Web Development Using Application Frameworks
Coding Assignment: Template
Instructions

Overview

The Template coding assignment is the next 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 Template coding assignment, we create list pages for most or the EZU database tables. This includes creating the template page, creating a function-based view, and creating an entry in urls.py.

Tools

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

Tool Versions

Use the versions of PyCharm Professional, Anaconda, and Python that we installed during Week 1 of the course when we created the *e4_trainor_django_course* virtual env. These versions are documented in *Instructions for Tool Versions, Installation, and Virtual Environments*.

Starter Files

Please note that I have provided a starter file for base.html. You do not need to type this HTML code by hand. You can just copy this file into the proper directory structure within your PyCharm project.

Tutorial Parts

This is a one-part tutorial. During the video, I demonstrate the required coding and testing activities for two of the six EZU database tables:

- Instructor
- Section

At the end of the tutorial video, you are instructed to perform the coding and testing for the remaining tables on your own:

- Course
- Semester
- Student
- Registration

Note that we will not be creating pages in our EZU application for the year and period tables. These are infrequently changed infrastructure tables. We will assume that a system administrator will use the Django Admin application to maintain those tables when necessary.

Exercises

1. **Exercise 1 (Regular)**
   Follow the tutorial instructions exactly.

2. **Exercise 2 (Challenge)**
   The challenge exercises for all of the EZU-based coding assignments will be based on finding ways to maximize the usefulness of the Django Admin app in the activities of the current assignment. When working on these challenge exercises, you may consult any resources that you may find helpful. I am offering the following resources as a starting point:

   1. [Django Software Foundation (2025).](#) *The Django admin site* in Django Documentation.

   2. [Real Python (2025).](#) *Customize the Django Admin With Python*.

   3. [Tomazic, N. (2024).](#) *Customizing the Django Admin* in TestDriven.io.

   This week's challenge exercise is to do the following:

   1. Write a short report that identifies ways in which we might customize the Django Admin app to help with the current week's work of writing and testing Django template files.

   2. Identify 1 or 2 customizations. For each customization briefly explain how that customization might make our work easier or might make us more effective. Also, identify any coding work that would be required to implement the customization.

   3. Place your report in a text file named *template_assignment_challenge.txt*. Place that text file directly into your Django Project directory.

   4. Format your work as a business report with proper paragraphs and sentences. Pay attention to grammar, choice of words, and spelling. You do not need to cite sources.

Code and Document 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.

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