# Web Development Using Application Frameworks Coding Assignment: Forms Instructions

#### Overview

The Forms coding assignment is the fifth in a series of assignments in which we will be developing the EZ University database system, a full C-R-U-D database application for a simplified university record keeping. In the Forms coding assignment, we add Create, Update, and Delete functionality for each of the EZ University model classes. The result is a full-featured C-R-U-D application.

#### Tools

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

# **Tool Versions**

In the current semester, I am expecting you to use Python 3.6 and Django 2.1.X.

# **Tutorial Parts**

This is a four-part tutorial, consisting of Parts 0, 1, 2, and 3.

**Part 0** has been given this unusual name to indicate that it does not introduce new functionality. Instead, it is a quick refactoring of the code in views.py associated with each of the detail views. In this refactoring, we change the view code to use the *render()* method rather than the *render\_to\_response()* method. *render\_to\_response()* has been deprecated and was included in solutions to previous assignments accidentally. In **Part 1**, we implement the *Create* pages. During the video, I code and test all parts required to implement the *Create* pages for the following EZ University model classes:

- Instructor
- Section

While doing so, I use the following checklist:

- 1. Create the ModelForm subclass \_\_\_\_\_ Form in forms.py.
- 2. Create the template for this page: \_\_\_\_\_form.html .
- 3. Create the URL Pattern for this page.
- 4. Create the class-based view for this page: \_\_\_\_\_Create in views.py.
- 5. In the \_\_\_\_\_list.html file:
  - a. Add the Create New \_\_\_\_\_ link code.
- 6. Test.

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

- Course
- Semester
- Student
- Registration

In **Part 2**, we implement the *Update* pages. During the video, I code and test all parts required to implement the *Update* pages for the following EZ University model classes:

- Instructor
- Section

While doing so, I use the following checklist:

- 1. Create the URL Pattern for this page.
- 2. Add the get\_update\_url() method to the model class in models.py.
- 3. Add the \_\_\_\_\_\_ Update CBV to views.py (replace underscores with model class name).
- 4. Create the \_\_\_\_\_\_form\_update.html file: (replace underscores with model class name).
- 5. In the \_\_\_\_\_detail.html file:
  - add the Edit \_\_\_\_\_ link code.
- 6. Test.

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

- Course
- Semester
- Student
- Registration

In **Part 3**, we implement the *Delete* pages. During the video, I code and test all parts required to implement the *Delete* pages for the following EZ University model classes:

- Instructor
- Section

While doing so, I use the following checklist:

- 1. Create the URL Pattern for this page.
- 2. Add the get\_delete\_url() method to the model class in models.py .
- 3. Add the \_\_\_\_\_\_ Delete CBV to views.py (replace underscores with model class name).
- 4. Create the \_\_\_\_\_confirm\_delete.html file.
- 5. If appropriate (not Registration model class), create the \_\_\_\_\_refuse\_delete.html file.
- 6. In the \_\_\_\_\_detail.html file:
  - add the Delete \_\_\_\_\_ link code.
- 7. Test

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

- Course
- Semester
- Student
- Registration

# Deliverables

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

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

#### Submission

Submit 1 properly named and properly organized zip file containing your PyCharm project. Remember to use the following naming conventions:

- Project Name: yourLastName\_yourFirstName\_ez\_university
- File Name: yourLastName\_yourFirstName\_ez\_university.zip

#### **Due Date**

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