Databases and Information Systems Laboratory

Course code: CS313
Project - II

Application Project

1. *This project should be done by a group of maximum 2 members(You only have to select your team partner). Please add your group members and the project name in the sheet shared here.* **Due date to fill the sheet is 2 days from the date of announcement.**
2. *Select any one of the suggested projects from the below list.*
3. *You are free to explore other projects apart from the listed below.*
4. *Submission: Submit the source code of the project along with the report.*
5. *Report must contain the following:*
   - *Overview of the project/ Introduction*
   - *Database schema, ER Model, Integrity Constraints and views, Users.*
   - *Relational Database design(Tables creation)*
   - *Languages and Technologies used*
   - *Interface Designs(UI Design, Transactions involved in Project)*
   - *Workflow and Pages*
   - *Add the relevant Screenshots*
   - *Conclusion*

Here are some suggestions for projects. Many of these projects are best done as Web Applications. Only a broad idea is mentioned and you are expected to develop it into a full-fledged project description that is proper scope and depth.

1. Course management system for a university that has course contents, past enrollments, performance, student feedback, question papers, projects, etc., which may also recommend courses based on student interests in specializations.
2. Disaster management system that helps in providing resources, hospital facilities, volunteers, etc (that can be used in large disasters such as rain havoc at state levels, You can explore this project on a particular region say Dharwad or any other city)
3. Project management in a large consulting company, where you have projects expected timelines, multiple activities, assignments to people, their performance, customer charging based on time and skills of people or other resources like equipment)
4. Job portal that has resume management, job demands, interviews etc that both companies and job seekers can use.
5. Similar to above but to be used explicitly within an institute (like an IIT) for placements, summer internships, etc with proper fairness policies that gives options to students, restricts jog 'hogging' by a few. Companies announce positions, areas required, and salaries. A schedule has to be prepared for tests, interviews etc that minimizes conflicts but still the whole placement happens within a given time period like 1 month.
6. Hostel room management system (or hospital bed management, or some similar types, including railway reservation system)

7. Bus fleet management system that allocates routes to a fleet of buses and drivers based on demands which may be day specific
8. Taxi sharing or carpooling system (or app) which takes into account road infrastructure (that can tell us if two destinations have a shared path or require only a small detour)
9. Personalized news aggregator including a facility for push of important news
10. Election management system that keep records of candidates, their manifestos, their past records, their major expenses, booths, votes (anonymous levels to be maintained), result declaration, etc
11. Only trading system such as a stock exchange, second hand goods, which maintains records of products, sales, pricing, etc
12. An internal messaging system and message aggregations, trends analysis, etc (modeling your own 'twitter' kind of social network)
13. Internship management for a large company that gives various kinds of projects across many universities based on student and university rankings, places them at multiple locations, may have multiple durations, may have varying stipends, etc., and where the system has interfaces with university systems for online applications, etc
14. Hostel mess management system
15. Online tutoring system for school children, giving individual or batch based coaching, evaluations, reinforcements, etc.

Evaluation scheme:
1. Demo *[Demo will be taken on* 31st October 2022 *in Lab hours, you have to show the implementation of your project]* *20 Points*
2. Source Code *15 Points*
3. Report *15 Points*

How to Submit?
[Submit a <roll_number>.zip file which contains Source files and the report.pdf]

NOTE:
1. Due date for Assignment is *30th October 2022(11:59PM).*
2. Mode of submission is moodle.
3. We will run a plagiarism check for all the submissions.
4. Penalty for late submission is 15% of secured marks.
5. Penalty for plagiarism is 100% of the secured marks.