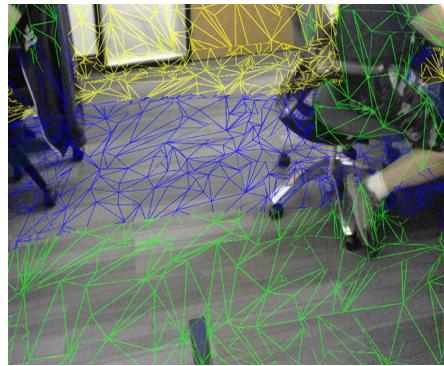


# Software Engineering internship at Planon

## HoloLens2 Project

Jun 2023 - Aug 2023

After finishing the parking project, I started working on an internal navigation project which used a HoloLens2, augmented reality, application to guide users to their meeting room. My task was to upload the application from Unity onto the HoloLens2 and to make the menu more accessible. I started by getting myself familiar with the code left off by the previous team that had worked on the project. The code was composed of 3D scans of the building and spatial mappings in Unity to understand where the user was in space and a program which guided the user from one location on the map to another. All of the code was written in C# in Unity.



In order to upload the internal navigation app onto the HoloLens2, I needed to make the application compatible with the HoloLens2. To make the application compatible, I needed to pair the HoloLens2 with the Laptop using Unity's device library and download packages that translated the C# code on unity to be readable and not throw an error. This process was very meticulous, since a specific driver was required and lots of errors would come up throughout the linking process, since many libraries, packages and drivers needed to be uninstalled and reinstalled to finally upload the application. Once uploaded, the menu screen was a bit glitchy, since it was hard to see and clicking the buttons on the menu rarely worked, so I tried editing the shaders responsible with the menu to make the menu more visible and added a voice activation function from the keyword recogniser api library in Unity which allowed the user to say a list of commands instead of pressing through the menu to access the app functionality more easily. I then catalogued the work with in depth descriptions to help for a smoother transition for the next set of interns that would be charged with continuing to develop and upload the internal navigation application, to then help people who aren't accustomed to the building to help them find their meeting room, just by following arrows in their augmented reality environment.