IBM Developer
SKILLS NETWORK

Lab 1: Understand the Project Requirements and Get the Final Project Template

Estimated time needed: 20 mins

As a new full-stack developer joining the team, the lead developer has assigned this new course assessment feature to you. In order to deliver this feature, you will need to leverage your Django full-stack skills to design and implement related models, templates, and views. Then, you will need to test and deploy the updated online course app on IBM Cloud Foundry.

Objectives

This lab contains the following tasks:

1. Understand the requirements about the new course assessment feature
2. Get and test the a code template for the final project
3. Create a GitHub repository for saving and submitting your work

The UI Design

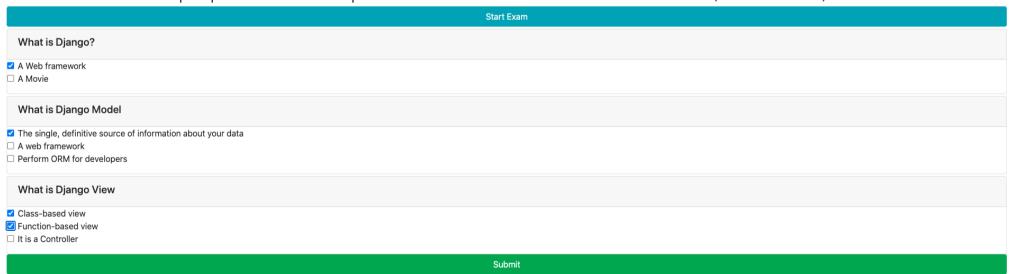The UI design team has made some initial screenshots with some mockup data:

- After logged in and entered the course detail page, a learner should see a new `Start Exam` collapse button, click

to open a exam section with questions and choices.

Lesson 2: Django model
A model is the single, definitive source of information about your data. It contains the essential fields and behaviors of the data you're storing. Generally, each model maps to a single database table.
Start Exam

- A learner can start taking the exam and submit selected choices.

One exam contains multiple questions and each question should have more than one correct choice (multi-selection).

Start Exam
What is Django?
☑ A Web framework
☐ A Movie
What is Django Model
☑ The single, definitive source of information about your data
☐ A web framework
☐ Perform ORM for developers
What is Django View
☑ Class-based view
☑ Function-based view
☐ It is a Controller
Submit

- If a learner failed the exam, he/she should be shown with the final score with

the incorrect choices. The learner should be allowed to re-take the exam and submit again.

Failed Sorry, Yan! You have failed exam with score 66 / 100

Re-test

Exam results

What is Django?

Correct answer: A Web framework
A Movie

What is Django Model

Correct answer: The single, definitive source of information about your data
A web framework
Not selected: Perform ORM for developers

What is Django View

Correct answer: Class-based view
Correct answer: Function-based view
It is a Controller

- If a learner passed the exam, he/she should be shown with the final score, as well as a congratulations.

Home

Congratulations, John! You have passed the exam and completed the course with score 100 / 100

Exam results

What is Django?

Correct answer: A Web framework
A Movie

What is Django Model

Correct answer: The single, definitive source of information about your data
A web framework
Correct answer: Perform ORM for developers

What is Django View

Correct answer: Class-based view
Correct answer: Function-based view
It is a Controller

Get the Final Project Template

- In the Theia terminal, run the following command-lines to download a code template for the final project:

```
wget "https://cf-courses-data.s3.us.cloud-object-storage.appdomain.cloud/IBM-CD0251EN-
SkillsNetwork/labs/m6_final/final_template.zip"
unzip final_template.zip
rm final_template.zip
```

- Or git clone the following repository:

https://github.com/ibm-developer-skills-network/final-cloud-app-with-database

- The project template has an empty SQLite database in the db.sqlite database file but you still need to run model

migrations.

You could use the admin site to add some data later.

- Set up the Python runtime and test the template project

```
pip3 install -r requirements.txt
```

- Create a new GitHub repository and push your current Theia workspace to the repo.

You will also need it for committing any future source code and assets updates and submit the URL of this repository for source code peer reviews.

If you need to refresh your memory on how to commit and push to GitHub in Theia lab environment, please refer to this lab Working with git in the Theia lab environment

More details about creating a GitHub repository can be found in here Adding an existing project to GitHub using the command line

Now you can start working on the tasks in the final project.

Author(s)

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Changelog

Date	Version	Changed by	Change Description
04-Dec-2020	1.0	Yan Luo	Initial version created