

Modules	Description
Log in/out (Data validation)	Input: Registered information from User Output: Main interface – validation successful This module is a compulsory one used to grant access to users (Officer level/ Janitor & Collector level)
Route planning	Input: MCPs from Officer Output: Calculated distance Route planning module is meant to be a productivity-oriented modules since it helps significantly reduce the human workload which could have been the Officer's responsibility. This calculate the current total distance a J/C has to finish on a daily basis and give Officer chances to maximize J/C work efficiency.
Task assignment	Input: Information got from the database and route planning Output: Assigned task for all J/C Task assignment is one of the main module for this application. Base on retrieved information, Officer will assign the tasks (including MCPs location and vehicles) to all J/C available.
Chat Communicate	Input: Message Output: Sent messages Chat function is an additional function which helps solve unexpected situation during working hours and increase communication between workers.

Feedback/	Input: Feedbacks/ Leave application form
Leave	Output: Reply/ Leave permit
application	This allows J/C to communicate directly with Officers who control their tasks. Moreover, with this module, Officer will be able to optimize their assignment.
Task check	Input: check in/ out for task
in/check out	Output: workday recorded in database

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