

TEAM LEAD VERSION (Backend Sprint-1 Week-2)



CLARUSWAY
WAY TO REINVENT YOURSELF

Meeting Agenda

- ▶ Icebreaking
- ▶ Questions
- ▶ Interview Questions
- ▶ Coding Challenge
- ▶ Video of the week
- ▶ Retro meeting
- ▶ Case study / project

Teamwork Schedule

Ice-breaking

5m

- Personal Questions (Stay at home & Corona, Study Environment, Kids etc.)
- Any challenges (Classes, Coding, studying, etc.)
- Ask how they're studying, give personal advice.
- Remind that practice makes perfect.

Team work

5m

- Ask what exactly each student does for the team, if they know each other, if they care for each other, if they follow and talk with each other etc.

Ask Questions

15m

1. Which one is the reason of the using virtual environment?

- A.** Resolve dependency issues by allowing you to use different versions of a package for different projects. For example, you could use Package A v2.7 for Project X and Package A v1.3 for Project Y.
- B.** Make your project self-contained and reproducible by capturing all package dependencies in a requirements file
- C.** Install packages on a host on which you do not have admin privileges
- D.** All of them

Answer: D

2. Which architectural design pattern does django use?

- A.** Model-view-presenter(MVP)
- B.** Hierarchical model-view-controller(HMVC)
- C.** Model – View – Template (MVT)
- D.** Model – Viewer – Controller (MVC)

Answer: C

3. Which command is the create django project?

- A.** Django-admin createproject -projectName-
- B.** Django-admin addProject -projectName-

- C. `py manage.py createproject -projectName-`
- D. `django-admin startproject -projectName-`

Answer: D

4. Which one is not default file in project folder?

- A. `Urls.py`
- B. `Settings.py`
- C. `init.py`
- D. `Models.py`

Answer: D

5. is a place where we put the "logic" of our application. It will request information from the, you created before

- A. Url-View
- B. Model-View
- B. View-Url
- B. View-Model

Answer: D

6. After installation DRF package with PIP, do we need to add DRF to installed apps? If so with which name?

- A. True
- B. False

Answer: A, `'rest_framework'`

7. When we call data from database, response data type is QUERYSET. To translate this queryset data, what do we need to use?

- A. Authenticaion
- B. Serializers
- C. Permission
- D. Model

Answer: B

8. What is request.META in request object?

- A. It is a python dictionary.
- B. It contains all the HTTP Headers associated with a particular request.

- C. It contains the user's IP address and machine specifications.
- D. All of the above

Answer: D

9. Which of the following Password Validators are not provided by default in Django?

- A. NumericPasswordValidator
- B. CommonPasswordValidator
- C. MinimumLengthValidator
- D. MaximumLengthValidator

Answer: D

10. You should use the http method ____ to read data and ____ to create data?

- A. READ; WRITE
- B. GET; POST
- C. POST; GET
- D. GET; PATCH

Answer: B

11. What would variable m output?

```
from post.models import Post
m = Post.objects.filter(post_heading='post1')
```

- A. It will print the first object which matched with heading 'post1' in argument
- B. t will print all objects.
- C. It will print all the objects which match the heading 'post1'.
- D. It will return None

Answer: C

Interview Questions

15m

1. Explain Django Architecture?

Answer:

Django follows the MVT (Model View Template) pattern which is based on the Model View Controller architecture. It's slightly different from the MVC pattern as it maintains its own conventions, so, the controller is handled by the framework itself. The template is a presentation layer. It is an HTML file mixed with Django

Template Language (DTL). The developer provides the model, the view, and the template then maps it to a URL, and finally, Django serves it to the user.

2. Explain the django project directory structure?

Answer:

- `manage.py` - A command-line utility that allows you to interact with your Django project
- `init.py` - An empty file that tells Python that the current directory should be considered as a Python package
- `settings.py` - Comprises the configurations of the current project like DB connections.
- `urls.py` - All the URLs of the project are present here
- `wsgi.py` - This is an entry point for your application which is used by the web servers to serve the project you have created.

3. What are models in Django?

Answer:

A model in Django refers to a class that maps to a database table or database collection. Each attribute of the Django model class represents a database field. They are defined in `app/models.py`

4. What is the Django Rest Framework?

Answer:

Django REST Framework (DRF) is a Django app and a framework that lets us create RESTful APIs rapidly. DRF is especially useful if we have an existing Django web application and we wish to quickly generate an API for it. They are ideal for web applications due to low bandwidth utilization.

5. What is Django ORM?

Answer:

This ORM (an acronym for Object Relational Mapper) enables us to interact with databases in a more pythonic way like we can avoid writing raw queries, it is possible to retrieve, save, delete and perform other operations over the database without ever writing any SQL query. It works as an abstraction layer between the models and the database.

6. What is the difference between CharField and TextField in Django?

Answer:

- `TextField` is a large text field for large-sized text. In Django, `TextField` is used to store paragraphs and all other text data. The default form widget for this field is `TextArea`.

- CharField is a string field used for small- to large-sized strings. It is like a string field in C/C++. In Django, CharField is used to store small strings like first name, last name, etc.

Coding Challenge

35m

-There is no code challenge in this week

Coffee Break

10m



Video of the Week

10m

- [What is Django Capable of? | Companies That Use It](#)

Retro Meeting on a personal and team level

5m

Ask the questions below:

- What went well?
- What went wrong?
- What is the improvement areas?

Case study/Project

0m

Django Serializers

- [Django Serializers Workshop](#)

Closing

5m

-Next week's plan

-QA Session
