C CLEANER

Abstract:

This project deals with the problem of Waste management in smart cities, where the garbage collection system is not optimized. This project enables the organizations to meet their needs of smart garbage management system. This system allows the user to manage the garbage bin and to give a cost effective and time saving route to the truck drivers.

Waste management is all the activities and actions required to manage waste. This includes collection, transportation with monitoring and regulation. Waste is collected at regular intervals by specialised trucks. Waste collected is then transported to an appropriate disposal area.

The web portal will provide functionality to manage the system and dustbin information. It also helps to calculate the salary of each truck drivers those collect the waste according to their work done.

Objectives:

The key research objectives are as follows:

- o The proposed system would be able to automate the solid waste monitoring process and management of the overall collection process.

- o The user provide the level of waste in it and send the message directly to the municipal corporation.

- o According to the information of the dustbin, the vehicles from the municipal corporation collect the waste at appropriate time.

- o The proposed system helps less time and fuel consumption as the truck go only to the filled containers.

Users

Admin

- o Manage Registration.
- o Manage Salary.
- o Assign truck drivers to collect waste from particular location.
- o View complaints about truck drivers.

o View feedback.

<u>Truck drivers</u>

- o View Assignments
- o Update status of waste bin
- o View Salary
- o Manage profile

<u>Users</u>

- o Manage waste bin status
- o Manage profile
- o Request for waste pickup
- o Register complaints
- o Register feedbacks

Modules:

<u>Registration</u>

Individuals can register in order to perform normal user operations in the applications.

Truck drivers can register in order to perform truck driver operations in the applications.
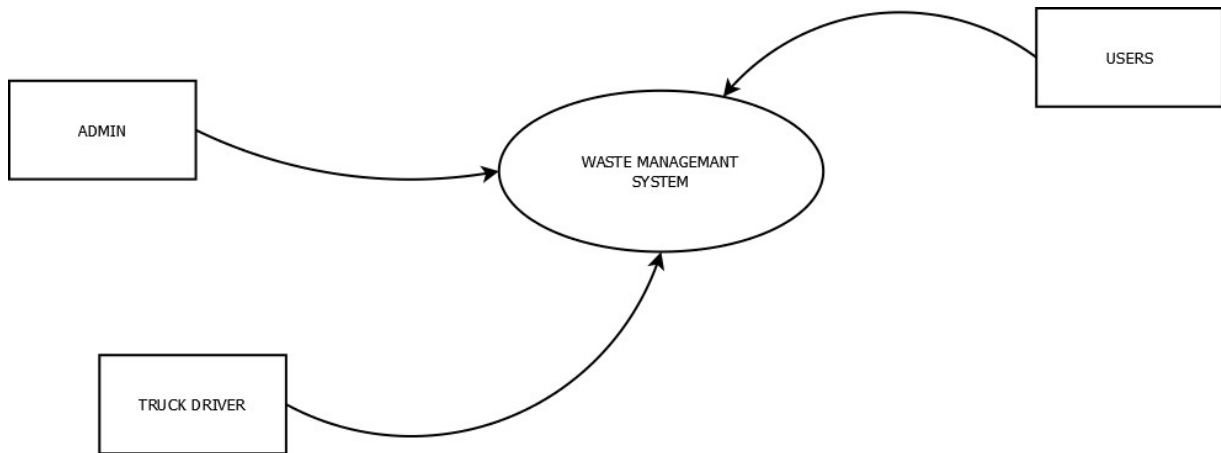
<u>Salary</u>

Salary for truck drivers are calculated by their work.
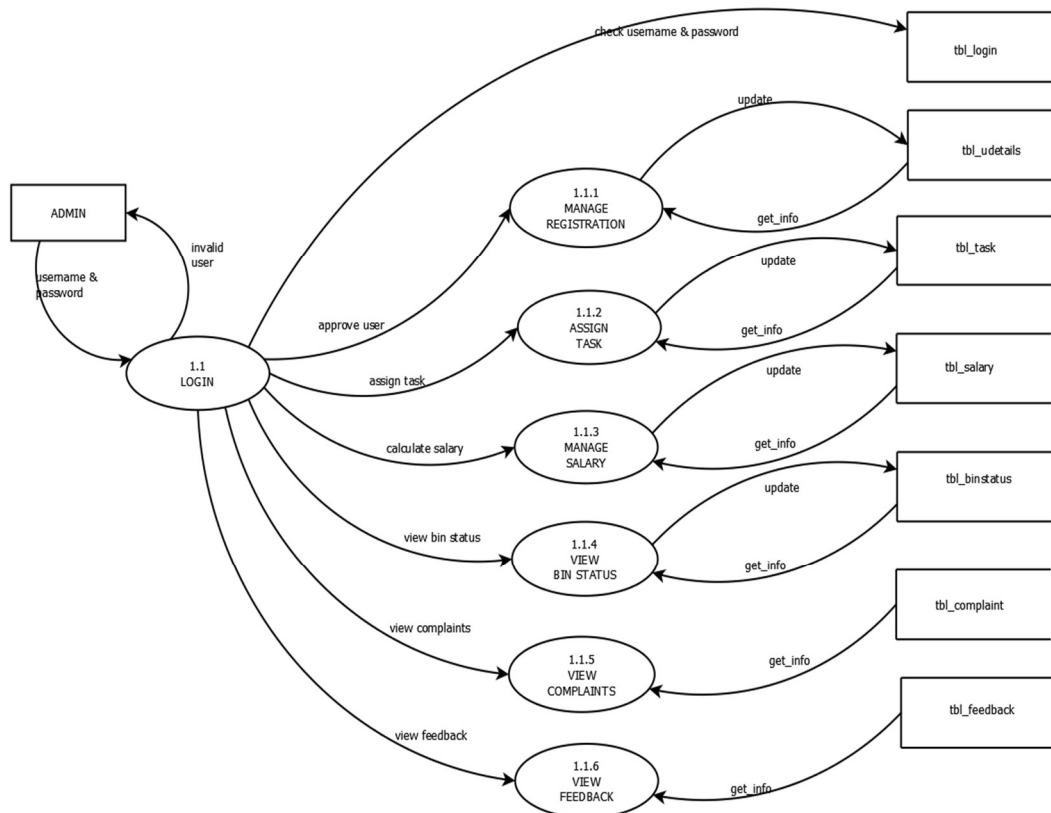
<u>Complaint Registration</u>

Users can register complaints about truck drivers who doesn't perform their work correctly.
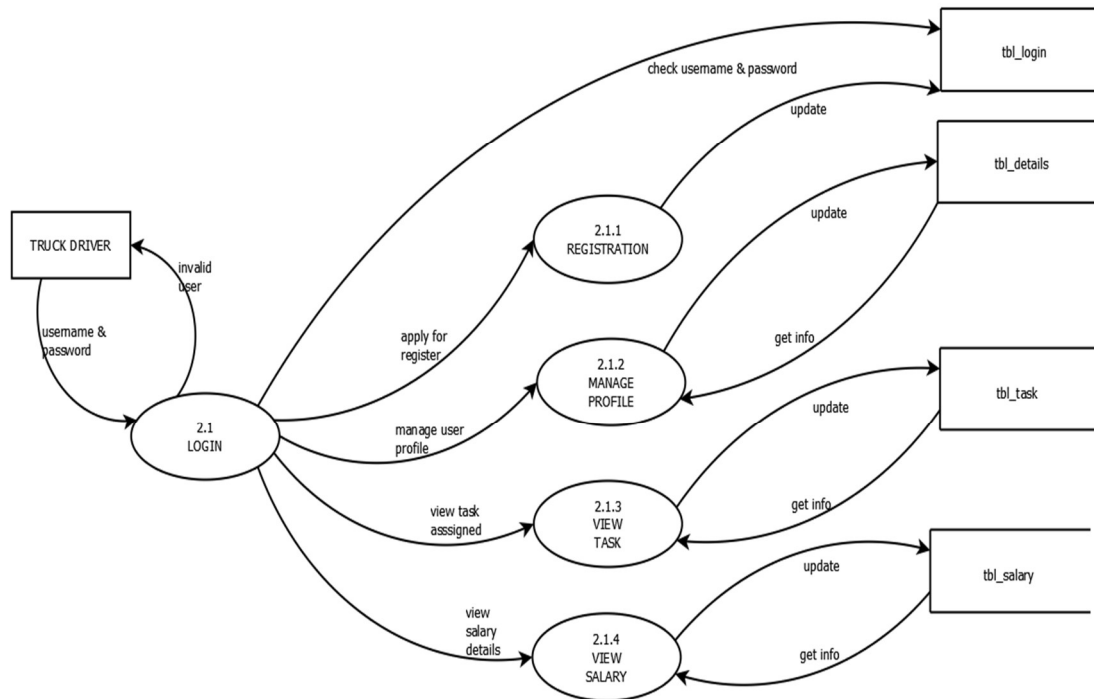
Data Flow Digrams:
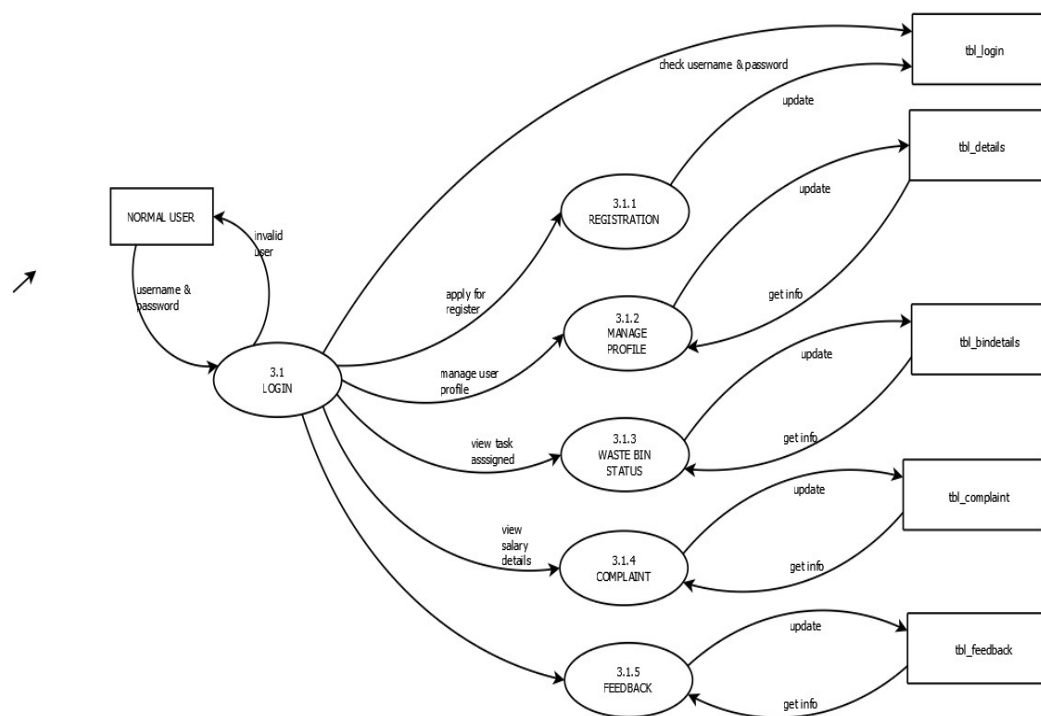
Level 0:

Level 1: Admin

Truck driver

Users

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Table Design:

tbl_login

Primary Key: login_id

TABLE FIELD	DATA TYPE	KEY	DESCRIPTION
login_id	Int	Primary key	Unique key for table
email	Varchar(25)	unique	Email id of customer
password	Varchar(25)		Password for login
type	Int		Admin/user/truck driver
status	Varchar(10)		Approved/ blocked

tbl_udetails

Primary Key: ureg_id

TABLE FIELD	DATA TYPE	KEY	DESCRIPTION
ureg_id	Int	Primary key	Unique key for table
fname	Varchar(25)		First name
lname	Varchar(25)		Last name
mobile	Varchar(25)	unique	Mobile number
email	Varchar(25)	unique	Email id of customer
place	Varchar(25)		Place of customer
house_name	Varchar(25)		House name of customer
district	Varchar(25)		district of customer
pincode	Varchar(10)		Pincode of customer
photo	Varchar(10)		Photo of customer

tbl_tddetails

Primary Key: ureg_id

TABLE FIELD	DATA TYPE	KEY	DESCRIPTION
tdreg_id	Int	Primary key	Unique key for table
fname	Varchar(25)		First name
lname	Varchar(25)		Last name
mobile	Varchar(25)	unique	Mobile number
email	Varchar(25)	unique	Email id of truck driver
place	Varchar(25)		Place of truck driver
truck_regno	Varchar(25)	unique	Register no of truck
photo	Varchar(20)		Photo of truck driver
licence_no	Varchar(20)		Licence number of truck driver
licence	Varchar(20)		Doc file of licence

tbl_bindetails

Primary Key: bin_id

TABLE FIELD	DATA TYPE	KEY	DESCRIPTION
bin_id	Int	Primary key	Unique key for table
date	date		date
ureg_id	int	Foreign key	User id
status	boolean		Status of waste bin is ready for collection

tbl_complaintdetails

Primary Key:comp_id

TABLE FIELD	DATA TYPE	KEY	DESCRIPTION
comp_id	Int	Primary key	Unique key for table
date	date		date
ureg_id	int	Foreign key	User id
comp_details	Varchar(100)		Complaint details
status	boolean		Wheather read or unraed

tbl_feedback

Primary Key:feedback_id

TABLE FIELD	DATA TYPE	KEY	DESCRIPTION
feedback_id	Int	Primary key	Unique key for table
date	date		date
ureg_id	int	Foreign key	User id
subject	Varchar(10)		Subject of feedback
message	Varchar(100)		feedback details
status	boolean		Wheather read or unraed

tbl_task_allocation

Primary Key:task_id

TABLE FIELD	DATA TYPE	KEY	DESCRIPTION
task_id	Int	Primary key	Unique key for table
Date	date		date
tdreg_id	int	Foreign key	Truck driver id
status	boolean		Pending/completed

tbl_task_location

Primary Key:tloc_id

TABLE FIELD	DATA TYPE	KEY	DESCRIPTION
tloc_id	Int	Primary key	Unique key for table
ureg_id	int	Foreign key	User id
Task_id	int	Foreign key	Task id

tbl_salary

Primary Key:salary_id

TABLE FIELD	DATA TYPE	KEY	DESCRIPTION
salary_id	Int	Primary key	Unique key for table
tdreg_id	int	Foreign key	Truck driver id
total_task	Int		Completed task
month	Varchar(20)		Month
salary	double		Salary of customer