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# **PROBLEM STATEMENTS**

# (Department of Information Technology)

# Problem 1: Hostel Management System

Develop a web application for NIT Hostel Management. There will be two types of users i.e. students who have to register and one administrator for each hostel.

MINIMAL FEATURES:

* Complaint Register
* Student Feedback System
* Application Submission
* All kinds of official work related to hostel
* Hostel allotment

# Problem 2: Web Application For Online Auctioning System

An online auction server which allows a person to place an advertisement for an item for sale online and buyers will bid for them. The buyers view the items on the server, and if they want to bid for it, they need to have a client to lodge a bid. The server then notifies other potential buyers of the received bid, so that they can bid against it. If no further bids are received in a given time after the last bid, the server notifies all the potential buyers that the sale is finalized.

Features of an online auctioning system -

1. A platform where people can search for products they intend to buy.
2. The products should have a profile that shows the details.
3. Sellers should be able to add their products to existing list.
4. Potential buyers can bid for an item.
5. Security: password mechanism has been used to prevent unauthorized access.
6. Administrator can manage user and product profiles.

# Problem 3: Medicine Finder

People have to search each and every store to find the required medicine. Although there are applications for ordering medicines online but they also cause a time delay. Develop a mobile app where all medicine shops are registered. The user can use this app for the following purpose:

* Search the availability of any medicine in nearby stores.
* Tracking the address using GPS.
* Order the medicine in any emergency situation.

Shopkeeper Interface:

* Uploading the names of their stock of drugs of each type in the app.
* Providing their contact number for other enquiries/details.
* Contacting and ordering from nearby stores in case of empty stock of any drug in emergency situations.

# Problem 4: Locality Feedback App

Develop a mobile app where several users from different locality can register themselves. The app can be used to conduct surveys regarding basic amenities like water, poor waste management or any other scarcity.

* The feedbacks from users of same locality will be used to predict the situation of that area and their requirements for betterment.
* It can predict the ailment or disease accurately when symptoms are entered in the app and track of the number of ailments of each kind so that an epidemic can be predicted in an area.
* The app should also predict the level of water scarcity in any locality.
* This app would require an admin for each locality and an administrator for the entire town or ward. Based on the predicted results by the app, the administrator will take effective measures to solve the problem.

## Problem 5: CONFERENCE APP

Design a web application that gives a functionality both for the conference organizer and the participants.

Main features:

* Information on tracks/talks (speaker bio, links to slides)
* Schedule with push notification on the talks that the user choose.
* The Conference can be public or private. A public conference can be used by all the employees of any organization to share their ideas.
* The Conference organizer has to register for the conference and will approve other members if the conference is private.

## Problem 6: MAPPING OF COLLEGE

Mapping of College, a very common problem that is faced by any visitor or a new student in the college is that how to find a particular place inside the campus (like hostels, offices, departments, rooms, canteen etc.). A solution to this problem is an application which gives virtual tour i.e. it provides the direction to all the various landmarks and rooms inside the campus and main building. It should show direction from your current location to the destination. It should also have a list of the important locations in the college so that the user can access those locations directly. You may even use three dimensional view of the campus to show the path.

## Problem 7: RESTAURANT GUIDING APP

Design an application in which every restaurant is registered. There will be two interfaces i.e. a user interface in which the user can search restaurants in any preferred area and a restaurant interface in which the restaurant representative will feed the required information. The app should display number of persons per table and ask for necessary information like number of persons coming to dine in the restaurant, then allot the tables accordingly.

It should also show the estimated time for the tables to be free if every table is occupied.

## Problem 8: WASTE MANAGEMENT APP

Develop a mobile app through which the user notifies the Waste Management team about the garbage that has not been disposed for more than 2 days in a locality by clicking a picture and uploading it. The app will track the location of the place through GPS. This will promote a healthy and clean environment for the people in the particular locality.

