Web Development Using Application Frameworks
Coding Assignment: Link Pages
Instructions

Overview
The Link Pages 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 Link Pages coding assignment, we populate the `href` attributes in all of the pages that we created during earlier coding assignments. The result is a highly interlinked Web site that allows the user to pick any of the model classes as their entry point to this information system.

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
This is a three-part tutorial.

In Part 1, we begin by providing the code required to redirect the root URL to the appropriate page. Following that, we populate the `href` attributes for the links that are part of the navigation section in the base.html template. During the video, I demonstrate coding and testing for the following navigation links.

- Instructors
- Sections

At the end of the Part 1 tutorial video, you are instructed to perform similar coding and testing for the remaining navigation links on your own:

- Courses
- Semesters
- Students
- Registrations

In Part 2, we populate the `href` attributes for all of the links on the list pages. During the video, I demonstrate coding and testing for the following list pages.

- Instructor
- Section

At the end of the Part 2 tutorial video, you are instructed to perform similar coding and testing for the remaining list pages on your own:

- Course
- Semester
- Student
- Registration

In Part 3, we populate the `href` attributes for all of the links on the detail pages. During the video, I demonstrate coding and testing for the following detail pages.

- Instructor
- Section

At the end of the Part 3 tutorial video, you are instructed to perform similar coding and testing for the remaining detail pages on your own:

- Course
- Semester
- Student
- Registration

Exercises

1. **Exercise 1 (Required)**
   Follow Parts 1, 2, and 3 of the tutorial instructions exactly.

2. **Exercise 2 (Optional Challenge Exercise)**
   For the next teaching of this IS439 course (Spring 2023), I plan to begin using Django 4. So far, I haven't found a suitable text to replace the Pinkham book that we are using in Spring 2022. Your assignment is to find a candidate textbook for me to consider for adoption as the next textbook for IS439. Please include the following details:

   a. Metadata
      Include the Title, Author, and ISBN for this book.

   b. Coverage of Django
      Does the book cover Django 4? If not, how do you propose that I offset that deficiency when planning the course?

   c. Introductory Tutorial
      I would like to replace the Django Girls tutorial with one that is a bit more stable. Some books have their own introductory tutorial. Does this book have one? If not, what do you propose that I use for an introductory tutorial?

   d. Django Reference
      While the Pinkham book is not a reference book, it does cover many of the advanced Django features. Does the candidate textbook cover as many features as the Pinkham text? If not, can you suggest another book that I could pair with this candidate text as a Django reference?

   Please write no more than 1 page of text (single spaced). Convert your document to a PDF file named *new_django_textbook_recommendations.pdf*. Place it in the *courseinfo* directory of your PyCharm project with program files like *urls.py* and *views.py.*

Code Deliverables

<mark>ou 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.</mark>

Non-Code Deliverables

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

1. <mark>A test user (username = "tester", password = "{iSchoolUI}". PLEASE NOTE: We have changed the password that in the current semester. The old password is mentioned in some of the tutorial videos. Please be sure to use the new password instead.</mark>
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
```

<mark>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.</mark>

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