Web Development Using Application Frameworks
Coding Assignment: Model
Instructions

Overview

The Model coding assignment is the first in a series of assignments in which we will be developing the EZU database system, a full C-R-U-D database application for a simplified university record keeping. In the Model coding assignment, we create the Django model classes that implement the database functionality and test our code using the Admin data entry feature.

Tools

I am expecting you to use the tools that are demonstrated in the tutorial videos: Anaconda and PyCharm.

Tool Versions

In the current semester, I am expecting you to use Python 3.9.7 and Django 3.2.5.

Tutorial Parts

You should play 3 tutorial videos and follow along. The first video is specific to the operating system that you are using. Play one of the following:

- Get EZU Project Started on Windows 10
- Get EZU Project Started on macOS

Then, play and follow along with both of these videos:

- EZU Model Coding Assignment – Part 1
- EZU Model Coding Assignment – Part 2

Exercises

1. **Exercise 1 (Required)**
   Follow the tutorial instructions exactly. Do not make any attempt to change the model classes for Instructor or Student to integrate them more closely with the User model class of the built-in Django authentication feature.

2. **Exercise 2 (Optional Challenge Exercise)**
   After having done Exercise 1, revise your model class code for Instructor and Student to integrate them more closely with the User model class of the built-in Django authentication feature. When doing so, you should consult the following resource:

   a. https://docs.djangoproject.com/en/4.0/topics/auth/customizing/#extending-the-existing-user-model

Code Deliverables

You are expected to submit one properly organized PyCharm Django project that is ready to be tested using PyCharm. Please refer to my tutorial video for details. Even if you have decided to do Exercise 2, just submit one Django project.

Non-Code Deliverables

Please be sure that the project you submit includes the following:

1. A test user (username = "tester", password = "{iSchoolUI}"
2. Sufficient test data present in the database to allow for testing all functions

Submission Method

Follow the process that I demonstrated in the tutorial video on submitting your work. This involves:

- Locating the properly named directory associated with your project in the file system.
- Compressing that directory into a single .ZIP file using a utility program.
- Submitting the properly named zip file to the submission activity for this assignment.

File and Directory Naming

Please use the following naming scheme for naming your PyCharm project:

```
surname_givenname_ezu
```

If this were my own project, I would name my PyCharm project as follows:

```
trainor_kevin_ezu
```

Use a zip utility to create one zip file that contain the PyCharm project directory. The zip file should be named according to the following scheme:

```
surname_givenname_ezu.zip
```

If this were my own project, I would name the zip file as follows:

```
trainor_kevin_ezu.zip
```

PLEASE NOTE: All file and directory names must be in lower case. Deductions will be made for submissions that do not conform to this standard.

Due Date

Please see the Weekly Schedule for the date and time when this assignment is due.