**---------- Complaint Redressal System Writeup ----------**

* **Overview:**

ABC Telecom Ltd. is one of India’s major telecommunication service providers offering landline, mobile phone and Fiber optic broadband services across the country. Their customer services group is interested in providing a set of customer redressal services through the development of a new application using the state-of-art technologies such as Spring-boot for the development of java-based services, and UI using Angular and integrate them suitably, so that all the necessary services are taken care of through this application. They want to have an online complaint management system where the customers can raise complaints regarding their landlines and broadband services..

* **Tools Used:**

1. Eclipse: An IDE to code for the application

2. Java: A programming language to develop the prototype

3. Angular: To create view layer

4. Maven: A build tool for adding all the external dependencies

5. Git: To connect and push files from the local system to GitHub

6. GitHub: To store the application code and track its versions

7. VS Code: To code for frontend

8. Docker: To deploy jar in a container to access it from EC2

* **Frameworks & Techniques Used:**

1. Spring Boot: Popular Java Framework to achieve inversion of control and dependency injection

2. Spring MVC: Model View Controller by Spring.

3. Angular: A popular JavaScript framework to design view layer

* **UI Screens:**

**Login Screen**

The login screen will have the username and password fields. The usernames and passwords and roles are stored in the user table. The system should show those screens that are allowed for each category of users.

**Admin Activities through UI**

There has to be only one admin, and he/she can login/logout. Once logged-in, he/she should be able to maintain the lifecycles of Customer, Manager and Engineer

**Manager Activities through UI**

Managers should be able to login and logout. Once logged in he/she should be able to do the following, at a minimum:

* View all the tickets and status
* Assign Complaints to different Engineers
* Should be able to view of Customer feedback

**Engineers Activities through UI**

Engineers should be able to login and logout. Once logged in he/she should be able to do the following, at a minimum:

* View the complaints,
* View complaints based on individual customer
* Work on complaints (Off line activities) and assign the new status
* Mark the ticket status appropriately
* View the Customer feedback

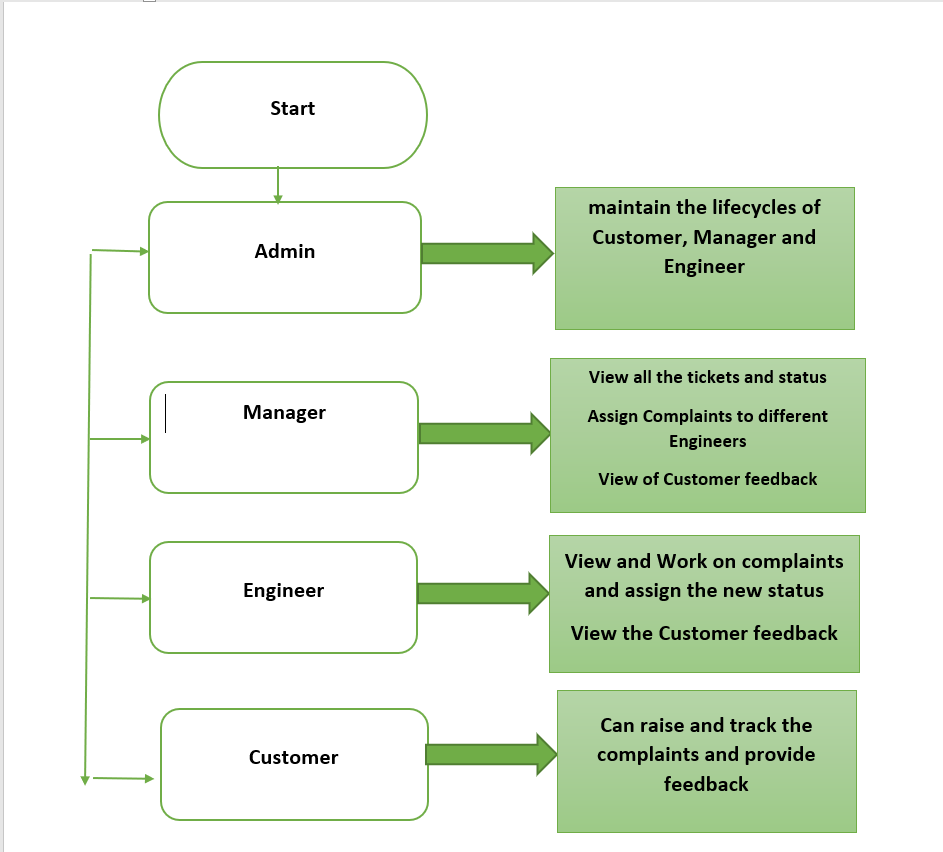
**Customer Activities through UI**

A customer should be able to login/logout. Once logged in, he/she can view the status of the tickets raised by him/her. The customer also should be able to provide a feedback on the status RESOLVED or ESCALATED. In case there is a problem, the customer can raise a ticket on the complaint, through say, Register Complaint. Once successfully submitted, the customer should get the ticket number as the acknowledgement.

* **Access Levels:**

Appropriate users of the use cases defined in the Requirements section should have appropriate access levels. For example, Admin screens can take care of the CRUD operations on Customer, Manager and Engineer Use cases. Each of them should be able to do appropriate activities as defined above, using their UIs.

* **Application Flow Chart:**

****