

Scenario 1

Novice Drone Pilot Nominal Interaction Scenario – Flight Visualization App Workflow

Charley Thorton was hired to fly a drone to collect data on points within the building that need to be inspected. Because Charley has never flown in this building, he was given a device that has this application.

Charley is currently looking at the “Upload View” tab to upload files or to use the default files. Charley clicked the default button, as he was instructed. Charley then clicks the “Analyze View” tab that switches the view to the 3D representation of the building and the flight paths.

After switching, a modal appears, reading “Does the scene look aligned?”. Charley notices that the paths and inspection points do not match the current building location in 3D space. Charley notices there is an option to translate and rotate the building until the space matches up with the data points. When the 3D space looks accurate.

Charley continues on, using their mouse and keyboard to “fly” throughout the 3D space. Charley notices that the view is a bit cluttered because all of the flight paths are shown by default. Charley decides to toggle several of the paths to make the view less cluttered by clicking each path’s name in the path visualizer widget pane. During this time they are curious about one of the flight paths that was taken. Charley wants to know what direction the drone was flying during this path and clicks on this path which highlights it, displaying a directional arrow. Charley wants to know how fast the drone was going and in what direction it was flying so they hover over the path at different points which populates the flight metadata viewer with the speed and pitch of the drone at that particular time.

At this time Charley is curious about any potential places where they might need to be more careful when flying the drone. They observe that certain places on the displayed path are red which indicates more time spent in that area. It is determined that those areas must be important.

Upon having navigated the 3D space and having viewed multiple potential flight paths, the drone pilot feels confident in their ability to replicate such a drone inspection. Charley goes on to exit the web browser and close the application.