DBMS Lab Assignment 4: College Festival Management Web Application Development
Deadline: March 3, 2024
To be done in groups of at most FIVE students.

System Description:
Design a web application for a web based system for managing a university cultural festival. You may use the schema designed in Assignment 2. You may use additional relations and attributes.

Intended users are:
(a) External participant registrants (b) Student registrants (c) Volunteers (d) Organizers of events (e) Database Administrators: add/delete users

Functional Requirements:
The system is required to support the following workflow:
1. External participants should be able to create an account and browse/search the events and schedules. They should also be able to register for particular events and know about the winners of the events in real time. Access to logistics like accommodation and food should be provided through the same web application.
2. Students should be able to browse/search the event schedules and register for the events. They should also be able to register as volunteers.
3. Organizers should be able to create an account and browse the event details. They should also be able to view/search the volunteer and logistics details.
4. Database administration – should be able to add/delete new users (bonus point: implement data security policy with suitable access control)

Technology Requirements:
1. Browser based web interface with front end form interfaces
2. Connectivity to back-end database
3. Triggers and procedures to support the workflow
4. Postgresql or MySQL may be used as backend database
5. Java/PHP/python or any other language may be used as frontend

Deliverable:
1. A demonstration of the system in the lab
2. Report outlining the design including (a) schemas, (b) triggers, (c) queries, (d) forms.
The assignment will be evaluated based on the number of functionalities implemented.

Study Material:
1. Database Management Systems book chapter on Web Application Development:
https://www.db-book.com/slides-dir/PDF-dir/ch9.pdf
2. https://www.w3resource.com/
3. https://www.w3resource.com/PostgreSQL/PostgreSQL-with-php-a-through-introduction.php
4. https://www.w3resource.com/PostgreSQL/postgresql-triggers.php