**EE468/EE568/CS560 Database Systems | Spring 2022**

**Project: Database-Backend Web Application**

**User Manual**

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### **Introduction**

##### **University Course Management System**

We present a prototype of the university course management system to fulfilment the semester project requirement of ‘EE468/EE568/CS560: Database Systems’. This is the first version. The system has three modules: Admin, Professors and Students.

##### **System/tools requirements**

MySQL 8.0.28

Django Version 2.1.3

Python 3.10.4

IDE Pycharm

##### **Accessing the University Course Management System**

The University Course Management System can be accessed using a web browser using the address: 127.0.0.1:8000. This is the address of the index page. The application is not browser specific.

Graphical user interface, text, application, email, Teams

Description automatically generated

##### **Using the University Course Management System.**

From the Index page, login to authorized user as Admin, Professor or Student.

##### **Authorized User Profile**

The system has three types of profiles:

1. **Admin can perform following tasks**

* Create a list of professors sorted by one of the following criteria that can be chosen by the admin: (1) name (2) dept, or (3) salary.
* Create a table of min/max/average salaries by department.
* Create a table of professor name, dept, and total number of students each professor taught for a given semester.

1. **Professor can perform following tasks**

* Create the list of course sections, and the number of students enrolled in each section, that the professor taught for a given semester.
* Create the list of students enrolled in a course section taught by the professor, in a given semester.

1. **Students can perform following tasks**

* Query the list of course sections offered by dept in a given semester and year.

##### 

### **2. Manual for the Admin**

Below shows the functionality of each of the Admin sections with a sample output. Each of the functions is labeled F1, F2, F3 for the Administrator.

**F1 Query:**

Create a list of professors sorted by one of the following criteria that can be chosen by the admin: (1) name (2) dept, or (3) salary.

Graphical user interface, text, application

Description automatically generated

**F1 Name Result:**

Table

Description automatically generated

**F1 Department Result:**

**Table

Description automatically generated**

**F1 Salary Result:**

Table

Description automatically generated

**F2 Query:**

Create a table of min/max/average salaries by dept

Graphical user interface, text, application

Description automatically generated

**F2 Result:**

Graphical user interface, application

Description automatically generated with medium confidence

**F3 Query:**

Create a table of professor name, dept, and total number of students each professor taught for a given semester.

Graphical user interface, text, application

Description automatically generated

**F3 Result:**

### 

### **Table Description automatically generated**

### **3. Manual for the Professors**

Below shows the functionality of each of the professor sections with a sample output. Each of the functions is labeled F4 and F5 for the professor.

**F4 Query:**

Create the list of course sections and the number of students enrolled in each section that the professor taught for a given semester.

Graphical user interface, text, application, email

Description automatically generated

**F4 Result:**

Graphical user interface, application

Description automatically generated

**F5 Query:**

Create the list of students enrolled in a course section taught by the professor in given semester

Graphical user interface, text, application, Teams

Description automatically generated

**F5 Result:**

### 

Graphical user interface

Description automatically generated

If returns no values, no data is found against this command

### **4. Manual for the Students**

Below shows the functionality of each of the student sections with a sample output. The student has one function, F6.

**F6 Query:**

Query the list of course sections offered by dept in a given semester and year.

Graphical user interface, text, application, Teams

Description automatically generated

**F6 Result**

# Graphical user interface, application Description automatically generated