the **Node Text Field** and use the mouse scroller to zoom in and left click on **the starting/ending node** for the edge.
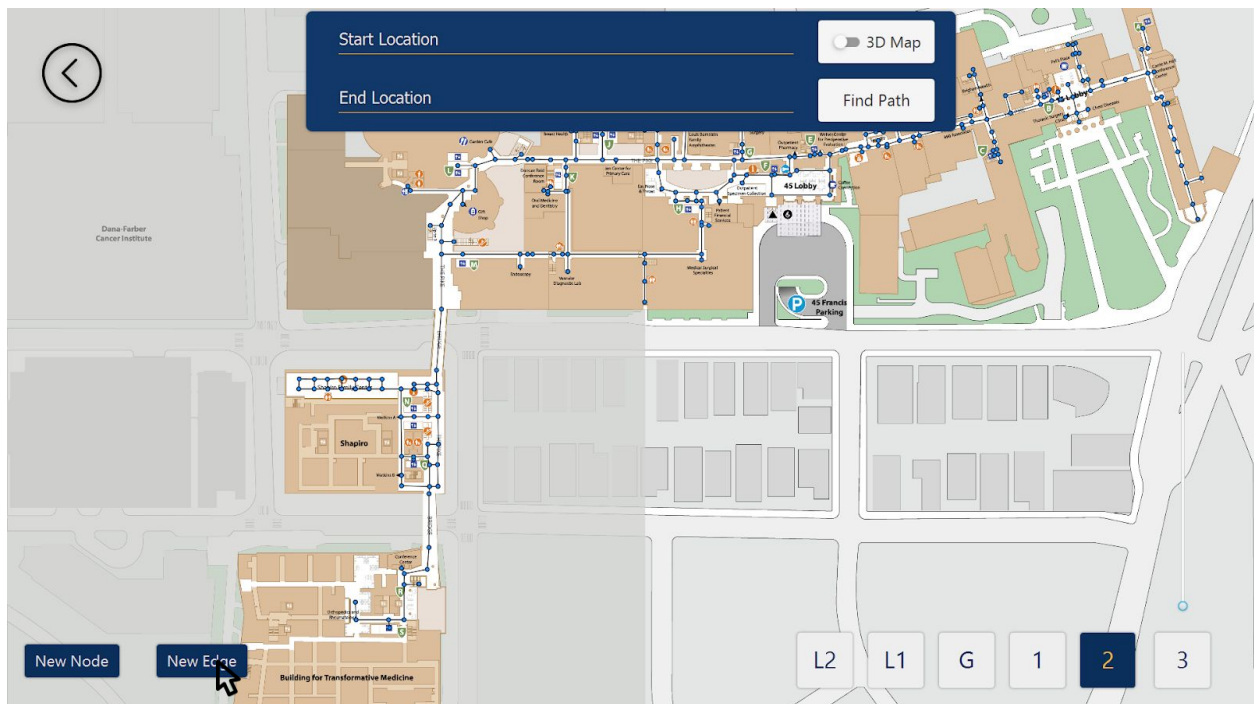

5. Click the **Submit button** to save your changes.

3.2.2.   Modify Edges

To modify an edge to the map as an administrator:
1. Enter your **login credentials** or swipe your **ID card** through the card reader to login as an administrator.
    ○ Note: Only administrators can modify Edges.
2. Left click the **Map Component** button on the Admin home screen.
3. Use the mouse scroller to zoom in and left click on **the edge** to be modified.

4. Click on the **Node Text Field** for the start or end nodes, and click on new nodes on the map to modify them.
   ○ Note: An edge cannot be modified if it does not connect between two existing nodes.
5. Click the **Submit button** to save your changes.

3.2.3. Delete Edges

To delete an edge to the map as an administrator:
1. Enter your **login credentials** or swipe your **ID card** through the card reader to login as an administrator.
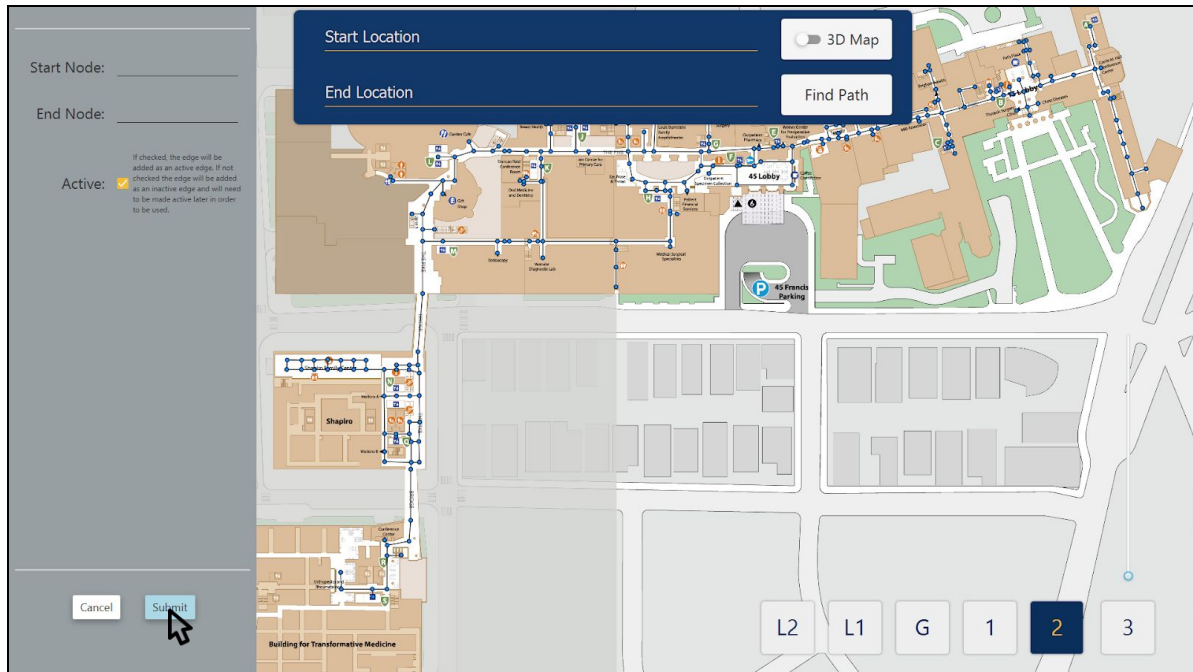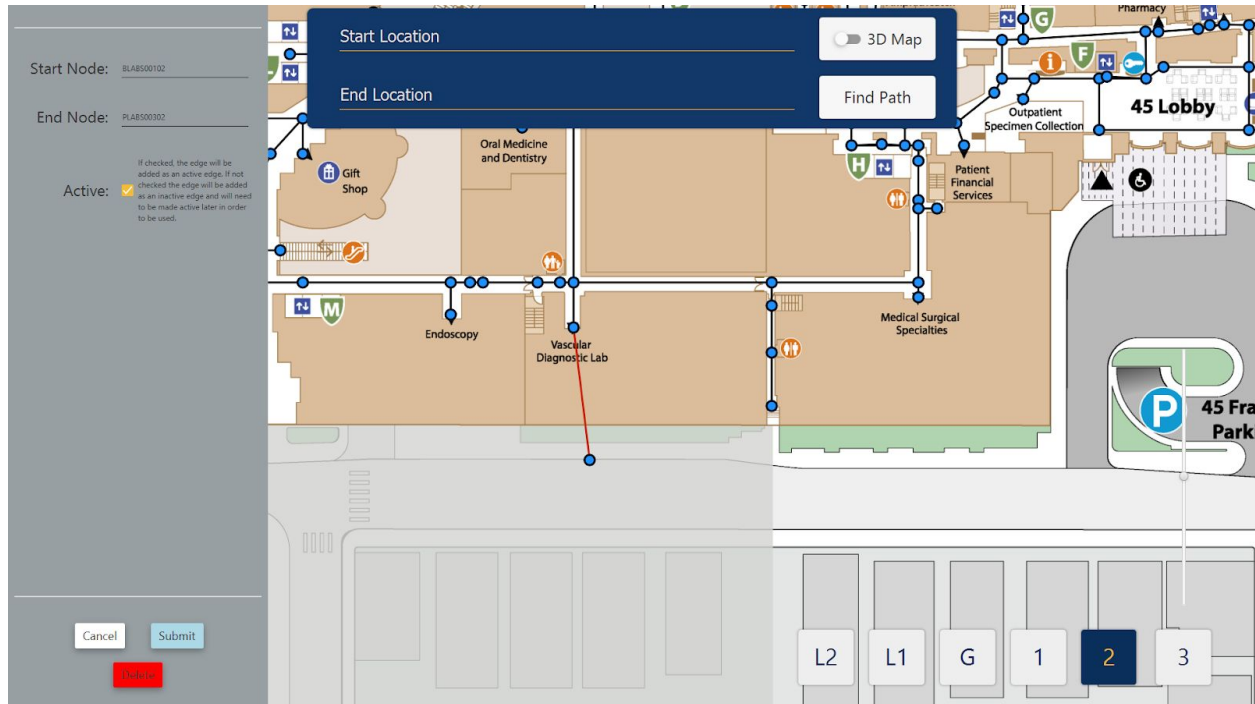   ○ Note: Only administrators can delete Edges.
2. Left click the **Map Component** button on the Admin home screen.
3. Use the mouse scroller to zoom in and left click on **the edge** to be deleted.
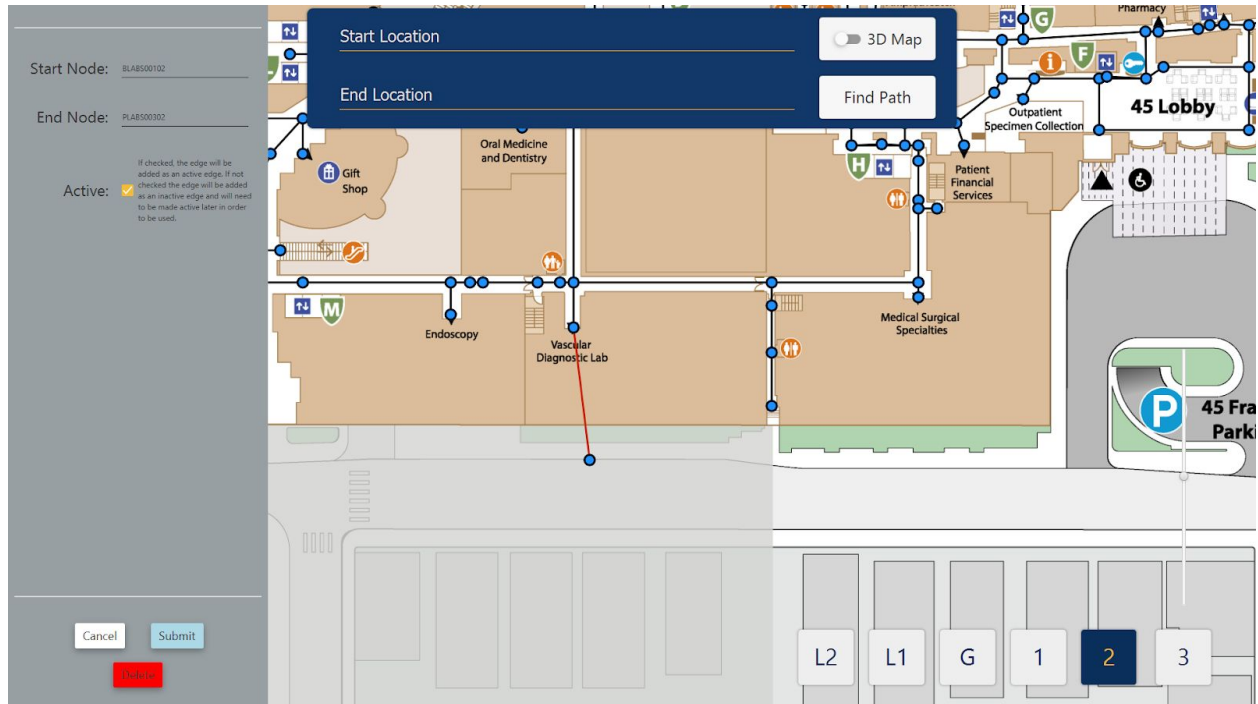4. Click on the **Node Text Field** for the start or end nodes, and click on new nodes on the map to modify them.
   ○ Note: An edge cannot be deleted if it is the only edge connected to one of its nodes.

5. Click the **Delete button** to delete the edge.
6. Click **Yes** on the popup window asking if you are sure you want to delete the edge.

3.2.4.   Add Nodes
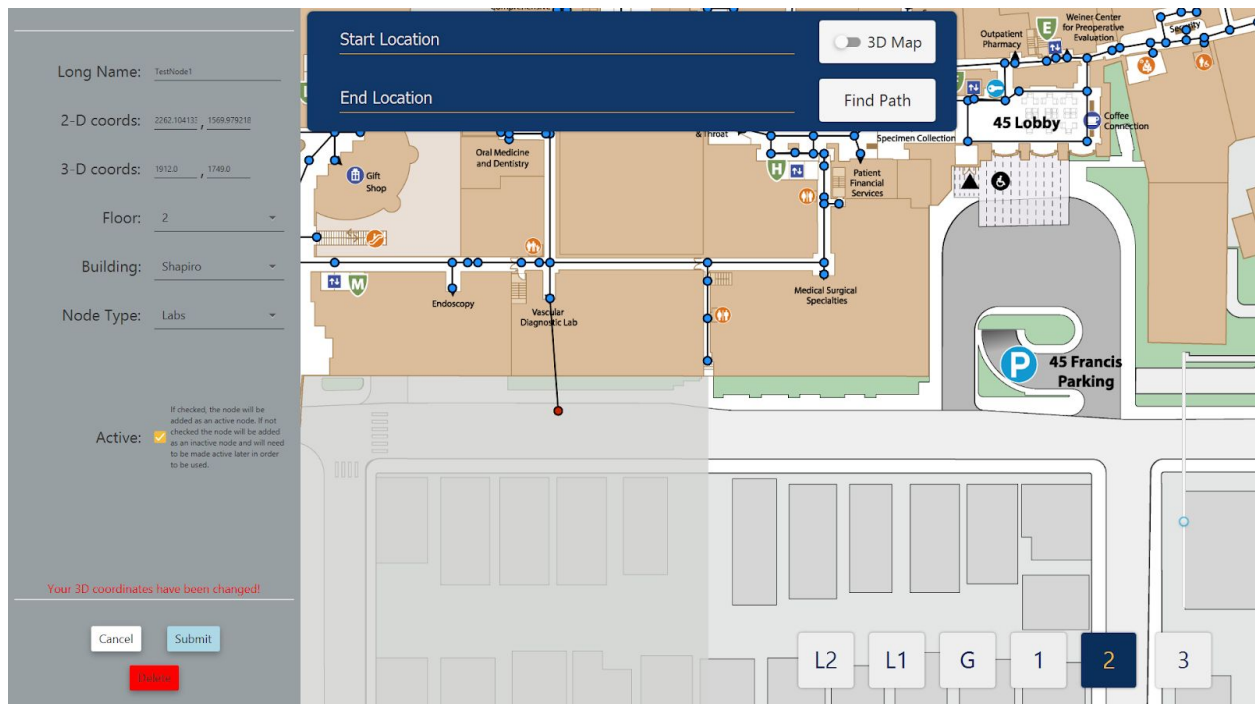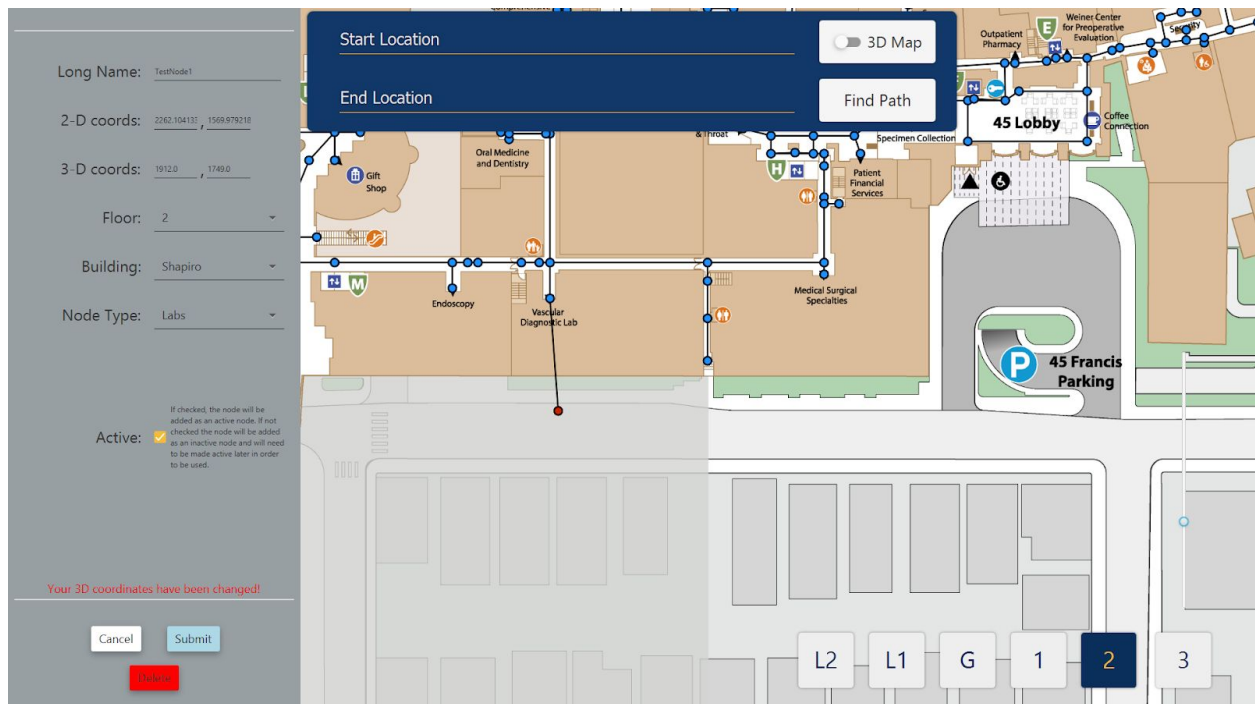

To add a node to the map:

1. Enter your **login credentials** or swipe your **ID card** through the card reader to login as an administrator.
    ○   Note: Only administrators can add Nodes.
2. Left click the **Map Component** button on the Admin home screen.
3. Click on the **New Node** button in the lower left corner of the screen, or click on the map where the node will be placed.
    ○   If you clicked on the **New Node** button, click on the map where you would like the node to be placed to fill in the 2D and 3D coordinates.
4. Add information about node name, floor, building, type, and the connecting node.
    ○   A connecting node is required because orphaned nodes cannot be added to the map.
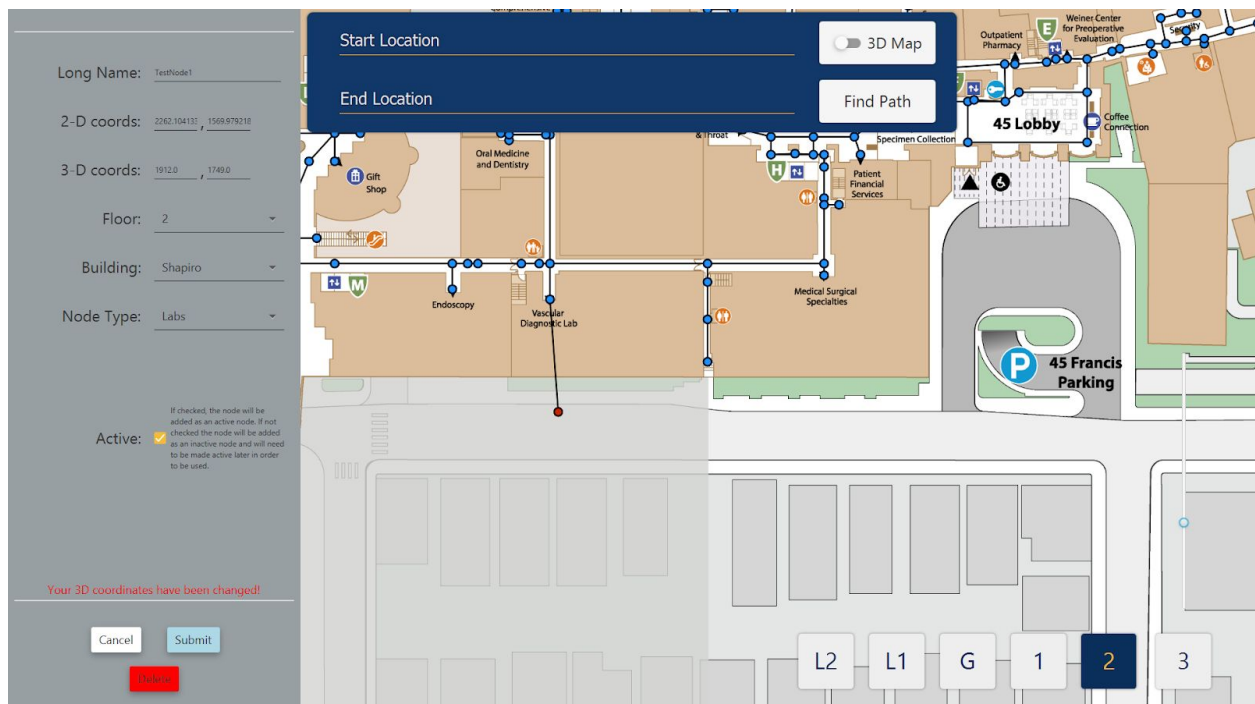5. Click the **Submit button** to save your changes.

3.2.5.   Modify Nodes

To modify a node on the map:
1. Enter your **login credentials** or swipe your **ID card** through the card reader to login as an administrator.
    ○   Note: Only administrators can modify Nodes.
2. Left click the **Map Component** button on the Admin home screen.
3. Zoom in using the mouse scroller and click on the **node** to be modified.
4. Edit **node information** in the popup on the left by clicking and dragging the node, or by manually entering new information.

5. Click **Submit** to save your changes.
    ○ Note: Although nodes can be created and moved in the 2D map, changes made to the nodes in the 3D map will not be saved as they are for visual comparisons.
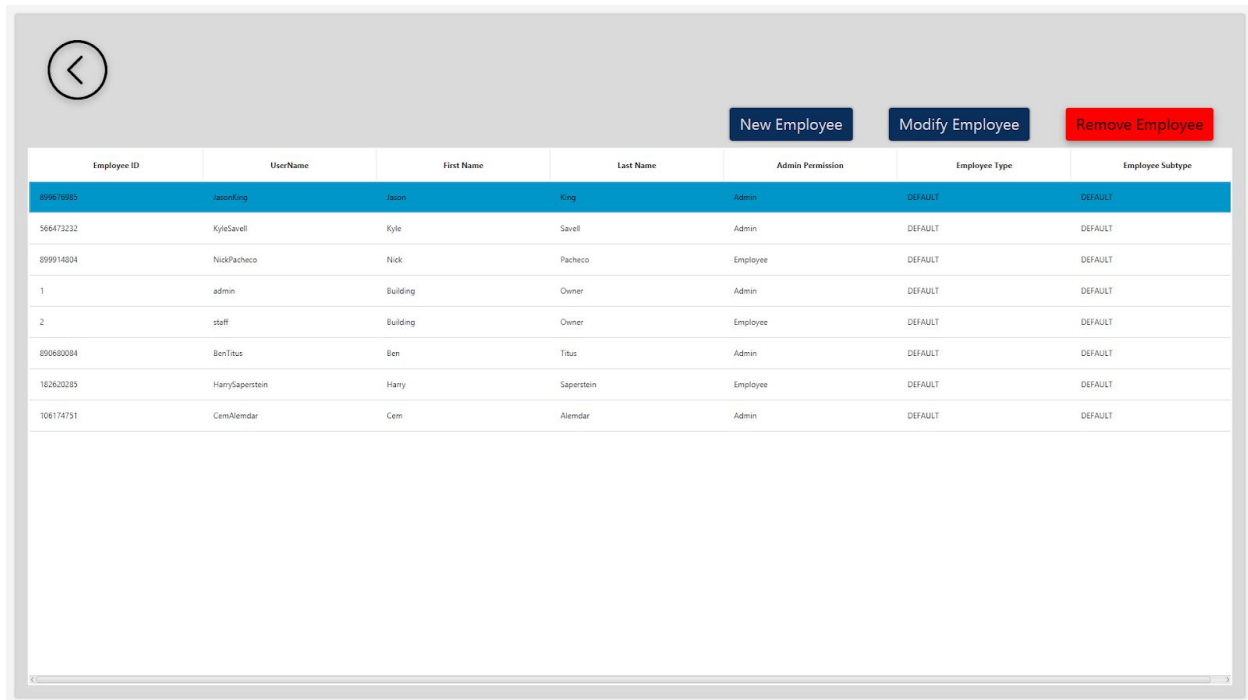

3.2.6.   Delete Nodes

To delete a node from the map:
1. Enter your **login credentials** or swipe your **ID card** through the card reader to login as an administrator.
    ○ Note: Only administrators can delete Nodes.
2. Left click the **Map Component** button on the Admin home screen.
3. Zoom in using the mouse scroller and click on the **node** to be deleted.
4. Click **Delete** to delete the selected node
5. Click **Yes** when prompted to confirm your delete decision.
    ○ Note: Deleting a node will automatically delete any edges that are connected to it, as edges require two existing nodes to be present on the map.

3.3.   Managing Employees

3.3.1.   Add Employees

To add an employee to the database:
1. Enter your **login credentials** or swipe your **ID card** through the card reader to login as an administrator.
    ○   Note: Only administrators can add Employees.
2. Left click the **Employees** button on the Admin home screen.
3. Left click the **New Employee** button.
4. Fill out the **New Employee form**.
5. Click **Submit**.

3.3.2.   Modify Employees

To modify employees in the database:
1. Enter your **login credentials** or swipe your **ID card** through the card reader to login as an administrator.
    a.   Note: Only administrators can modify Employees.
2. Left click the **Employees** button on the Admin home screen.
3. Left click the **Employee** from the table to be modified.
4. Click the **Modify Employee** button.
5. Change the employee information in the **Modify Employee form**.
6. Click **Submit**.

3.3.3.   Delete Employees

To delete employees from the database:

1. Enter your **login credentials** or swipe your **ID card** through the card reader to login as an administrator.
    a. Note: Only administrators can delete Employees.
2. Left click the **Employees** button on the Admin home screen.
3. Left click the **Employee** from the table to be deleted.
4. Click the **Remove Employee** button.
5. Click **Delete** when prompted to confirm your Employee deletion.

3.4. Managing Service Requests

3.4.1. Add Requests

To add a request to the database:
1. Enter your **login credentials** or swipe your **ID card** through the card reader to login as an administrator or employee.
    ○ Left click the **Service Requests** button on the Admin home screen if you login as an Administrator.
2. Left click the **Create New Service Request** button and select the type of request from the dropdown menu
    ○ This will transfer you to that specific service request database screen.
3. Fill out the **Request form**.
4. Click **Submit.**.

3.4.2. Modify Requests

To modify a request in the database:

1. Enter your **login credentials** or swipe your **ID card** through the card reader to login as an administrator or employee.
   - ○ Left click the **Service Requests** button on the Admin home screen if you login as an Administrator.
2. Left click the **Service Request** in the In-Progress or Requested tables and select the **Modify Request** button.
   - ○ Alternatively, right click the service request in one of the two aforementioned tables and click **Modify Request** from the popup box.
3. Modify any information in the **Request form**.
4. Click **Submit.**

3.4.3. Delete Requests

To delete a request from the database:

1. Enter your **login credentials** or swipe your **ID card** through the card reader to login as an administrator or employee.
   - ○ Left click the **Service Requests** button on the Admin home screen if you login as an Administrator.
2. Left click the **Service Request** in the In-Progress or Requested tables and select the **Delete Request** button.

○ Alternatively, right click the service request in one of the two aforementioned tables and click **Delete Request** from the popup box.
3. Click **Yes** when asked to confirm your deletion by the popup.

3.4.4. Completing Service Requests

To complete a service request:
1. Enter your **login credentials** or swipe your **ID card** through the card reader to login as an administrator or employee.
    ○ Left click the **Service Requests** button on the Admin home screen if you login as an Administrator.
2. Left click the **Service Request** in the In-Progress table and select the **Complete Request** button.
    ○ Alternatively, right click the service request in one of the two aforementioned tables and click **Complete Request** from the popup box.
    ○ Note: Only Admins and Employees whose specialty matches the request type can complete a request.

3.5.   Change Settings
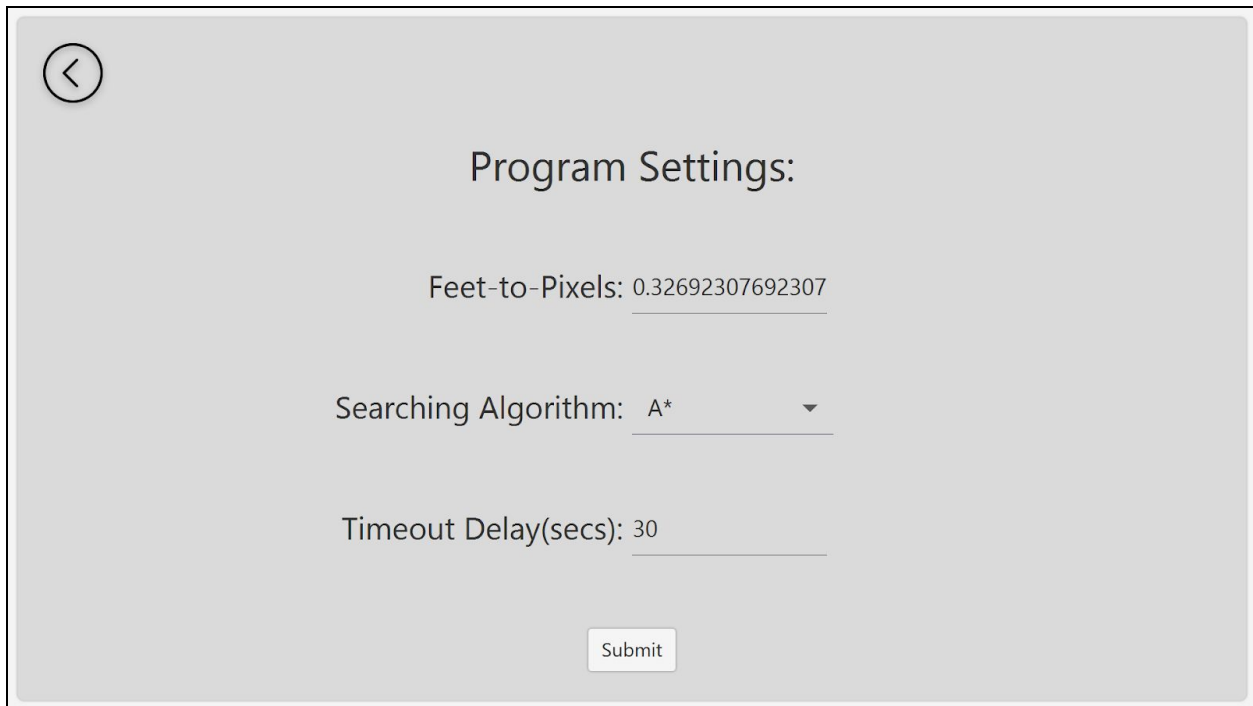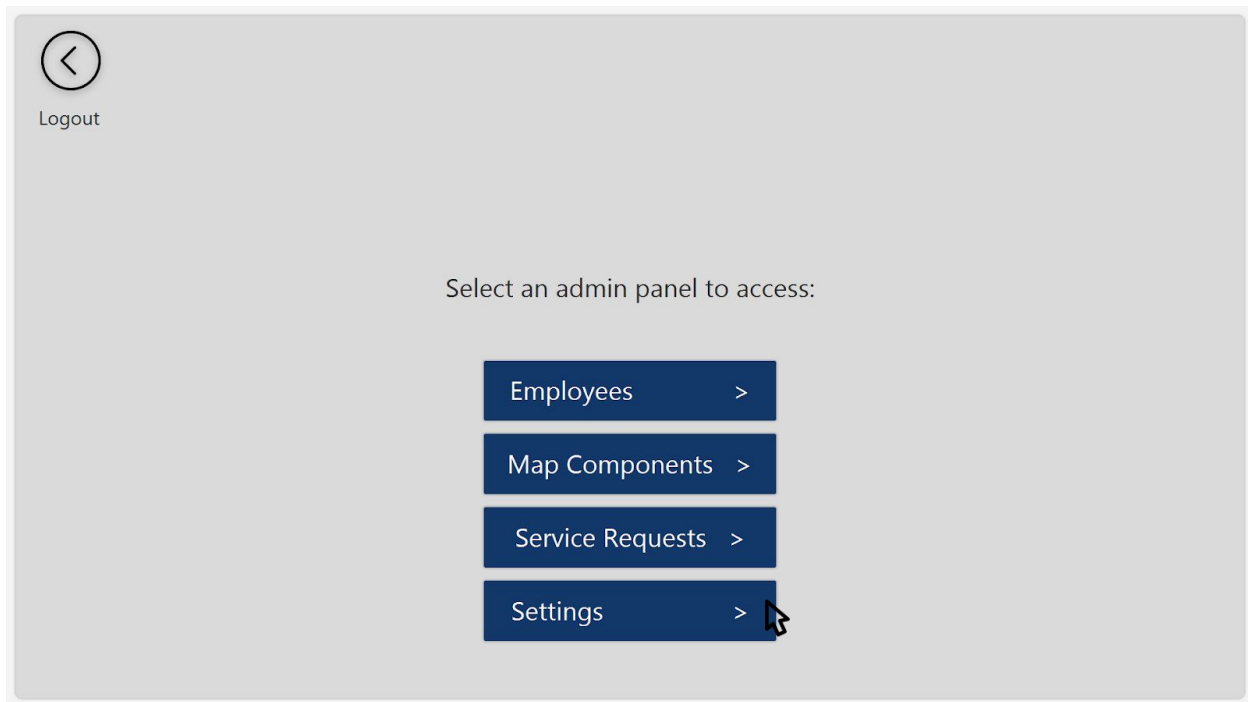
Reference photos for 3.5.1-3.5.3.

3.5.1.   Change Feet to Pixels Conversion Factor

To change the feet to pixels conversion factor in settings:
1. Enter your **login credentials** or swipe your **ID card** through the card reader to login as an administrator.
    ○ Note: Only administrators can change Feet to Pixels settings.
2. Left click the **Settings** button on the Admin home screen.
3. Click in the **Text Field** for the Feet to Pixels category and modify it.
4. Click **Submit** when prompted that these changes will affect text instructions.

3.5.2.   Adjust Idle Screen Timeout Length

To change the adjusted timeout length on idle screens:
1. Enter your **login credentials** or swipe your **ID card** through the card reader to login as an administrator.
    a. Note: Only administrators can change Feet to Pixels settings.
2. Left click the **Settings** button on the Admin home screen.
3. Click in the **Text Field** for the Timeout Length category and modify it, writing your modification in seconds as a unit.
4. Click **Submit** when prompted that these changes will affect idle screen wait times.

3.5.3.   Toggle Pathfinding Algorithm

To toggle the algorithm used during the pathfinding process:
1. Enter your **login credentials** or swipe your **ID card** through the card reader to login as an administrator.
    ○ Note: Only administrators can change Feet to Pixels settings.
2. Left click the **Settings** button on the Admin home screen.
3. Click the **Drop down arrow** under the Algorithm category and change it.
4. Click **Submit** when prompted that these changes will affect pathfinding instructions.

3.5.4.   Submitting Emergency Service Request

To submit an emergency service request
1. Click the **Emergency button** on the home page.
2. Enter the **PIN** number for employees.
3. Click the type of emergency service request that needs to be submitted.