

# PYTHON PROGRAMMING

## BEGINNER

Working with variables in python.

understanding data types and how to manipulate strings.

control flow and logical operators.

randomization and python lists.

python loops.

python functions and karrel.

Hangman.

function parameters and Caesar cipher

dictionaries, nesting and the secret auction

functions and outputs

the blackjack capstone projects

scope and number guessing game

debugging how to find and fix errors in your code

higher lower game projects

## INTERMEDIATE LEVEL

local development environment setup & the coffee machine

object oriented programming (OOP)

the quiz project and the benefits of OOP

turtle and the graphical user interface (GUI)

instances, state and higher order functions

build the snake game part 1 animation and coordinates

build the snake game part 2 inheritance and list slicing

building pong the famous arcade game

# PYTHON PROGRAMMING

the turtle crossing capstone project

files, directories and paths

working with CSV data the pandas library

list comprehension and the NATO alphabet

Tkinter, Args, Kwargs and creating GUI

programs

tkinter, dynamic typing and the Pomodoro GUI applications

building a password manager GUI app with tkinter

errors, exceptions and JSON data improving the password

flash card app capstone project

send email (smtplib) and manage dates (date-time)

Api endpoints and api parameters -ISS Overhead notifier

Api practice – creating a GUI Quiz App

keys, authentication and environment variables

send sms

stock trading news news alert project

habit tracking project api post requests and headers

workout tracking using google sheets

capstone part 1 flight deal finder

capstone part 2 flight club

## WEB FOUNDATION

Introduction to HTML

Intermediate HTML

Introduction to CSS

# PYTHON PROGRAMMING

Intermediate CSS

## INTERMEDIATE

web scraping with beautiful soup

create a Spotify playlist using the musical time machine

create an automated amazon price tracker

selenium web driver browser and game playing bot

automating job applications on Linked in

auto tinder swiping bot

Internet speed twitter complaint bot

Instagram follower bot

web scraping capstone – data entry job automation

introduction to web development with flask

HTML and URL parsing in flask and the higher lower game

rendering HTML static files and using website template

web foundation bootstrap

## ADVANCED

blog capstone project part 2 – Adding styling

make POST requests with flask and HTML forms

building advanced forms with flask-Wt forms

flask, Wt forms, bootstrap and csv – coffee and WiFi project

databases and with SQLite Alchemy

my top 10 movies websites

# PYTHON PROGRAMMING

web design school – how to create a website that people will love

building your own API with Restful routing

blog capstone project part 3 – Restful routing

authentication with flask

blog capstone project part 4 – adding users

deploying your web application with digital ocean

data exploration with pandas college major vs your salary

data visualization with matplotlib programming languages

aggregate and merge data with pandas analyses the LEGO data set

google trends data re sampling and visualizing time series

beautiful plot charts and analysis the android app store

computation with numpy and N-dimensional arrays

linear regression and data visualisation with seaborn

analysing the nobel prize with plotly, matplotlib and sea-born

capstone project – predict house prices