

# Welcome All...!

Pythonic projects & its Implementation

Full-stack applications - Beginner series

CRUD + GUI & Web applications – Python3 +  
Django + SQLite3

Ms. Ramya Nagabhushan and Team

WOMEN WHO  
**CODE**

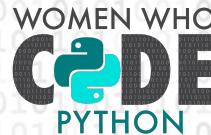




- Please make sure your chat is set to "**All panelists and attendees**".
- Few housekeeping rules:
  - ◆ Everyone will be muted throughout the webinar!
  - ◆ Please share your thoughts on the chat and/or ask questions in the Q&A.
  - ◆ Our team is here. Please reach out to us with any technical questions!

# Our Mission

Inspiring women to  
excel in technology  
careers.



# Our Vision

A world where diverse women are better represented as engineers and tech leaders



# Our Target

Engineers with two or more years of experience looking for support and resources to strengthen their influence and levelup in their careers.



# 290,000

## Members

70 networks in 20 countries

122+ countries

14K+ events

\$1025 daily Conference tickets

\$2M Scholarships

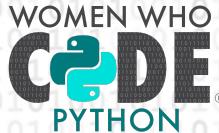
Access to [jobs](#) + [resources](#)

Infinite connections



# OUR MOVEMENT

As the world changes, we can be a connecting force that creates a sense of belonging while the world is being asked to isolate.



# Code of Conduct

**WWCode is an inclusive community**, dedicated to providing an empowering experience for everyone who participates in or supports our community, regardless of gender, gender identity and expression, sexual orientation, ability, physical appearance, body size, race, ethnicity, age, religion, socioeconomic status, caste, creed, political affiliation, or preferred programming language(s).

Our events are intended to inspire women to excel in technology careers, and anyone who is there for this purpose is welcome. We do not tolerate harassment of members in any form. Our [Code of Conduct](#) applies to all WWCode events and online communities.

Read the full version and access our incident report form at

[womenwhocode.com/codeofconduct](http://womenwhocode.com/codeofconduct)

# Upcoming Events <https://www.womenwhocode.com/python/events>

SAT  
**12**  
MAR

## Development to Deployment of a Web Application with Python: Part 2 *Featured*

📍 Online | Python | 11:00 PM - 12:30 AM IST (UTC+0530)

Organized By: WWCode Python

[Register](#)

WED  
**16**  
MAR

## Machine Learning Study Group Webinar Series *Featured, Recurring*

📍 Online | Data Science | 8:30 PM - 10:00 PM IST (UTC+0530)

Organized By: WWCode Data Science | WWCode Python

[Register](#)

THU  
**17**  
MAR

## CFP Series: Writing your Talk Proposal *Featured*

📍 Online | Other | 9:30 PM - 10:30 PM IST (UTC+0530)

Organized By: WWCode Blockchain | WWCode Cloud | WWCode Data Science | WWCode Front End  
| WWCode Mobile | WWCode Python | WWCode Career Nav

[Register](#)

SAT  
**19**  
MAR

## Introduction to Coding Environments for Python *Featured, Recurring*

📍 Online | Python | 8:30 AM IST (UTC+0530)

Organized By: WWCode Python

[Register](#)

SAT  
**19**  
MAR

## Bytes n' Brew I - Celebrating Women in Tech *Featured*

📍 Online | Data Science | 12:30 PM - 1:30 PM IST (UTC+0530)

Organized By: WWCode Blockchain | WWCode Data Science | WWCode Python

[Register](#)

# Follow us

**Register for Events and Join our community -**

[womenwhocode.com/python](http://womenwhocode.com/python)

**Email** - python@womenwhocode.com

**Social Media:** 



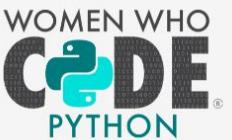
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Women Who Code Python



@WWCodePython



# Development of a Web Application in Python

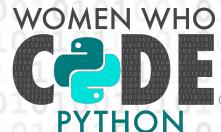
Go from development to deployment  
of an intermediate web app in Python

## Development and Deployment

### Part-1

 Jan 22, 2022 @ 12:30 pm ET

With Ramya Nagabhushan  
Web Developer | Python Mentor



## Full-stack applications - Beginner series

Project > Pythonic Quiz and CRUD applications

Tools > Python3 + Django + SQLite3



# Resource Links

- The slides available here on GitHub:

[https://github.com/rnedesigns/WWC\\_Python\\_Events](https://github.com/rnedesigns/WWC_Python_Events)

- URL of today's project:

→ <https://mcquiz-pydj.herokuapp.com/>

# Agenda for the series



- Uses-cases of Python
- Tools | Libraries | Database
- Application's **What** and **How**
- Walk-through of the code and deployment
- Q&A

# Use-cases of Python



- Full-stack web applications
- GUI/Desktop applications
- Game development
- Software Testing
- Web/Data scraping
- Data Analysis
- ML/DL applications
- NLP applications
- Network programming



# Applications for the series



Projects and Coding demo on:

- CRUD application
- Quiz web application

# Python3 > Database & Frameworks



It's General-purpose,  
High-level &  
Object-oriented language.  
Garbage collected &  
Interpreted language.  
Initially designed by Guido van Rossum.

django



# Python3 > Deployment Platforms

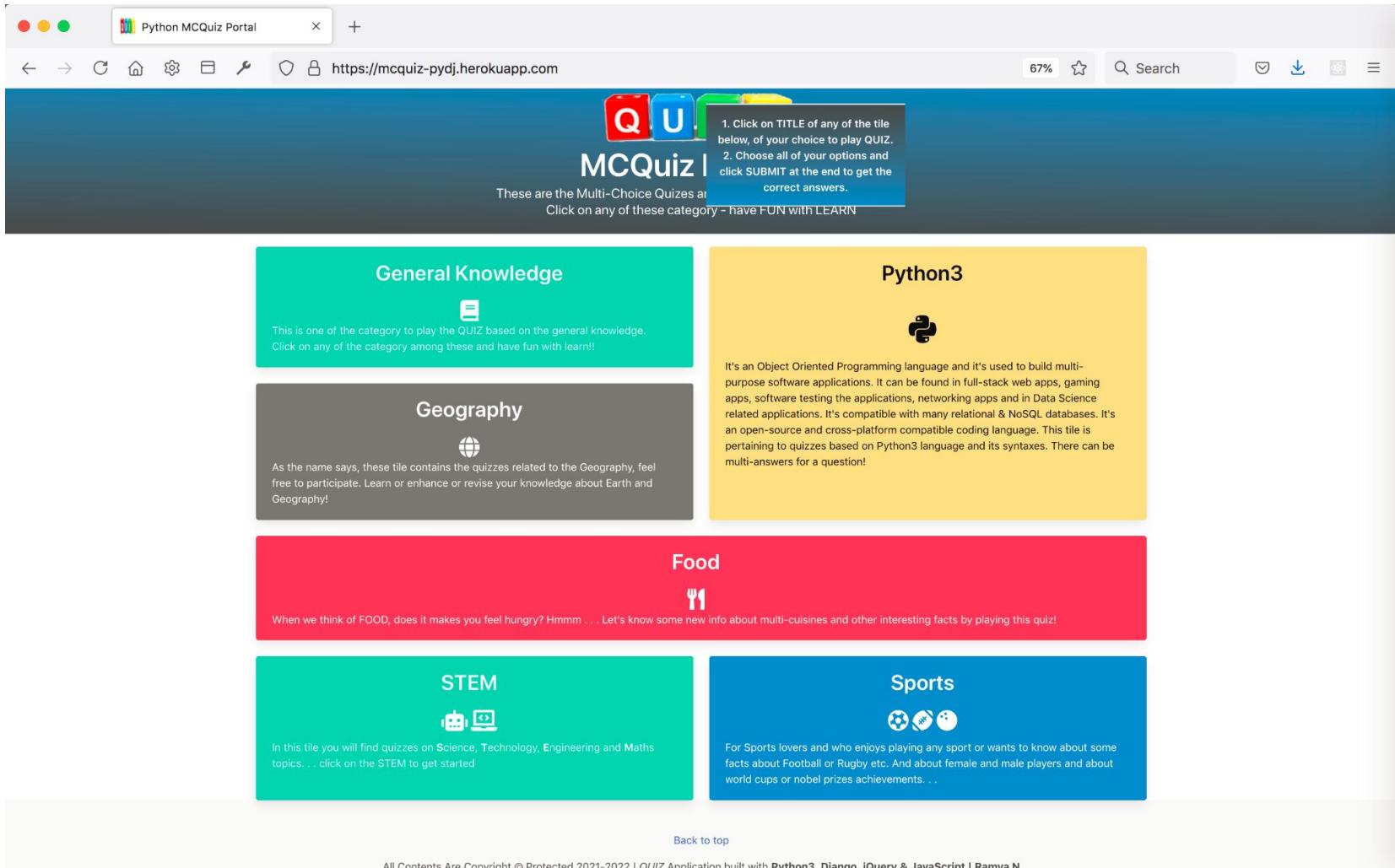


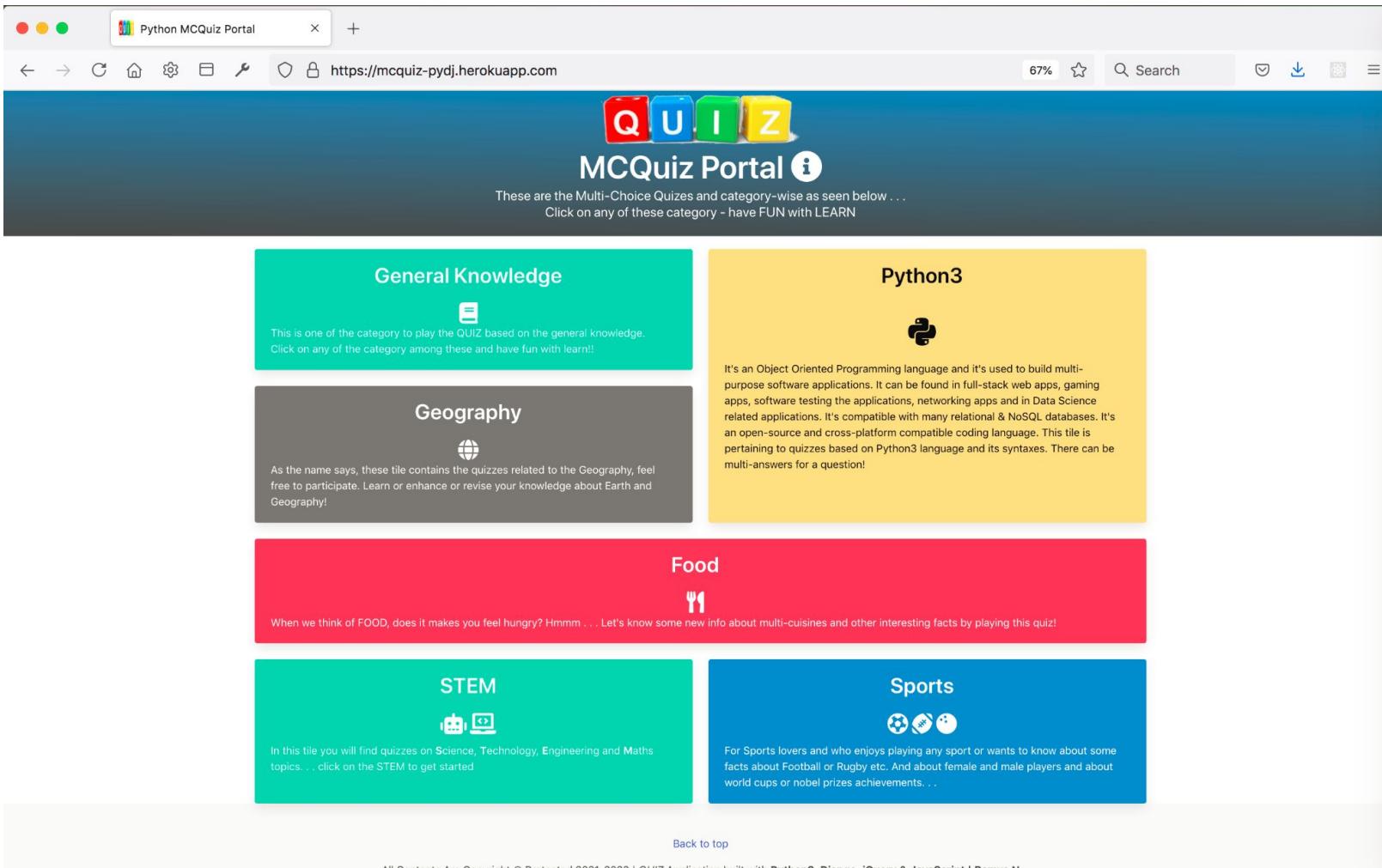
OSS platforms:



HEROKU







Multi-Choice Quizzes | GK    X    +

https://mcquiz-pydj.herokuapp.com/qna.html

67%       Search   

## Multi-Choice Quizzes on General Knowledge

Learn | Fun | Recap . . .

[HOME](#)

[NEXT](#)

1. Octopus has how many hearts?

- 3
- 1
- 5
- 8

2. Which is the capital city of Australia?

- Perth
- Sydney
- Brisbane
- Canberra

3. What is the smallest planet in our solar system?

- Mars
- Mercury
- Uranus
- Jupiter

4. What is the tallest mountain in the world?

- Mount Abu
- Mount Rainier
- Mount Everest
- Swiss Alps

Multi-Choice Quizzes | Python X +

https://mcquiz-pydj.herokuapp.com/py\_quiz.html 67% ⭐ Search

## Multi-Choice Quizzes on Python

Learn | Fun | Recap ...

HOME    NEXT    PREV

1. What does this statement do 'dict(zip(var\_1, var\_2))' - Assume var\_1 and var\_2 are lists

- Returns dictionary for var\_1 and var\_2
- Converts two lists into a dictionary
- Throws error
- Only merges two variables

2. What is the correct output of below statements: tp = ("Python3");  
print(type(tp))

- bool
- list
- str
- tuple

3. Which of the following is correct?

- Comments are for programmers for better understanding of the program.
- Python interpreter ignores comment
- Multi-line comments in Python using triple quotes
- All of them

4. Python was created by:

- James Gosling
- Guido van Rossum
- Steve Jobs
- Google

5. What is a correct syntax to output 'Hello World' in Python?

- print("Hello World")
- echo "Hello World"
- echo("Hello World")

# CRUD application - Students Registry

## Django Web Framework

[Add Student](#)

Student ID	Student Name	Student Email	Student Address	Student Contact	Student Gender	Edit/Update	Delete
4	Kate	kate@outlook.com	342, Willson Street, UK	4467583	F	<a href="#">Edit</a>	<a href="#">Delete</a>
5	Williams	williams@outlook.com	23, Eastham, UK	4490280	M	<a href="#">Edit</a>	<a href="#">Delete</a>
6	Rathod	rathod@gmail.com	45, City Central, New Delhi, India	916736	M	<a href="#">Edit</a>	<a href="#">Delete</a>
7	John	john@gmail.com	111, Gallions Reach, UK	4413910	M	<a href="#">Edit</a>	<a href="#">Delete</a>
8	Maina	maina@outlook.com	56, High Street, Bombay, India	919939	F	<a href="#">Edit</a>	<a href="#">Delete</a>



https://students-crud-django.herokuapp.com/create



## Add New Student Record

Student Name

Enter Your Name

Email

Enter Your Email

Address

Enter Your Address

Phone/Mobile Contact

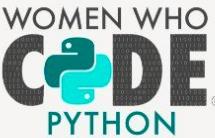
Enter Your Contact Number

Gender

Female |  Male

Insert Record

Home Page



# Development to Deployment of a Web Application in Python

Part 2: Walkthrough how the data is stored and  
the database's integration with the user interface

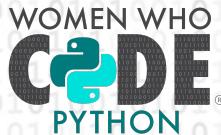


Mar 12, 2022 @ 12:30 pm ET

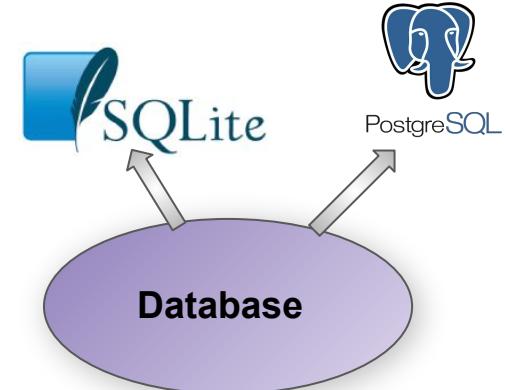
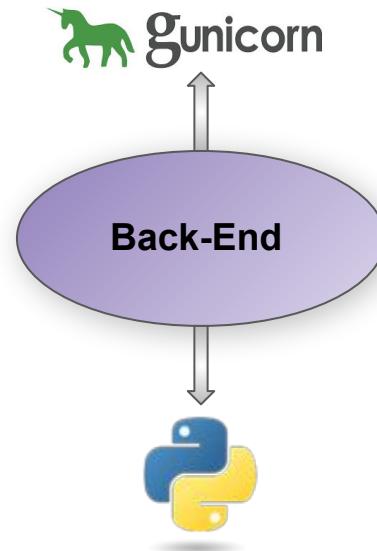
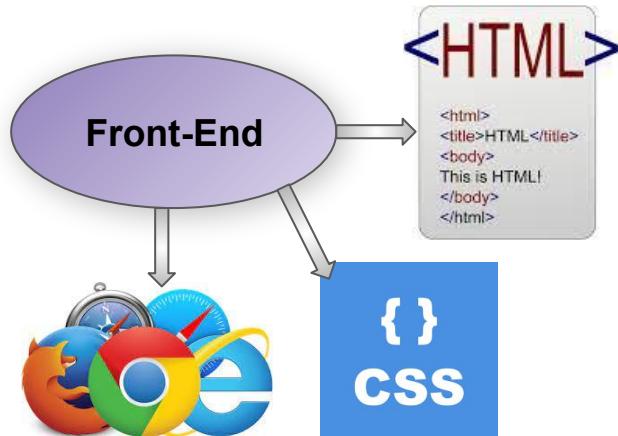
With Ramya Nagabhushan  
Web Developer | Python Mentor

# Development and Deployment - Part-2

Walkthrough of  
Database Admin  
Portal, it's Access &  
Connection to  
Database



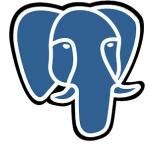
# Python3 > Application's Components



# Python3 > Databases [ SQL | NoSQL ]



It's an organized collection of data that can be used to store and retrieve data



PostgreSQL



Firebase

# Python3 > Database Access Portal



## App #1 : Database Admin Portal - Django

← → ⌛ ⓘ 127.0.0.1:8080/admin/students\_crud\_app/student/

WELCOME, RAMYA. VIEW SITE / CHANGE PASSWORD / LOG OUT

### Django administration

Home › Students\_Crud\_App › Students

AUTHENTICATION AND AUTHORIZATION

Groups + Add  
Users + Add

STUDENTS\_CRUD\_APP

Students + Add

«

Select student to change

Action: — Go 0 of 9 selected

STUDENT  
 Test User  
 Mahadev  
 Sarah  
 Srivatsa  
 Maina  
 John  
 Rathod  
 Williams  
 Kate

9 students

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ADD STUDENT +

# Python3 > Database Access Portal



## App #2 : Database Admin Portal - Django

127.0.0.1:8000/admin/



### Django administration

WELCOME, ADMIN. VIEW SITE / CHANGE PASSWORD / LOG OUT

Site administration

#### AUTHENTICATION AND AUTHORIZATION

Groups	<a href="#">+ Add</a>	<a href="#">Change</a>
Users	<a href="#">+ Add</a>	<a href="#">Change</a>

#### PYQUIZ\_PORTAL\_APP

Category infos	<a href="#">+ Add</a>	<a href="#">Change</a>
Food cat infos	<a href="#">+ Add</a>	<a href="#">Change</a>
Geo cat infos	<a href="#">+ Add</a>	<a href="#">Change</a>
Mc quiz pythons	<a href="#">+ Add</a>	<a href="#">Change</a>
Mc quiz sportss	<a href="#">+ Add</a>	<a href="#">Change</a>
Mc quiz stems	<a href="#">+ Add</a>	<a href="#">Change</a>
Mc quizzes	<a href="#">+ Add</a>	<a href="#">Change</a>
Py cat infos	<a href="#">+ Add</a>	<a href="#">Change</a>
Sports cat infos	<a href="#">+ Add</a>	<a href="#">Change</a>
Stem cat infos	<a href="#">+ Add</a>	<a href="#">Change</a>

#### Recent actions

##### My actions

- [Python3](#)  
Py cat info
- [Python3](#)  
Py cat info
- [Python3](#)  
Py cat info
- [Until 2013, select soccer player held the record for the number of goals in international competition for both men and women.](#)  
Mc quiz sports
- [How many overall World Cup championships has Lindsey Vonn won](#)  
Mc quiz sports
- [How many overall World Cup championships has Lindsey Vonn won](#)  
Mc quiz sports
- [Which driver is the only female to have won an IndyCar Series race?](#)  
Mc quiz sports

# Commands



## Steps to setting up and Running the Application:

- Create virtual env: [OSX] \$ `python3 -m venv path/venv_name` | [Windows] > `python -m venv path\venv_name`
- Activate above virtual env: \$ `source venv_name/bin/activate` | > `venv_name\Scripts\activate.bat`
- Install Django package: \$ or > `pip install django`
- Run the server: \$ or > `python manage.py runserver`
- Install dependencies [ex]: \$ or > `pip install gunicorn`
- Create Django project: \$ or > `django-admin startproject django_project`
- Create Django application: \$ or > `python manage.py startapp app_name`
- Access the database: <http://127.0.0.1:8000/admin>

# Link to Slides



[https://github.com/rnedesigns/WWCode\\_Py\\_CodingWorkshops](https://github.com/rnedesigns/WWCode_Py_CodingWorkshops)

# Q&A

# Join our Slack for Help

<http://bit.ly/WWCodePythonSlack>

We will be happy to answer questions you may have...!!

# WOMEN WHO CODE

Thank you All ....!

Women Who Code's Python track and Team

12<sup>th</sup> March 2022  
@ 05:30 pm UTC

