Project Design Phase-II

Solution Requirements (Functional Requiremnt)

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Detailed bin inventory	The IoT device consists of Ultrasonic sensor, IR sensor, Weight sensor. To send data to the cloud GPRS/GSM is used. The Dashboard displays information about the bin, including its capacity, most recent measurement, GPS location, and collection schedule.
FR-2	Real time bin monitoring.	Retrieving information from database for calculation garbage bin which fulfils the condition for garbage collection, example: Collect garbage from bins whose level is over 80% of bin. Garbage collection live monitoring is done using a client side script
FR-3	Adjust bin distribution.	Determine which regions have a dense or sparse distribution of bins. You can make any necessary adjustments to bin position or capacity based on past data.
FR-4	Eliminate inefficient picks.	Eliminate the collection of half-empty bins. The sensors recognize picks. By using real-time data on fill-levels and pick recognition, we can show you how full the bins you collect are.
FR-5	Plan waste collection routes.	Route planning for waste pickup is semi-automated using the tool. It is prepared to act and arrange for garbage collection based on the level of bin filling at the moment and projections of when capacity will be reached.