

Team 3 - Andrew Chen, Eric Ong, Can Zhou
Requirement Summary

Module Name	High Level Requirement	Points
Height Adjustment Module	<p>This module should successfully move our table prototype up and down automatically using Ultrasonic Sensor data.</p> <p>This module should also be able to disable its automatic operation, locking the height and allowing the table to be adjust height manually</p>	15
Customer Presence Sensing Module	<p>This module should successfully detect if something is on top of the table via the Load Sensors and if someone is sitting at the table via the FSR</p> <p>This module should also send the status of the chair (through bluetooth) and table (via pins) to the Raspberry Pi Zero Table Module</p>	10
Raspberry Pi Zero Table Module	<p>This module should successfully poll data from the Customer Presence Sensing Module, and based on an algorithm report whether the table is vacant, needs service, or occupied</p> <p>This module should also send payment data and table status to a single coordinator</p>	10
Dashboard Module	<p>This module should successfully display the status of each table on a Frontend Web Page and be able to send bills to each table</p> <p>This module should also allow users to upload a floor plan to be used as an overlay</p>	10
Payment Module	<p>This module should successfully poll for a NFC payment and send it to a coordinator</p> <p>This module should also process the payment data and display an acknowledgement on the dashboard</p>	5
	Total	50