

Submission Deadline: January 19, 2018

Full Marks – 20

No assignment will be evaluated after the scheduled deadline.

Select a project of your choice from the list given below

1. Smart Health Consultation

This system aims at maintaining patient health records and even getting appointments from various doctors for related treatments. The system user must register as a member of this system and keep updating his medical history. Patients can then select from a list of specialized doctors for respective treatments such as (skin specialist, ENT specialist cardiologist etc) at particular locations. Patients may also select suitable appointment timings for their meeting.

This Project contains 7 useful areas:

- i. General User area
- ii. Doctor's area
- iii. Patient's area
- iv. Transaction/Billing area
- v. Administrator area
- vi. Pharmacy area
- vii. Insurance area

2. ERP System

Educational institutes usually have a number of departments and courses. Managing all these department and course data manually is a very tedious, ineffective and expensive task. So here we propose an ERP system for institutes. We aim to provide entire examination section along with faculty dashboard and training placement department in this system. Our system firstly consists of student database needed by faculty as per their requirement. The system allows to input student attendance into the database which can later be viewed by concerned faculties and students. The students may view their personal attendance and assignment submission data through a separate student login. The examination allows authorized logins to insert update timetables. The time table is then available to be viewed on the web portal. The system also allows to manage the training and placement department. Here students may view latest vacancies and the admin may post vacancies as per criteria of selection. We design this system for 8 semesters for a particular department.

Features:

- Admin Login: The system will be under sole control of an admin. Admin can add or remove resources from the system and can even maintain a record of the resources available, supplied and demanded.
- Faculty Login: Each faculty has a login, allowed to view details of student under his/her guidance.
- Adding Exam Time Table: Authorized faculty is allowed to add edit exam time tables.
- Timetable storage and View: The time table inserted or updated may then be viewed by anyone visiting the portal.
- Student Attendance: The system allows to store student attendance data and also view the data as per search.
- Vacancies: The system allows authorized persons to post new job vacancies and students may view those vacancies from their login section.

3. Online Voting System

Online Election System would have **Candidate registration**, **document verification**, **auto-generated User ID and pass** for candidate and Voters. **Admin Login** which will be handled by Election Commission. **Candidate Login** which will be handled By Candidate, **Voters** will get Unique ID and Password, Using which they can vote for a Candidate only once per Election. The project is beneficial for Election Commission, Voters as they can get to know the **candidate background** and choose wisely, and even for Candidate. The software system allows the **Candidate** to login in to their profiles and upload all their **details** including their **previous milestone** onto the system. The **admin** can **check** each Candidate details and **verify** the documents, only after verifying Candidate's ID and Password will be generated, and can **remove faulty accounts**. The software system allows **Voters** to view a list of Candidates in their **area**. The **admin** has overall rights over the system and can **moderate and delete any details** not pertaining to Election Rules.

Modules:

- Admin Login
- Candidate Document Verification.
- Candidate Login
- Voters Login
- Voters can view Candidate's data
- Admin dashboard has overall functional rights
- Appropriate data processing and handling
- System generated ID and Password for Candidate and Voters.
- **Result Calculation module**
- **Election Creation module**
- **Voting conduction module**

PROBLEM: E-R MODELING

In the System described above, identify the entities and the relationships between those entities along with the entity attributes, primary keys, foreign keys and related constraints. Hence model the system using an E-R diagram. Use MS-Visio to build the E-R model. (Depending on the model you design, you shall be implementing an automation for this system, in your subsequent assignments.)

However you are advised not to be limited only by the features specified above, but to survey various similar systems, their regular activities and requirements and develop your own model for a globally acceptable system.