

The fourth assignment will be related to building a simple system or application with a front-end and back-end. Do this assignment in groups of 4.

Some topics (but not restricted to) are listed below:

- 1) Students Academic Portal (to keep track of courses, students, registrations, drop-outs etc)
- 2) Movies/CDs renting system for stores
- 3) Movie searching and rating system
- 4) Portal for supporting buying and selling of books between people (like an ebay for books)
- 5) Crowdsourced book library for lending and borrowing books for colleges
- 6) Library Management System for universities
- 7) Music Portal for songs facilitating search, upload, download and rating of musical items
- 8) Sports Information System (Pick up one popular sport - cricket or football)
- 9) Online Bus, Airline or Train Booking System
- 10) Hostel Information System
- 11) Travel Management System
- 12) System to suggest eating outlets based on your location (in the likes of Zomato)

Feel free to use your creativity in designing the system and adding features to it. Submit a report which should broadly contain the following sections:

- 1) Motivation of the project, the target audience and what do you envision from this system
- 2) Source of collecting data for the tables and the clean-up process to suit your needs
- 3) E-R Diagram of the system
- 4) Different modes of the application (User and Administrator)
- 5) User and System view (include the tables/views/triggers here)
- 6) Platform used for building front end and back-end. (Choose any platform between MySQL and Postgres for back-end. The front-end is entirely up to your choice.)

You are encouraged to use triggers, indexes or views to make your system more efficient.

The evaluation will be held by taking demos. We will test the system (both using the user's view and administrator's view) to verify if it gives correct results.