

K. J. Somaiya College of Engineering, Mumbai-77
(Autonomous College Affiliated to University of Mumbai)

Batch: A4 Roll No.: 1911053 Group No:3

Experiment No. 2

Experiment No 2

Title: Prepare Design Document and Specification of mini project

Objective:

To prepare design document for implementation of mini project after appropriate analysis of gathered requirement.

Expected Outcome of Experiment:

Course Outcome	After successful completion of the course students should be able to
CO 1	To understand the process required for defining the problem and scope of the project
CO 2	Identify various hardware and software requirements for problem solution

Books/ Journals/ Websites referred:

Mention the books/ Websites / blogs referred

1. <https://arxiv.org/>

Introduction:

This is the second phase of project development. In the previous stage development team interacts with customers (end user) to understand the scenario for which the project is to be developed. The requirements are needs of the project to be satisfied for achieving the goals written in the language understood by both, the designer and the customer.

Project Title: Library Management System

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Team Members :

- 1 **Mr X**
- 2 **Mr y**
- 3 **Ms Z**

Scenario:

These days most of the libraries are having number of resources such as books, journals, cds, magazines, kindle etc. for the various users such as librarian, administrative staff, faculty and students it is difficult to search a resource check availability of the same.

Problem: Definition: Difficulty in searching, issuing, returning buying resources for library

Objective of the project:

To provide a system supporting features for searching, issuing, returning buying resources for library

Requirements:

1. Modules for : Searching, Issuing, Returning and Buying resources
2. Provide intuitive, user friendly, software which could be access using any handheld device.
3. Provide assistance to use this software and also prevent any inconsistency in the operations.

Students are required to prepare design document in the format given below, please replace the words shown in yellow background of the template.

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Title of Mini Project: Job Portal web application

Team Members:

1. Tushar Sarkar
2. Disha Shah

Scenario in the real world for which you are proposing a solution.

These days as many jobs of a diversified field of skill sets is available which have offices at different places all over the world the process of applying for a job becomes quite difficult. A number of other online job portals are available but due to the large number of jobs many a times a person is not able to get the best job available for himself even after the recommendations provided by the recommender engine.

Problem Definition: Difficulty in finding the best job for a candidate as well as the best candidate for a particular opening in a job for a recruiter.

To provide the jobs that are best suited for the person by modelling a new recommender engine which is fundamentally different from the pre-existing ones. It will also allow the recruiters to find the most suitable employees for their job.

Objective:

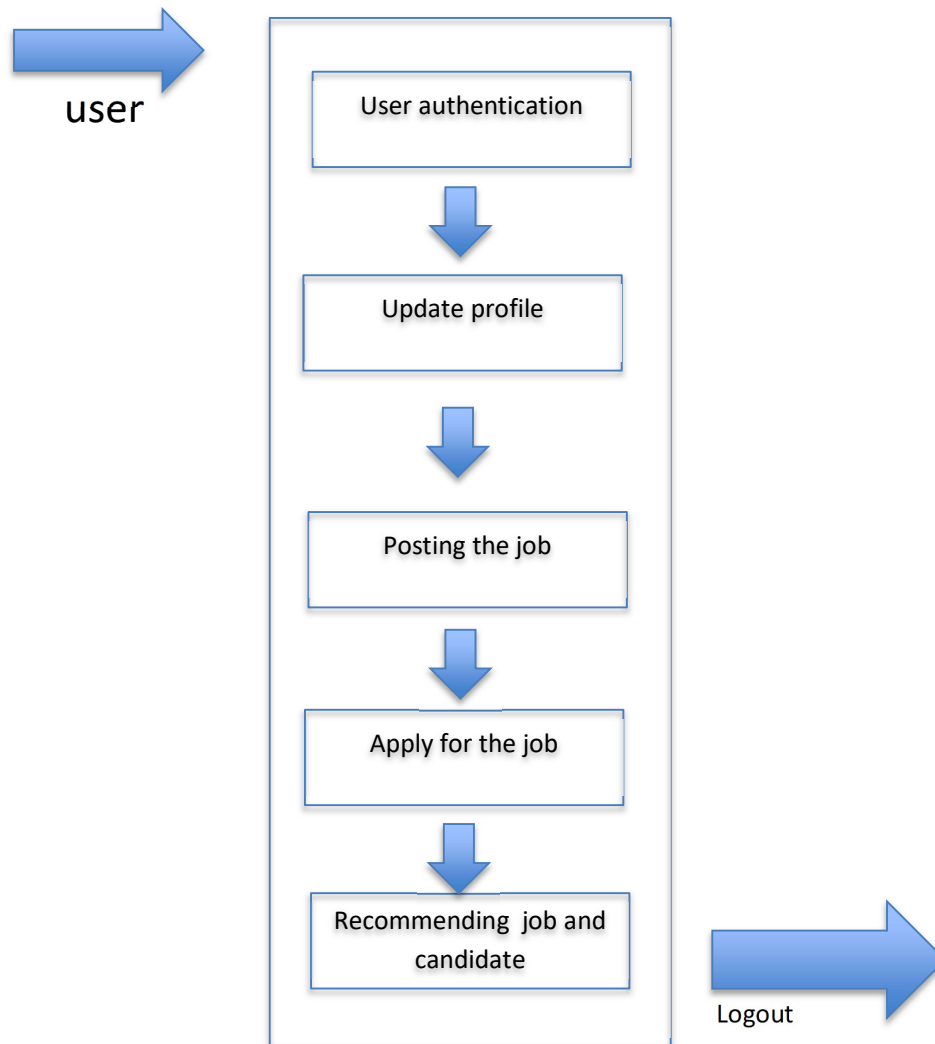
To provide a platform supporting features for efficient and better choosing of candidates for a job and also providing the most suitable jobs to the job seekers as well with respect to their skill set and qualification.

Requirements:

- Modules for: user authentication, profile updating, posting the job, applying for job, recommending job.
- Provide intuitive, user friendly, software which can be accessed on any device.

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- **System Design**

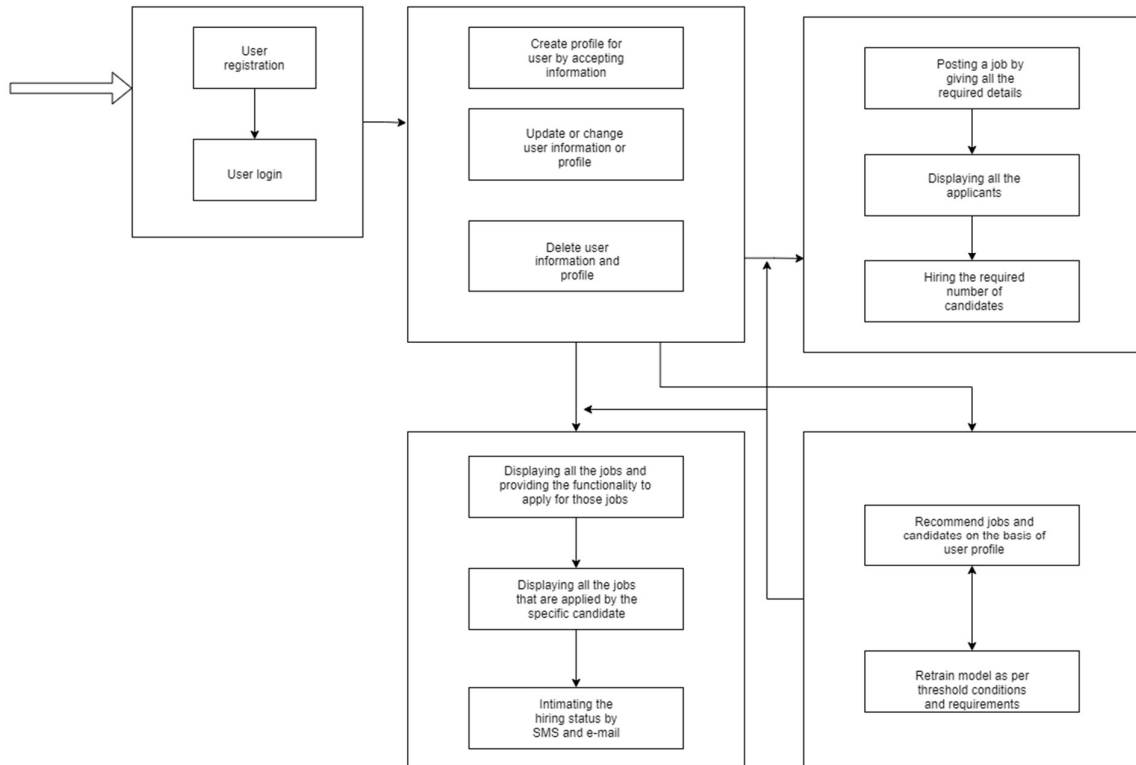


1.1 System Architecture

User can register and can get authenticated. This will create a user profile which can be modified by him anytime. The user can then get recommendations on jobs that are most suited for him. They can then apply to any of these jobs. Also, jobs can be posted and the recruiter posting these jobs will also be recommended the right choice of candidates for the job on the basis of the candidate's profile and the job descriptions and requirements.

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1.2 module wise flow diagram



2 2. System development

2.1 Programming languages

Python

2.2 Software development tools

- Django
- HTML
- CSS
- PyTorch
- MySQL
- Vscod

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- Jupyter notebook
- Twilio

Post Lab Activities:

1. Design document is a very important in software development life cycle.

Comment on the above statement.

Ans: System Design helps in specifying hardware and system requirements and also helps in defining overall system architecture. The system design specifications serve as input for the next phase of the model.

2. Justify the appropriate communication needed between the various stakeholders of a project.

- Develop in-depth plans and major milestones that must be approved by top management during the planning and design phases of the project.
- Ask top management associated with your project for their information reporting needs and frequency.
- Develop a status reporting methodology to be distributed on a scheduled basis.
- Keep them informed of project risks and potential impacts at all times.