سرفصـل هـای
دوره آموزشی

دوره بک اند دولوپرBack End Developer

مروری بر برنامه نویسی پایتون

- Installation and setup

- Prepare your ide

- Datatypes

- Functions

- Pip

- Modules

- Virtualenv

- Exceptions

- Oop concepts

- Sample projects

آموزش نحوه کار باGit

- What is git

- How to install it and using github desktop

- Basic knowledge of git and usage

آموزش جنگو مقدماتی

- **Start using Django**

  - Introduction to django

  - Django architecture

  - Setup your first project and learn structures

  - Setup your first app and using url,view,template

  - Choose your template

- **Static,Media and Tempalate**

  - Setup static and media in settings

  - How to use tags and jinja

  - Migrate your chosen template

  - Inheritance of templates

  - Dynamic urls

  - Create blog app

  - Render data to template

- **Database and Admin**

  - Makemigrations and migrate

  - Superuser and admin orm

  - Fields in database

  - Create model for blog with app

  - Create model in Django

- o Connect to shell and use orm

- o Checkout admin panel

- o Customizing admin

- o Meta in models

- **Views and Database**

  - o Fetch data and render to page

  - o url patrameters

  - o completing urls and views for blog app

  - o post categorizations

  - o concatenate the posts

  - o template include

- **Template Tags**

  - o Getting to use tags

  - o Simple tag

  - o Filter tag

  - o Inclusion tag

  - o Using tags in blog

  - o Pagination

- **Django Forms**

  - o Create forms in template

  - o Form

- o ModelForm

- o Use forms in blog

- o Messages

- **Django Modules**

  - o Humanize

  - o Sites framework

  - o Sitemap

  - o Robots

  - o Debugger toolbar

  - o Captcha

  - o meta

  - o Rss feed

  - o Django compressor

- **Django Authentication**

  - o What is authentication

  - o Login form and authentication

  - o Logout

  - o Signup

  - o Authentication decorators

  - o Auth module

  - o Introduction to allauth

- **Deployment on host**

  - Deployment on cpanel

  - Deployment on liara

آموزش داکر(Docker)

- **What is docker and how to install**

- **Basic usage of docker**

- **What is docker compose**

- **Setup a service and use for django**

آموزش جنگو پیشرفته

- **Introduction**

  - Why we need to know more

- **Getting Ready**

  - Setup repo

  - Create dockerfile

  - Add docker-compose

  - Environmets

  - Database schema

- Create needed apps

- **Setup Project**

  - Add models

  - AbstractBaseUser and CustomUser

  - Managers and UserManager

  - Change default auth model

  - Customize admin and admin forms

  - Add profile

  - Django Signals

- **Class Based Views**

  - FBV vs CBV

  - TemplateVIew

  - RedirectView

  - ListView

  - Paginations and Customizations

  - DetailView

  - FormVIew

  - CreateView

  - UpdateView

  - DeleteView

  - Permissions and mixins

  - Start a TodoApp

- **RestFramework and Serializers**

  o Api and RestAPI

  o Whats the difference between rest and render

  o DRF installation

  o views

  o Serilaizers

  o Statuscodes

  o Modelserializers

  o Validation

  o Crud operation

  o Introduction to Postman and usage

  o Permissions

  o Postman Authentication

- **Restframework in class based views**

  o Migrate to ApiView

  o Permission classes

  o Crud in apiview

  o Migrate to GenericViews

  o Crud in GenericViews

  o Migrate to ViewSets and ModelViewSet

  o Crud in ViewSets

  o Default and Simple Router

- o Api Documentation

- o Customizing representation

- o Get user info

- o Permission Classes

- o FilterBackends

- o SearchFIlter

- o Ordering and Sort

- o Paginations

- o More filters and customizations

- **Api Documentations**

  - o Swagger and Redic

  - o Swagger to postman

- **Authentications**

  - o Add accounting app

  - o What endpoints we need

  - o Register

  - o Token Authentications

  - o JWT Authentications

  - o Email Verifications and activation

  - o SMTP٤Dev

  - o Email templates

  - o Versioning api

- **Reformat and Lint**

  o Black and flake۸

- **Tests**

  o What is testcase

  o What should we test

  o url tests

  o fom tests

  o model tests

  o view tests

  o what is Pytest

  o Crud tests for application in api

- **Continues Integrations**

  o What is CI and devops

  o Intro to github actions

  o Workflow

  o Create and deploy ci in actions

- **Fake data**

  o Create fake data with faker

- **Access Management to API**

  o Request with jquery

  o Corsheaders setup

- **Load Testing**

  - Introduction to locust

  - Create some load on api

- **Background tasks**

  - What is background tasks

  - Setup redis and settings

  - What is celery and setup in django

  - Create tasks for workers

  - Create schedule tasks with beat

- **Caching**

  - What is caching

  - Setup redis and settings

  - How to cache pages

  - How to cache api calls

- **Getting ready for Deployment**

  - Getting ready for deployment

  - Setup gunicorn

  - Setup nginx

  - Setup statics and media

  - Create ۳ stages of program

- **Deployment**
  - Deploy on VPS
    - Setup ssh and docker
    - Setup server with proxy
    - Deploy
  - Deploy on Hamravesh

- **Continuous Deployment**
  - What is cd
  - Automate deployment in actions

آشنایی با مفاهیم میکروسرویس ها

- **What is microservice**

- **What is the best tools to choice**

- **General architectures**

- **Protocols and Usage**