❑ Overview

Introduction:

- This is a proposal for software project lab I. This project will be developed during the **3rd semester of BSSE 1st batch, IIT, NSTU,** from *january 2019* to end of the semester.
- We will work along with our regular academic courses. This project is the implementation part of the course **software project lab - I**.

❑ Title:

CUSTOMER QUEUE MANAGEMENT SYSTEM.

❑ What is queue management system??

- Automated queue management system is a system that helps service provider to manage customer in efficient way.
- We also define queue management as an approach used to develop more efficient systems that can reduce customer waiting times or perceived waiting times for service. The aim is to increase both the number of customers that can be served and customer satisfaction with the entire queue experience.
- Queue management is a set of principles aimed at controlling customer flow and streamlining the queuing experience.

❑ Deliverables:

i. Source code.
ii. Documentation.
iii. User Manual.

❑ Motivation:

- Queues can be frustrating for your customers, but if managed well they can be an opportunity to engage people and reflect a positive business image. Rather than simply letting people stand in line.
- Ease of use
- Pricing
- Available options

❑ FEATURE

- Features : Customer end

- Support single / multiple selection of service/s at the time of dispensing the token.
- Supports multiple services management.
- Generates tokens which contain date, branch, token number, list of selected services etc.
- Categorizes the customers with prioritizing the service

- Features :Customer Service Desk End

- Service officers (CSO) are able to view all relevant information of the customer arriving at his counter like token no, Customer type, transactions requested, wait time etc..
- CSO are able to view the services aligned against his counter, upcoming token no., Past token nos. Serviced, tokens missed.
- CSO are able to stop or pause operations for his counter for a certain period of time.

- Others:

- Support 5 customer care services.
- Priority search and Priority call.
- History log table.
- Deletion ability.

❑ How does its work???

- Queue is also called first in first out (FIFO) lists. since the first elements in a queue will be the first element out of the queue. In other word the order in which elements enter a queue is the order in which they leave.
- Queue management system mainly follow 4 rules to control the flow of customer.

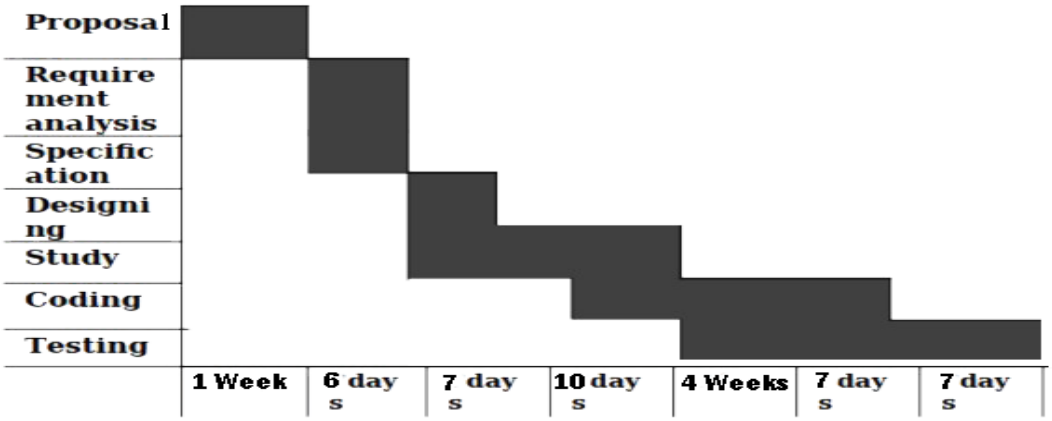
- Add Customer:Admin of the system add the customer to the queue table.
- Inform: Your customers will know exactly where to go for which ever service they select.
- Manage: Customers can no longer push ahead in line, nor can they lose their spot. Priorities will be handled faster.
- Record: Everything from waiting time to serving time will be recorded. You can rest assured knowing that the peak hours are getting handled competently by your staff.

❑ Work Distribution:

Task	*Active Member*
Proposal	Rahat Uddin azad,Faisal ahammed,Al Jaber
Requirement Analysis, Specification	Rahat Uddin azad,Faisal ahammed,Al Jaber
Design	Rahat Uddin azad,Faisal ahammed,Al Jaber
Study	Rahat Uddin azad,Faisal ahammed,Al Jaber
Coding	Rahat Uddin azad,Faisal ahammed,Al Jaber
Testing	Rahat Uddin azad,Faisal ahammed,Al Jaber

❑ Proposed Time line:

Task	*Deadline*
Project Proposal	**Within 3rd Week of January**
Requirement Analysis, Specification	**Within 21th January**
Designing, Study	**Within 28th January**
Coding	**Within 24th February**
Final Testing	**Within 3rd March**



Proposal timeline

❑ Requirements:

- ❑ Requirements for software development
- ▪ Java SWING
- ▪ Java GUI
- ▪ File Handling
- ❑ Requirements for USER:
- ▪ Its desktop base application.
- ▪ Support all version of windows.

❑Objectives

❖ **USER**

- It will increase service provider Profit.
- User can get service without waiting in queue.

❖ **DEVLOPER**

- Expertizing in OOP
- Building group working skill
- Desktop application building ability.

❑ **Scope**

- Later versions may be developed for desktop and android

Reference:

- www.irisys.net
- Qminder blog
- Safari blog online
- www.wavetec.com