aiQuest Intelligence & Study Mart

Web: https://www.aiquest.org

Email: contact@aiquest.org

Cell: +8801704265972

Django for Web Development & Artificial Intelligence

Course Type: Live Class (Night 8:30pm-10:30pm)

Total Hours: 55+

Total Class: 26+

Every Week: 2 Class

Projects: https://youtu.be/9B6zJpxJOk4

Course Instructor:

Md. Abu Noman Basar

Web Developer, aiQuest Intelligence

B. Sc. in Computer Science & Engineering

Course Goal:

Django is an amazing framework to learn web development & deploy ai models smartly. In this course, we will provide a very clear knowledge on Basic Python, OPP in Python, SQLite3 Database, Basic to advance Django framework, End to End **Ecommerce** Project, Deployment of **Machine Learning** model with Django.

Join Now: www.facebook.com/groups/Django1 & www.facebook.com/groups/StudyMart

Course Module Projects: https://youtu.be/9B6zJpxJOk4

Facilities:

1. Fees only 5000 taka / $50 / 50 Euros
2. More than 55 hours Live class via Zoom / Google Meet **(No pre-recorded video)**
3. We will also prove the class records & all materials
4. Class assignments
5. Facebook group for live support
6. Working with projects
7. Complete career guidelines
8. Course completion certificate from www.aiquest.org

Class: 01

Important Discussion on:
1. What is Web Development?
2. Why it's Important?
3. Web Design vs Development
4. What is Python?
5. Python for Web Development
6. Python Frameworks: Django, Flask
7. Why Django?
8. Demand of Django in Industry
9. Job Responsibility for Django Developers
10. Django for Machine Learning & AI
11. Django & Cyber Security
12. Future & Jobs in Django

Class: 02

Software Installation:
1. Latest Python
2. PyCharm
3. Visual Studio

Python Basics:
1. Print 'Welcome to Python with Django Course'
2. Input & Output Functions
3. What are variables?
4. Rules of Variable.
5. Multi Words Variable.
6. Multiple Assignment Variable.
7. What are Strings?
   - Slicing
   - Upper Case
   - Lower Case
   - Remove Whitespaces
   - Data Types
   - Operators

***Assignment

Class: 03

Data Structure:
1. Conditions
   - ➤ if, elif, else
2. Loop
   - ➤ For Loop
   - ➤ While Loop
3. List
4. Tuple
5. **Project 1**

***Assignment

Class: 04

Data Structure:
1. Set
2. Dictionary
3. Functions

Object-Oriented Programming:
1. What is OOP?
2. What is Class, Object & How it Works.
3. What is Method?
4. How Inheritance Works.

***Assignment

Class: 05

1. What is Django?
2. Why should learn Django?
3. Model View Template (MVT)
   - ➢ These 3 major architectures follow Django
4. Environment setup
5. Extension Install Inside Visual Studio Code
6. Django Install Globally
7. Django Install Inside 'Virtual Environment (VE)'
8. Project Structure
9. Create App
10. App Structure
11. Print ('Welcome to Django')

***Assignment

Class: 06

1. Function-Based View
   - ➢ Python functions that take http requests and returns http response, like HTML documents

2. URLs
3. Template
   - ➢ Here Write HTML Code
4. Render

***Assignment

Class: 07

1. Django Template Language (DTL)
2. Variables
3. Filter
   - For Searching
4. Template Tags
5. Template Inheritance
   - all the common elements of your site and defines blocks that child templates can override

***Assignment

Class: 08

1. **HTML inside Django**
   - HTML Elements
   - HTML Attributes
   - HTML Heading
   - HTML Paragraph

***Assignment

Class: 09

Static Files
1. CSS
2. Bootstrap Inside Django

***Assignment

Class: 10

1. Inheritance
2. Hyperlinks
3. Cookies
4. ORM
5. Model
   - Create Database Here

***Assignment

Class: 11

1. Makemigrations
   - Packaging up your model changes into individual migration files
2. Migrate
   - Migrations are Django's way of propagating changes you make to your models (adding a field, deleting a model, etc.) into your database schema.
3. Database
4. Superuser for Admin Panel
5. Register Model

***Assignment

Class: 12

1. Django form
2. Label Tag
3. Form field Argument
4. Form Widgets
5. GET & POST Method
6. Validate Form
7. Cleaned Data

***Assignment

Class: 13

1. Http Response Redirect
2. Password Match
3. Colorful Form Using CSS
4. Save Form Data to Database
5. Authentication & Authorization

***Assignment

Class: 14

1. User Creation Form
2. Login Using Authentication
3. Logout
4. Password Change Form
5. Set Password Form
6. Middleware

***Assignment

Class: 15

Database
1. Model Relationship
2. One To One relationship
3. One To Many relationship
4. Many To Many relationships
5. Class-Based View
6. Cleaned Data

***Assignment

Class: 16

Project 2: Ecommerce Website
1. Briefly Discussion About the Project
2. Urls
3. Views
4. Template
5. Static

***Assignment**

Class: 17

Project 2: Ecommerce Website
1. Create Models
   - ➢ Database Relations
2. Register Model in admin.py
3. Makemigrations
4. Migrate
5. Create Superuser
   - ➢ For Login Admin Panel
6. Insert Image & Information from Admin Panel
7. Show Images in User Interface

***Assignment**

Class: 18

Project 2: Ecommerce Website
1. Login
   - ➢ When Customer buy Product then they have to Login This website.
2. Registration
3. Authentication
   - ➢ Only Registered Person Can Buy Product.
4. Logout
   - ➢ Logout From This Website.

***Assignment**

Class: 19

Project 2: Ecommerce Website
1. Password Change
   - For Security Purpose User Can Change Password.
2. Forgot Password
   - If User Forgot Password, Then They can set New Password Using Email.
3. Reset Password
4. Password Match
5. Colorful Form Using CSS
6. Save Form Data to Database
7. Authentication & Authorization

***Assignment

Class: 20

Project 2: Ecommerce Website
1. Cart
   - Like A Bucket. After Buy Any Product Add Here.
2. Add to Cart
   - Customer Can Any Product Add To Card
3. Calculation in Cart
   - Product Price Calculate Here
4. Product Increase in Cart
   - Same Product Customer Can Buy More Than 1, In This Case Use It
5. Product Decrease in Cart

***Assignment

Class: 21

Project 2: Ecommerce Website
1. Product Remove from Cart
2. Checkout
    ➢ After Adding Cart, User Can See Again Details of That Product.
3. Product Show in Card
4. Search
5. Guideline for Project.

***Assignment Full Project

Class: 22

Deployment Django Project
1. What is Git
2. What is GitHub
3. Heroku / pythonanywhere.com Hosting

***Assignment

Class: 23

Discussion on Machine Learning Algorithms
1. Logistic Regression
2. Support Vector Machine
3. Naïve Bayes
4. XgBoost
5. Decision Tree
6. Random Forest

Class: 24

Project 3: Heart Disease Predict Using Machine Learning & Project Deployment
1. Load Machine Learning Model
   ➤ Machine Learning Code Convert ".sav / .h5" format & Load into Django.
2. Create Views
3. Apply Logic
4. Predict Result
5. Registration Form
6. Login From

***Assignment

Class: 25

Project 4: Fruits Classification & Reorganization Using Deep Learning
1. What Is Deep Learning?
2. What is convolutional neural network?
   ➤ *VGG-19 Model*
   ➤ *Resnet Model*
   ➤ *MobileNet Model*
   ➤ *Inception V3*
3. Load Deep Learning Model into Django
4. Apply Logic
5. Upload Fruits Image & Predict Result

***Assignment

Class: 26

Guidelines:
1. What Next?
2. Project Idea
3. Where Search Django Jobs?
4. Django Job Salary
5. Future Of Django
6. How to be a Good Developer
7. My Learning Story

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