



**OXdui**  
THE TECH SCHOOL  
**Python**

**Route Map** Master Classes 90 Days Program

Add-On Certificate



# Who we are ?

Bridging the gap between the educated and unemployed with a

**100% Placement Assistance**

**OXdu Tech School** is a learning centre with expert professionals who help individuals to explore the digital world and pave new paths for their careers.



# What you will learn ?



Basic Python Concept



Functions & Modules



OOPs in python



Regular Expression



Tkinter



Tkinter Application



QR Code System



Text to Speech Converter



MySQL



PostgreSQL



HTML



CSS



Bootstrap



DJANGO



GIT



Hosting



Rest API Django



Flask



Networking  
Using Python



OpenCV



Pandas



Numpy



Python Libraries



Data Analysis



Machine Learning



Machine Learning  
Algorithms

Python

# Why we are unique ?



Embassy Attestation  
Certifications



Learn in  
Malayalam



Rated  
5 Star



India's Top  
Placement Cell



50+  
Hiring Partners



Lifelong Placement  
Assistance



One-to-One  
Training



100% Moneyback  
Guarantee



Flexible  
Timing



Challenge Based  
Training

# Who Can Learn Python ?

- +2 Students ( Computer Science )
- Any undergraduate degree in CS
- B Tech Computer Science
- BCA and MCA
- Entrepreneurs
- Professionals

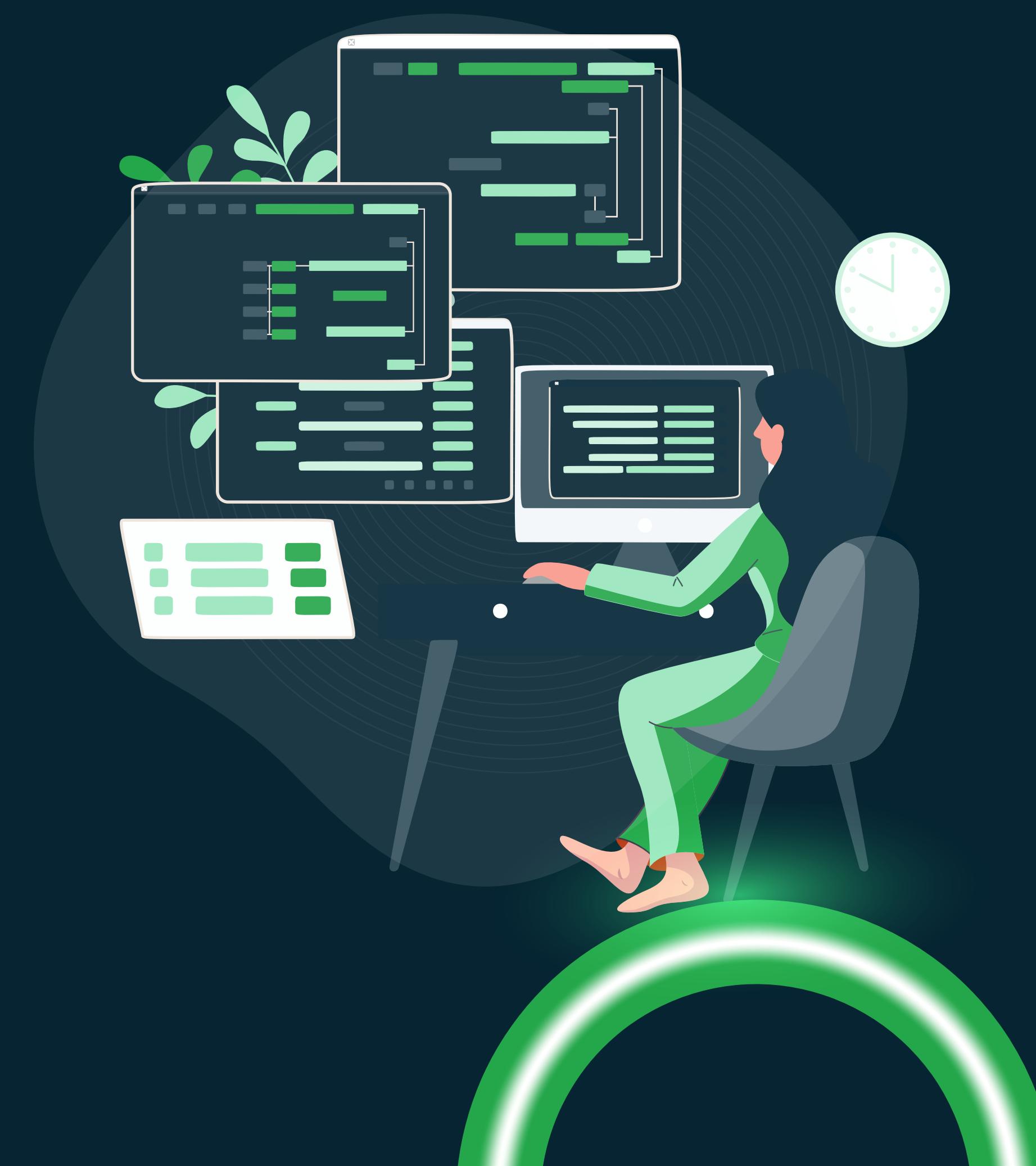


# Getting started

## 1 Introduction

## 2 Basic Python Concepts

- Installing Python And PyCharm
- Hello World Program In Python
- Some other mathematical operations in Python
- Strings In Python
- Accepting input from the user in Python
- Performing operations on a string in Python
- In place operators in Python
- Writing our very first program in PyCharm



Python

## ③ Html, CSS, JavaScript & Bootstrap

- Designing website
- Introducing to CSS, JavaScript & Bootstrap
- JQuery & Ajax

## ④ Building Databases

- Apps With PostgreSQL & Python
- Apps With MySQL & Python

## ⑤ Control Structures in Python

- If and Elif statement in Python
- Range function in Python

## ⑥ Loops in Python

- For Loop in Python Boolean logic in Python
- While loop in Python



7

## Functions & Modules

- In Python Passing arguments to functions in Python
- Making function return value in Python
- Passing functions as arguments in Python
- Modules in Python

8

## Exception Handling & File Handling In Python

- Errors & exceptions in Python
- Exception handling in Python
- Finally block
- File handling
- Reading data from file
- Adding data to the file
- Appending to a file



Python

9

## Data Types in Python

- Dictionaries
- Tuple
- List
- Set
- String functions, Numeric functions

10

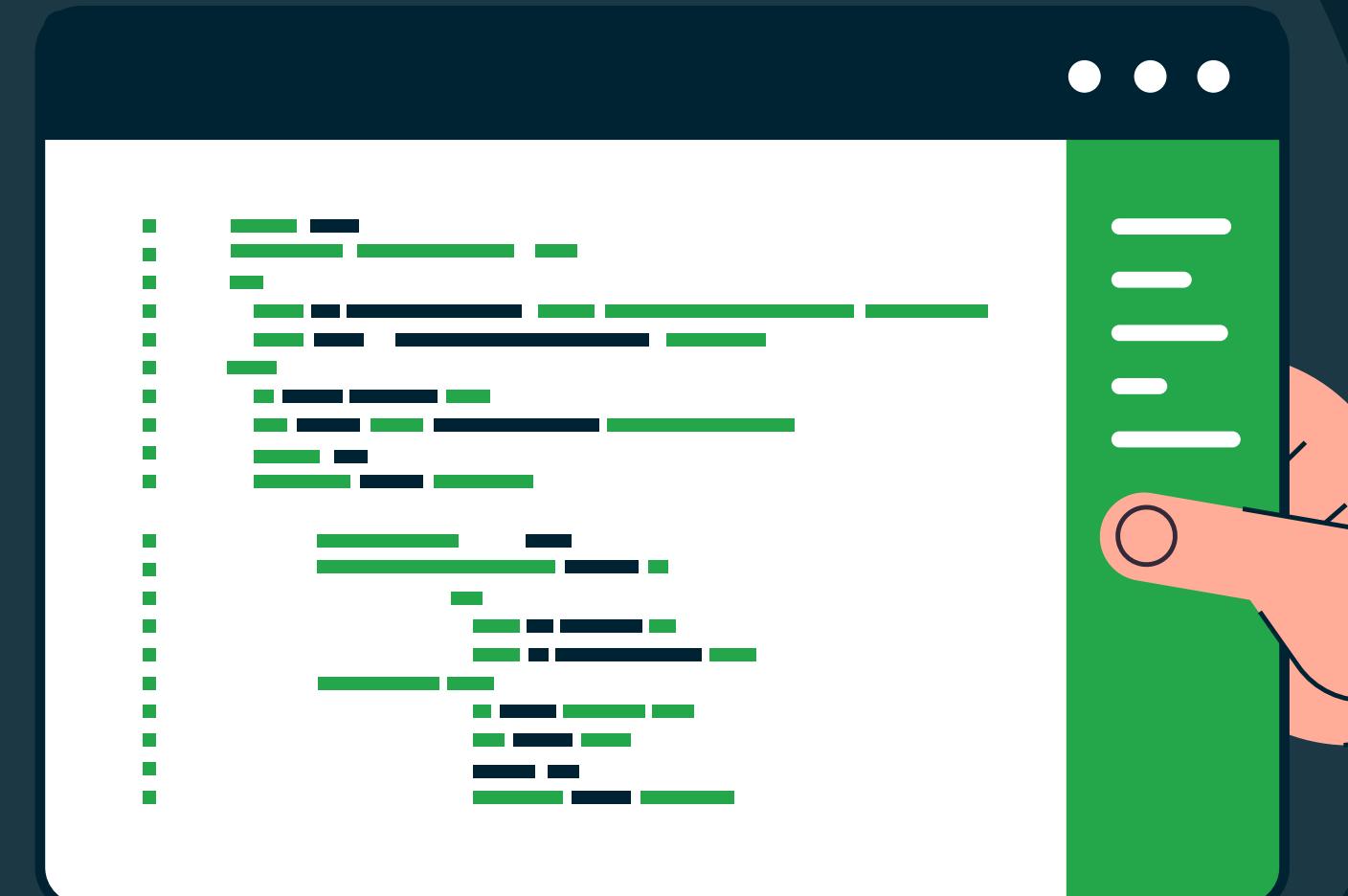
## Some other Types in Python

- List Slicing
- List Comprehension
- String formatting

11

## Functional Programming in Python

- Functional programming
- Lambdas in Python
- Generators in Python



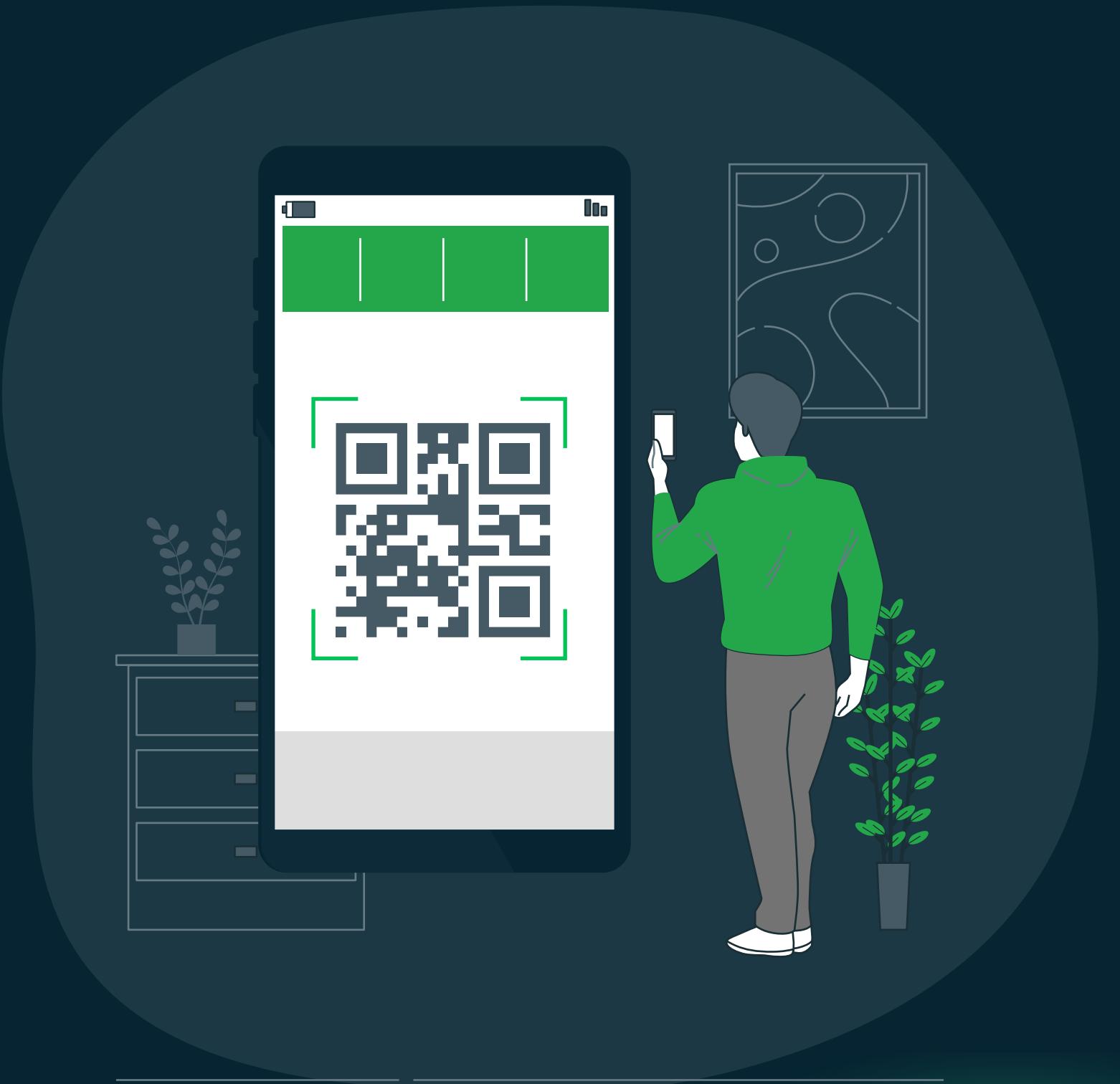
Python

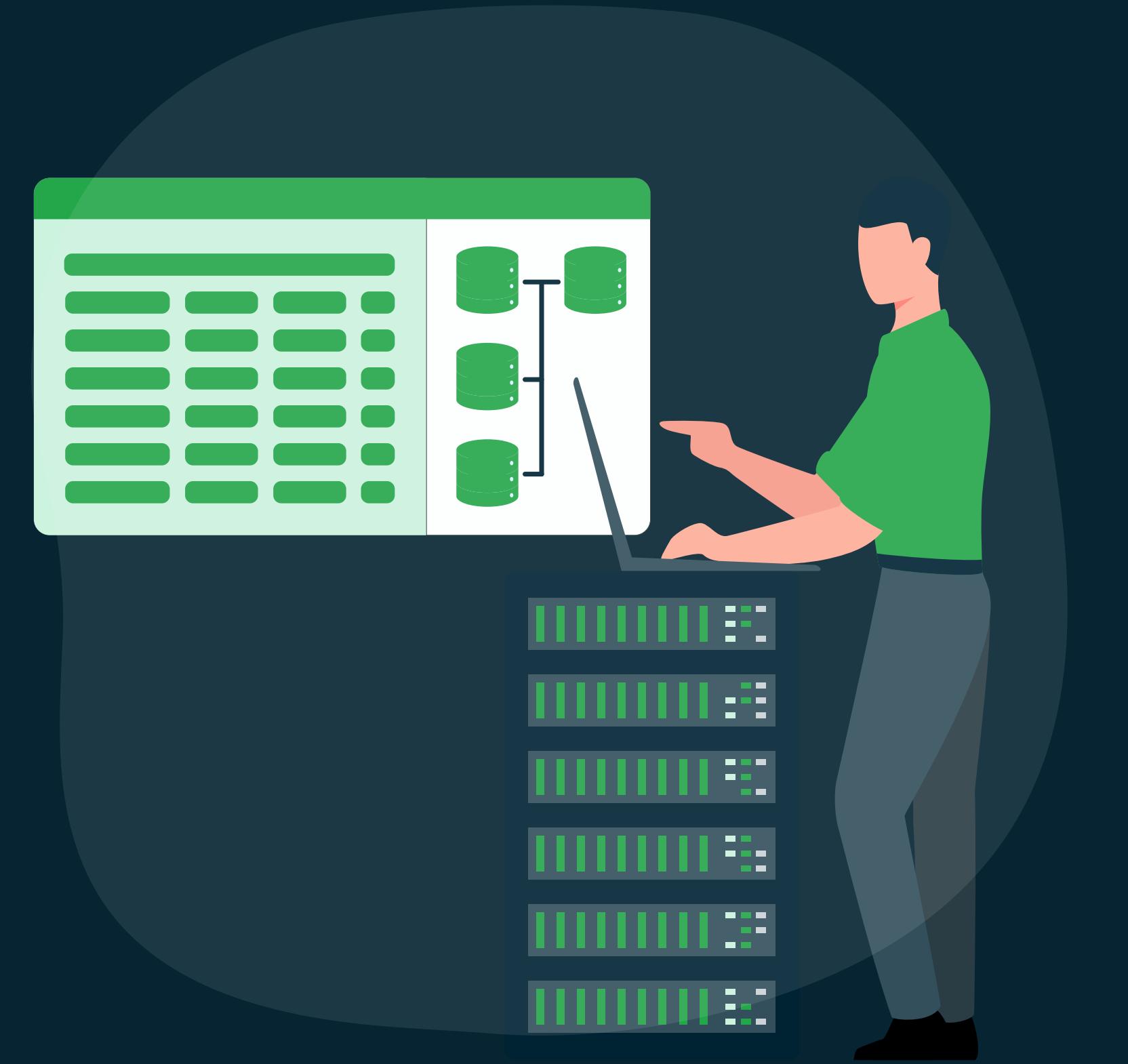
## 12 Object Oriented Programming in Python

- Object
- Class
- Inheritance
- Polymorphism
- Data hiding
- Data Abstraction

## 13 Regular Expressions in Python

- Regular expressions in Python
- Search & find all
- Find & replace
- The dot metacharacter
- Caret & dollar metacharacter
- Character class
- Star metacharacter
- Group





## 14 Tkinter

Functions &

- Tkinter grid
- Message box
- Dropdown
- Calculator buiding

## 15 Building QR CODE System

- QR Code Generator Part 1
- QR Code Generator Part 2

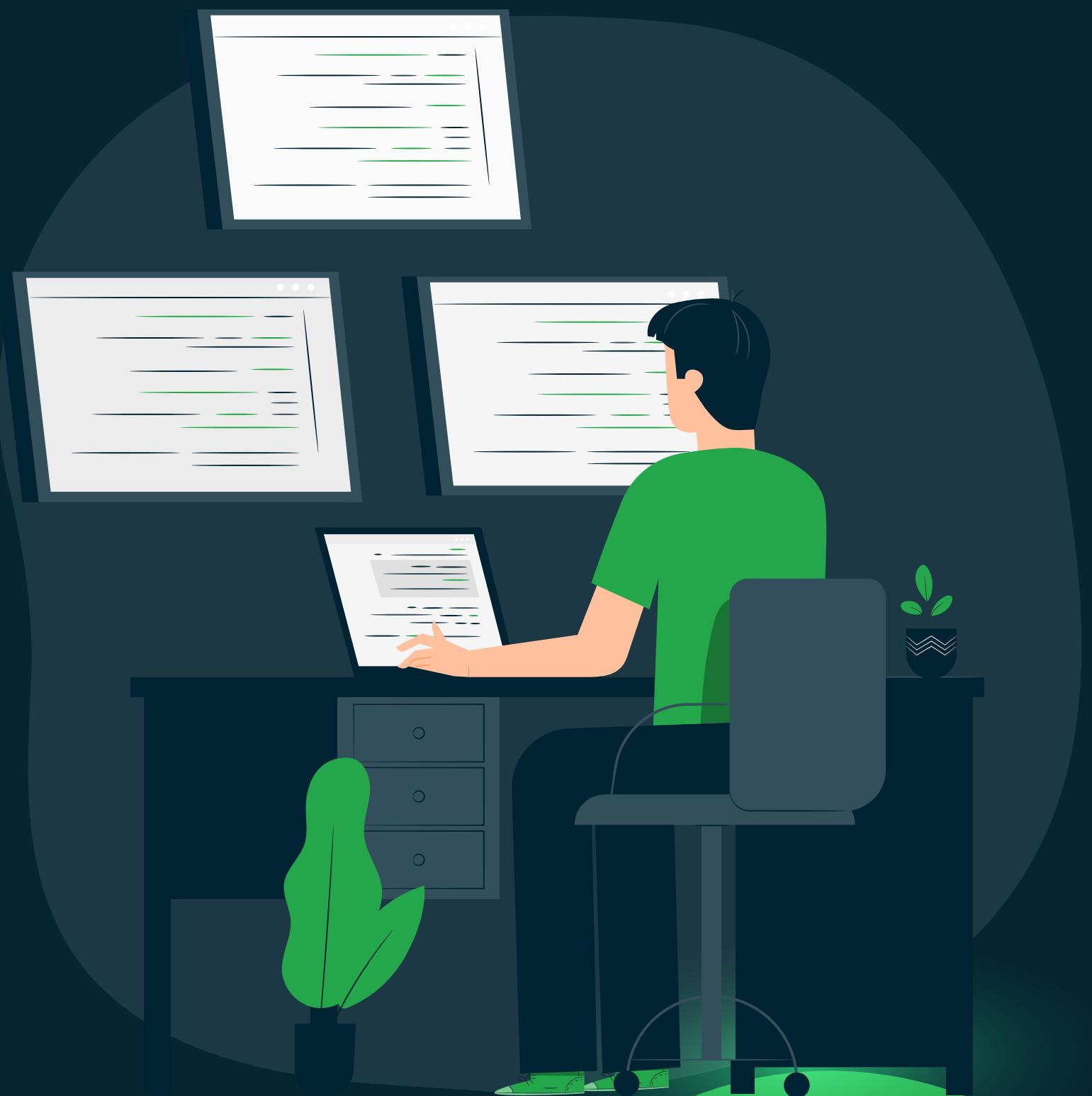
## 16 Building Text to Speech Converter

- Generating Audio From Text Data
- Converting File Data To Audio
- Converting User Input To Speech

17

## DJANGO

- MySQL Workbench Setup
- Python Database Connection Python | Git | PyCharm
- What is Django?
- Python Web Framework, Setup
- First App in Django - part 1
- First App Django - part 2
- Django Template Language DTL
- Django Template Language - part 2
- Addition of Two Numbers in Django
- GET vs POST HTTP Methods
- Model View Template in Django
- MVT, Static Files – 1, Static Files – 2
- Passing Dynamic Data in Html – part 1
- Passing Dynamic Data in Html – part 2
- If Statement ORM



- Object Relational Mapper
- Theory Postgres and PgAdmin Setup
- Models and Migrations
- Remigration
- Admin Panel
- Add and Fetch data from Database
- User Registration – 1
- User Registration – 2
- Passing Messages
- User login
- User Logout

18

## Build TODO Application in Django

19

## Build CRUD Application Using Django





20 **Complete E-Commerce Project**  
[ Host this Project in Free Hosting Server ]

21 **GIT**  
• Push all the code there

22 **Hosting Projects**

23 **REST APIs with Python & Django Rest Framework**  
• What is an API  
• Installing Django Rest Framework  
• Creating & Setting Up Django  
• Setting Up API App  
• Creating Serializer For Model  
• Creating Another Endpoint

- Update & Delete Functionality
- Adding Images To API
- Making The API Consumable
- Setting Up React App
- Fetching Data From API From
- React Front End

24

## Make Web Applications in Python Using Flask

- Creating Directory Structure
- Hello world, Routing
- Variables
- Dynamic Urls
- Passing Data To The Server
- Templates
- Passing Data Using Templates
- Passing Form Data To Templates
- Using Cookie



25 **Network Programming in Python Using Sockets**  
Building A Chat Application

26 **Image Processing With OpenCV & Python**

- Introduction To OpenCV
- Installing OpenCV
- Resources,Reading & Displaying Images
- Capturing Video From Webcam
- Drawing Shapes On Images
- Mouse Callback Events
- Manipulating Pixels
- Color Spaces In OpenCV
- Object Tracking In Images
- Object Tracking In Videos
- Simple Thresholding
- Simple Thresholding Implementation



- Adaptive Thresholding
- Geometric Transformation of Images
- Geometric Transformation of Images Implementation
- Image Blurring
- Image Blurring Implementation Averaging Gaussian
- Filtering

27

## Data Analysis Using Python

- Introduction to Data Analysis
- Installing Tools For Data Analysis
- Introduction to Pandas & Series
- Converting Dictionaries to Series
- Introduction to Data Frames
- Changing Column Sequence
- Changing Columns & Transposing Dataframe
- Reindexing Series & DataFrames
- Deleting Rows & Columns
- Arithmetic operations on dataframe and series



# Python

- Arithmetic operations in between dataframe and series
- Sorting series and dataframes
- Sorting according to values
- Handling duplicate values
- Calculating sum, max & min values
- Dropping nan values
- Loading data from a file
- Analyzing file data
- Creating Numpy Array
- Another way to create an array
- Logspace & Linspace
- Slicing a Numpy Array
- Advanced indexing and slicing techniques
- Broadcasting
- Iterating using nditer
- Plotting data using Matplotlib
- Analysing Supermarket Sales
- Reading CSV File



- Analysing Sales Data Part 1,2,3, and 4
- Accessing Different Parts of Data
- Analysing Sales Data Part 5 and 6
- Selecting Rows on a Condition
- Analysing Sales Data Part 7,8,9,10,11,12,13,14,15,16,17, and 18
- Classifying Sales By Month
- Analysing Sales Data Part 19 and 20

28

## Machine Learning Project

- Project 1
- Project 2



# Minimum System Requirements



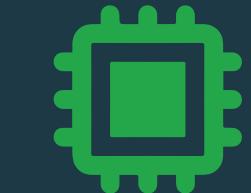
Operating System



Storage Capacity



RAM Capacity



Processor

Windows 10  
or above

512GB  
Storage

4 GB  
or above

i3 or  
above

## Our Approaches:

- Practical approach: 75% of the time you will be doing hands-on programming.
- Best-in class mentors: Mentors with deep technical expertise.
- Project oriented approach: Demonstrate a good quality project by the end of free Python internship.
- Plenty of quality Embedded Systems free course materials.
- Knowledge sharing and industry trends update to students.
- Tutorial and How-to-do training.
- Resume preparation, Interview facing tips and career advices.
- Live sessions for Personal counselling, Higher studies guidance, Placement guidance.
- Placement assistance for those who complete the internship programme successfully.

# Our Hiring Partners

+50 Companies

Python

# We are Located in

## KONDOTTY

Opp. PPMHSSchool  
Kottukkara- 673638  
Phone : +91 8129 313 838

## MANJERY

Coming soon

## TIRUR

Coming soon

## RAMANATUKARA

Vaidyarangadi  
Ramanatukara 673633  
Phone: +91 8891 686 627

## PERINTHALMANNA

Coming soon

## COCHIN

Coming soon



Python

# Don't hesitate to Connect with us



THE TECH SCHOOL

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Python