CS 353 SPRING 20 PROJECT TOPICS

The following is the list of project topics. Explanations are given for you to have basic idea about what to design. You are EXPECTED to come up with additions regarding the context you have. Note that you are also EXPECTED to implement different entity and relation types that you learn in the class. If you are not sure what to add to the project, you are highly ENCOURAGED to discuss your project topic with your respective TA. All projects will be web-based systems. You are free to use any environment or programming language you would like to use for the project.

Social Betting Platform (e.g. Tuttur.com)

You are going to implement a betting platform with social features. Users should be able to make bet, share their bet slips, comments on matches, and comment and like what other users share. Matches have different types of bets which have its own odd and minimum betting number (MBN). For a bet slip to be valid, number of bets in that slip must be equal to or greater than the maximum of the MBN of bets in that bet slip. Users can add other users as friends and see their activities on the timeline. Editors should be able to prepare bet slips and users that follow editor can see those bet slips. Admin can change odds of bets, or remove a bet completely.

Scouting Platform for Football Clubs

In this project, you are going to implement a scouting platform. There are clubs, scouting agencies, scouts, footballers and agents. Clubs request some number of scouts from agencies to look for talented players in certain tournaments and/or countries. According to club requests, agencies select suitable scouts and assign them to tasks for a certain time. After their tasks are finished, scouts report back to the clubs which footballers they find talented. Clubs should be able to compare reported footballers with their own and make a transfer offer. Footballer’s own club and agent will respond to this transfer request.

Coding Practice and Interview System (e.g., HackerRank)

In this project, you are asked to design a database for coding practice system. You have developers, companies, company representatives, coding questions, tracks, and so on. Questions can have different difficulty options and they should be related to a computer science subject such as database. Questions can be asked by developers, which should be checked by admins before publishing. Tracks will have multiple questions in a particular subject and results for tracks should be kept as Leaderboard. Companies through their representatives can arrange an interview question for candidates for hiring process.

Quiz Based Hiring System (e.g., TripleByte)

In this project, you are asked to design a database for a quiz system on technological subjects for a hiring company. You have developers, companies, company representatives, questions, subjects, quizzes, trials and so on. Admin should be responsible for generating questions and their options. Developers can take quizzes for different expertise areas and the process can have multiple trials. Each result of taking a quiz should be recorded in detail. Companies can search for candidates with results above certain threshold in multiple subjects. According to search, company representative can send an interview request to candidate, which then can be accepted or declined by the candidate.
Student Academic Information Registration System (e.g., STARS)

In this project, you are going to implement a student academic information registration system. You have students, instructors, teaching assistants, courses, and so on. Students should be able to login to the system to keep track of specific information. Students can register courses and edit student details such as email and password. Students can also view their student information, courses, grades and attendances. In addition, students can order official transcript by providing a delivery address, selecting a delivery method and making payment. Instructors should be able to submit student grades and attendances. Instructors can also authorize teaching assistants to do specific tasks such as sending mail to students and submitting grades.

Online Flower Shopping System (e.g., Çiçek Sepeti)

In this project, you are going to implement an online flower shopping system. You have customers, customer services, flower-sellers, couriers, orders, and so on. Customers should be able to place an order by selecting a floral arrangement and providing a delivery address. Customers can also add a note to their orders. In addition, customers can customize certain properties such as occasion, delivery type and method of payment. When customers place orders, flower-sellers assign these orders to couriers. Couriers can accept or reject assigned orders. Transportation of orders should also be kept. If customers are not satisfied with the service for any reason, they can file a complaint which should be handled by customer services.