



WAYFINDING AT UNION UNIVERSITY

ASHLEY RAINES

THE PROBLEM

- Many students and visitors have a difficult time finding their way around Union's campus.
- We have one help desk in our biggest building.



THE PROBLEM

- This help desk is located next to the chapel. When looking at the overview of the entire campus, it is central, but when looking strictly at the academic side, it is secluded from where it may be needed most.



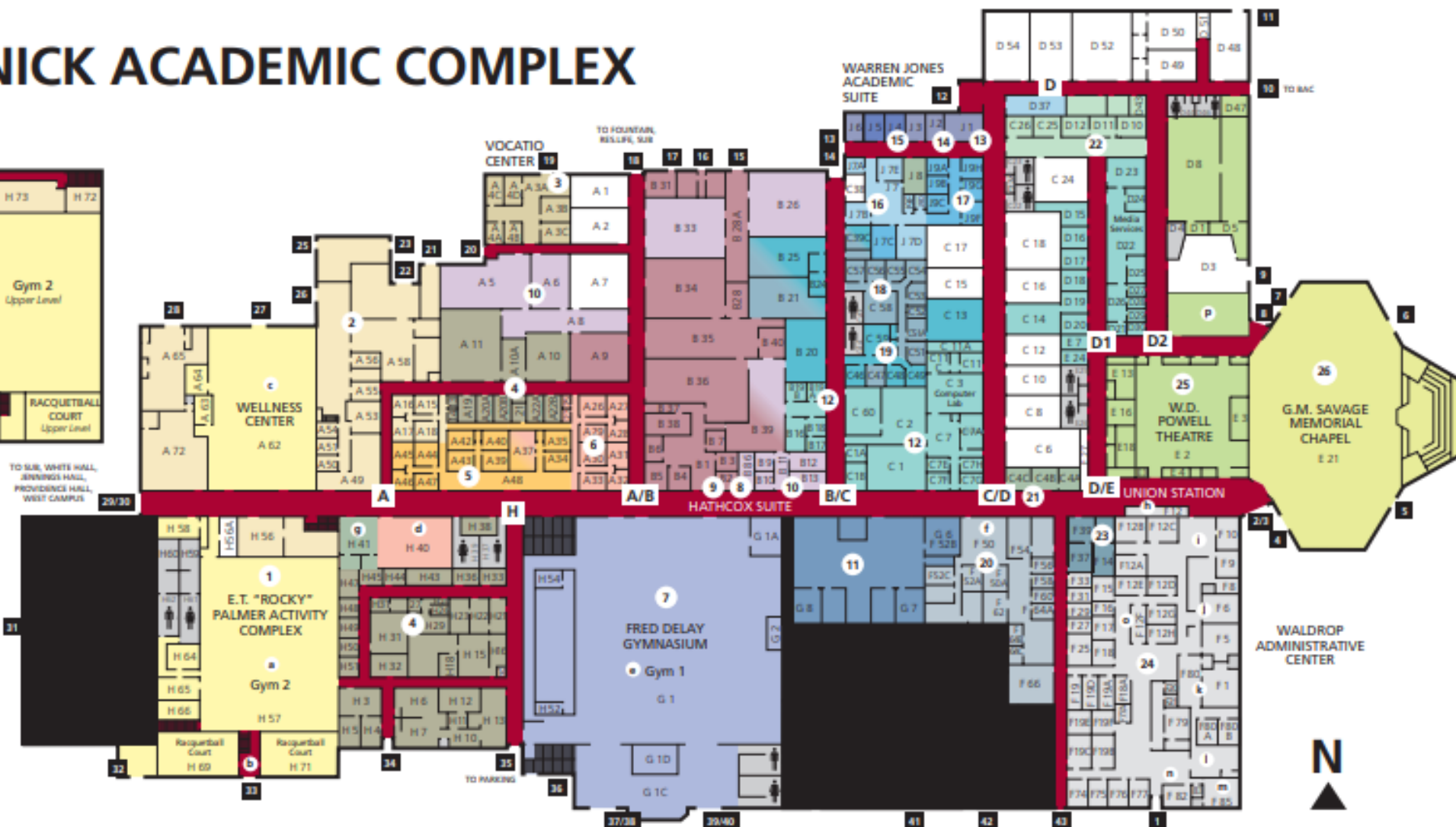
H 75
H 76
H 77
H 78

H 73
H 72
H 71

Gym 2
Upper Level

RACQUETBALL COURT
Upper Level

RACQUETBALL COURT
Upper Level



WHY DO WE NEED IT?

- Anyone who has experienced change will attest to this...
Change is daunting!
- New students have a lot to worry about...
 - Moving into their dorms
 - Registering for classes
 - Getting class supplies
 - The list goes on

MEET MAPWIZE

- Mapwize is a French company who has created a mapping and directional API to be used in creating an indoor experience.

<https://www.mapwize.io/developers>



WHY NOT USE GOOGLE MAPS?

- During this project, many people asked me “Why not use Google Maps?”
- Google Maps only uses GPS services which doesn't do very well indoors.
- In order to use an indoor location service, you need to utilize one of a few options...
 - Wi-fi triangulation
 - iBeacons
 - Cisco CMX

INDOOR LOCATION SERVICES

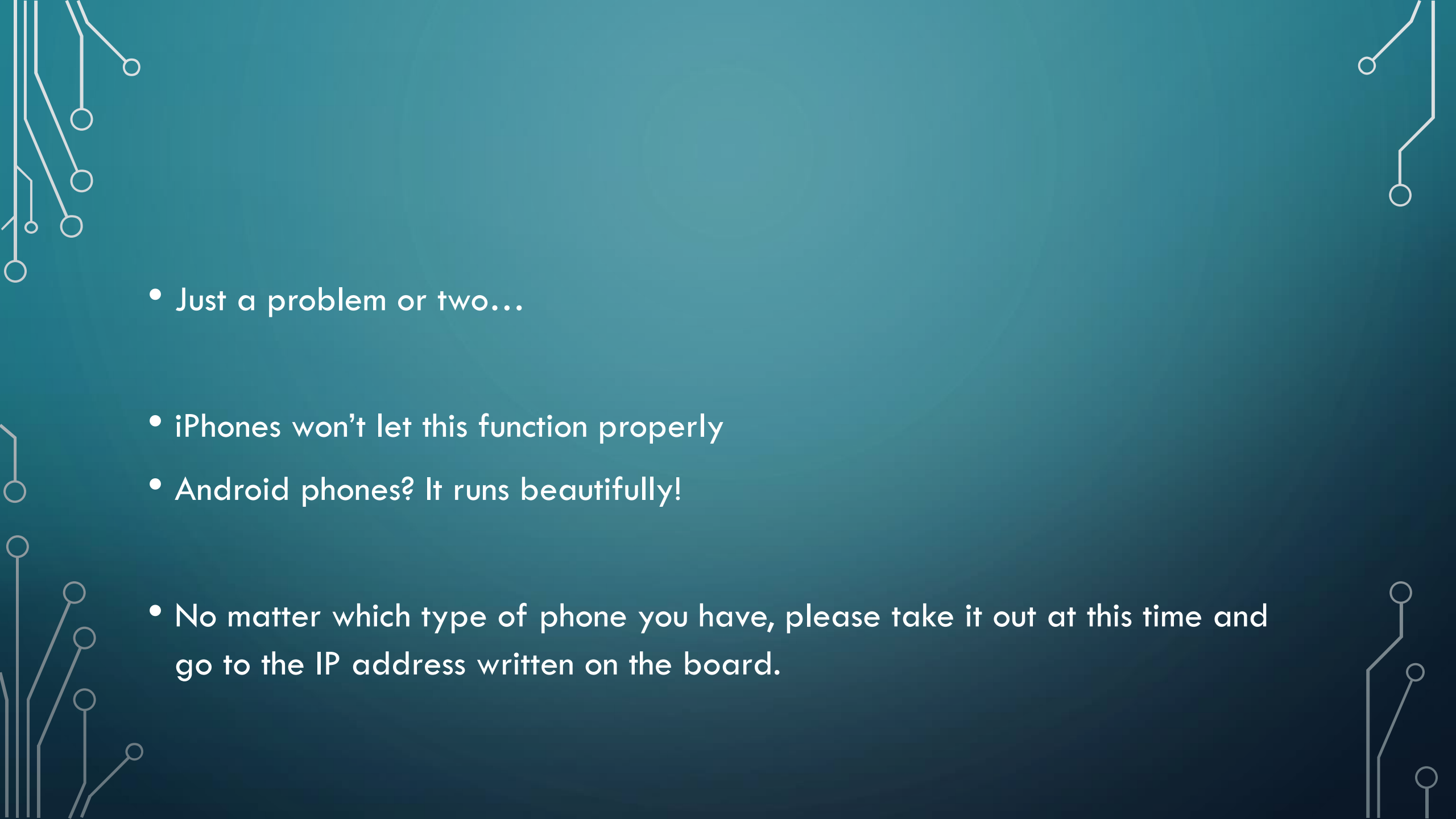
- With the Mapwize service, I chose to utilize the Wi-fi triangulation.
- Why?
- Mapwize has the triangulation built in to its service.
- Why not the others?
- The other options would need additional components or hardware that I didn't have the ability to attain or use.


```
1  <html lang="en-US">
2      <head>
3          <title>Senior Project</title>
4          <meta charset="UTF-8">
5          <meta name="viewport" content="width=device-width, initial scale=1.0">
6          <link rel="stylesheet" type="text/css" href="resources/style.css">
7
8      </head>
9
10     <body>
11         <!--<h1 style="border:5px solid #ffffff;">Welcome to Union University!</h1-->
12         <div class="flex-container">
13             <div>
14                 <a href="resources/mapwize.html">
15                     
16                 </a>
17             </div>
18         </div>
19
20     </body>
21 </html>
```

```
var unionVenueid = '5c82a195a380850016b0226f';  
var unionAPIkey = '95c9933eb6c1967381993901b64fb830';
```

```
MapwizeUI.map({  
  apiKey: unionAPIkey,  
  mapboxOptions: {},  
  mapwizeOptions: {},  
  onInformationButtonClick: (e) => {  
    console.log('clickOnSelectedInformation', e)  
  },  
  onMenuButtonClick: (e) => {  
    console.log('clickOnMenu', e)  
  }  
}).then((map) => {  
  console.log('MAP LOADED')  
})
```

```
Mapwize.apiKey(unionAPIkey) //this is the api key which links the file to the mapping data  
Mapwize.map({  
  container: 'mapwize',  
  color: 'crimson red',  
  center: [-88.8617697,35.6844031] // this gives the long/lat coordinates for the venue  
},{  
  venueId: unionVenueid  
}).then(mapInstance => {  
  mapInstance.centerOnVenue(unionVenueid); //instructs the map to center on top of the venue  
});  
map.fitBounds([  
  [-88.6, 35.4],  
  [-89.0, 35.8]  
]);  
map.getFollowUserMode();  
map.setFollowUserMode('FOLLOW_USER');
```

- 
- The background is a dark teal gradient. In the corners, there are white line-art illustrations of circuit boards. The top-left and bottom-left corners feature more complex, branching circuit patterns, while the top-right and bottom-right corners have simpler, more linear circuit designs.
- Just a problem or two...
 - iPhones won't let this function properly
 - Android phones? It runs beautifully!
 - No matter which type of phone you have, please take it out at this time and go to the IP address written on the board.

An abstract graphic on the left side of the slide, consisting of white lines and circles on a dark teal background. The lines are vertical and horizontal, with some branching out, resembling a circuit board or a stylized tree. The circles are small and are placed at the ends of the lines.

QUESTIONS?

A decorative graphic on the left side of the slide, consisting of white lines and circles on a dark teal background, resembling a circuit board or a stylized tree structure.

THANK YOU!