**ASPC Team Root**

**Team: David Cowles, Logan Crowe , Ayden Martin, Trevor Hamilton**

**Sponsor: Automatic Spring Products Corporation**

**Zoom Link:** [**https://gvsu-edu.zoom.us/j/92942543981?pwd=cWQrSTJuS3FIdlVJWFZXejJQY2pnZz09**](https://gvsu-edu.zoom.us/j/92942543981?pwd=cWQrSTJuS3FIdlVJWFZXejJQY2pnZz09)

**Passcode: 565523**

Abstract:

The Root team working for Automatic Spring Products Corporation (ASPC) was responsible for developing a server to act as an intermediary between the cloud and the sensors developed by the Branch & Leaf team. Our server is designed to act as a wifi hotspot to allow for the coordinated transmission of data between the sensors, the cloud, and our own SQLite database. The database is meant to store backup data from the cloud and sensors in case of a wifi outage. Information about spring production jobs will be pulled from the cloud and forwarded to the appropriate production stations, and data relating to material usage will be received from the sensors and pushed to the cloud. The entire server prototype runs on a Raspberry Pi 4b 2GB and is meant to interface with the Plex ERP software used by ASPC.