IS231: Web technology project

Purpose of the project is to practice and apply different concepts and techniques learned in the course. You are required to form a group of **5 or 6 students** from the **same lab or with the same TA** and **choose only one of the listed projects** related to FCI administration different departments to be developed as a web application

- Build the main pages using HTML, CSS, AJAX calls
- Backend functions will be written using python (Django Framework)
- Client side validations will be done using JavaScript

Project 1 (Human Resources Website):

Required minimum functionalities:

1. User can add a new employee to the system. Employee data should include id, name, email, address, phone number, gender, marital status, number of available vacation days, number of actual approved vacation days, salary, date of birth.
2. User can update an existing employee data.
3. User can delete an existing employee data through a delete button in edit employee data page with a confirmation dialogue for the action before deletion occurs.
4. User can search for an employee by name in a search for an employee screen and employees with similar names should be rendered as a table
5. User can select a specific employee after searching to submit a vacation form for the same employee. The vacation form includes from date, to date, reason, status which will hold a value =”submitted” and chosen employee id
6. User can review all “submitted” vacations of different employees with the ability to approve or reject the vacation submitted. Rejection and approval should be done by two buttons listed beside each submitted employee vacation.

7. If user clicked on approve button, mark vacation as approved , increment employee actual number of vacation days, decrement available number of vacation days for that employee and remove vacation from submitted vacations page

   If user clicked on reject button, mark vacation as rejected and remove vacation from submitted vacations page
8. Website should have a well designed navigation bar to go through all pages and a home page.

Project 2 (Student Affairs website):

Required minimum functionalities:

1. User add a new student to the system. Student information includes id, name, date of birth, GPA, gender, level, status=”active”, “inactive”, department, email, mobile number.
2. User update an existing student information (except department field should be shown disabled for editing).
3. User can delete an existing student data through a delete button in edit student data page with a confirmation dialogue for the action before deletion occurs.
4. User search for “active” students by name in search for students screen and students with similar names having active status should be rendered as a table.
5. User can select a specific student after searching to assign a department through the student’s department assignment page. The page should include student ID, name and a dropdown list for available departments and a submit button.This action is applicable for students if level = 3 else an error should be shown to the user with a clear understandable error message.
6. User can view all active/inactive students in a separate page rendered in a table with a related set of attributes only.
7. User can change the status of student from active to inactive or vice versa from the table viewing all students.
8. Website should have a well designed navigation bar to go through all pages and a home page.

Project 3 (Higher studies website)

Required minimum functionalities:

1. User add a new student to the system. Student information includes id, name, date of birth, university, gender, department, status=”active”, “inactive”, course1, course2, course3.
2. User can update an existing student information.
3. User can delete an existing student data through a delete button in edit student data page with a confirmation dialogue for the action before deletion occurs.
4. Add a new course and link the course to a specific department. Course information includes id, department , course name, number of hours, lecture’s day and hall number.
5. User can view all active/inactive students in a separate page rendered in a table with a related set of attributes only.
6. User search for “active” students by name or by a department in search for students screen and students with similar names having active status should be rendered as a table.
7. User can select a specific student after searching to register courses through the student’s course registration page. The page should include student ID, name and a dropdown list for available courses for 3 courses fields and a submit button.This action is applicable for students if user choose 3 different courses for the 3 courses fields else an error should be shown to the user with a clear understandable error message.
8. Website should have a well designed navigation bar to go through all pages and a home page.

Project 4 (Laboratory tracking website):

Required minimum functionalities:

1. Add a new laboratory. Laboratory information includes id, name, building number, floor number, number of PCs, capacity, number of chairs, status =”active” or “under maintenance”.
2. User can update an existing laboratory information.
3. User can delete an existing laboratory data through a delete button in edit laboratory data page with a confirmation dialogue for the action before deletion occurs.
4. User can search for a laboratory by name. Laboratory with the same name should be listed in a table which can be selected by user to report a problem.
5. User can report a problem in a specific laboratory after searching for it. Report problem page includes laboratory id, number of PC that needs a repair,

description of problem, problem type either a software or hardware problem, date of occurrence.

6. User can view a list of PCs needs a repair with details needed in a table and a button to mark a specific PC status as repaired.
7. Add a PC to a laboratory. PC information includes id, laboratory id , status. Adding a new PC should increment the number of PCs within the same laboratory.
8. Website should have a well designed navigation bar to go through all pages and a home page.

Important Rules:

- **Phase 1: build and submit all HTML pages for your website .**
  phase 1 Deadline 2/4/2022 at 11:59pm.
- Teams should be formed from the same lab or with the same TA.
- Teams should be either 5 or 6 members.
- No hard coded values for mentioned attributes user should enter his values and the system should store those values.
- Add any needed VALID assumptions and validations other than the mentioned validations at the client side and server side to complete the project requirements.
- Choose the suitable form fields and tags to match the requirements.
- Minimum number of HTML pages is 6 pages
- Designing the website in a good way will be graded.
- Any cheating project will be graded ZERO.
- **ALL TEAM MEMBERS** will be discussed.
- Compress project to:
  GroupID_LeaderID_Projectnumber_TAname_phasenumber.zip/.rar
- The project folder should include the whole code files and a cover page for student names, IDs,Group number, project name and project number
- Only the team leader will submit the project.
- NO late submission is accepted.