Government of Pakistan

National Vocational and Technical Training Commission

Prime Minister's Youth Skills Development Program

"Skills for All"

Course Contents / Lesson Plan
Course Title: Python/ Django + Angular
Duration: 3 Months

Revised Edition

Trainer Name	
Author	**Hafiz Muhammad Rizwan**
Course Title	**Python/ Django + Angular**

Objectives and Expectations	**Employable skills and hands-on practice in Python/ Django + Angular** This is a special course designed to address unemployment in the youth. The course aims to achieve the above objective through hands on practical training delivery by a team of dedicated professionals having rich market/work experience. This course is therefore not just for developing a theoretical understanding/back ground of the trainees. Contrary to that, it is primarily aimed at equipping the trainees to perform commercially in a market space in independent capacity or as a member of a team. The course therefore is designed to impart not only technical skills but also soft skills (i.e. interpersonal/communication skills; personal grooming of the trainees etc.) as well as entrepreneurial skills (i.e. marketing skills; free lancing etc.). The course also seeks to inculcate work ethics to foster better citizenship in general and improve the image of Pakistani work force in particular. **Main Expectations:** In short, the course under reference should be delivered by professional instructors in such a robust hands-on manner that the trainees are comfortably able to employ their skills for earning money (through wage/self-employment) at its conclusion. This course thus clearly goes beyond the domain of the traditional training practices in vogue and underscores an expectation that a market-centric approach will be adopted as the main driving force while delivering it. The instructors should therefore be experienced enough to be able to identify the training needs for the possible market roles available out there. Moreover, they should also know the strengths and weaknesses of each trainee to prepare them for such market roles during/after the training. i. Specially designed practical tasks to be performed by the trainees have been included in the Annexure-I to this document. The record of all tasks performed individually or in groups must be preserved by the management of the training Institute clearly labeling name, trade, session, etc. so that these are ready to be physically inspected/verified through monitoring visits from time to time. The weekly distribution of tasks has also been indicated in the weekly lesson plan given in this document. ii. To materialize the main expectations, a special module on **Job Search & Entrepreneurial Skills** has been included in the latter part of this course (5th & 6th month) through which, the trainees will be made aware of the Job search techniques in the local as well as international job markets (Gulf countries). Awareness around the visa process and immigration laws of the most favored labor destination countries also form a part of this module. Moreover, the trainees would also be encouraged to venture into self-employment and exposed to the main

requirements in this regard.   It is also expected that a sense of civic duties/roles and responsibilities will also be inculcated in the trainees to make them responsible citizens of the country.

iii. A module on **Work Place Ethics** has also been included to highlight the importance of good and positive behavior in the workplace in the line with the best practices elsewhere in the world. An outline of such qualities has been given in the Appendix to this document. Its importance should be conveyed in a format that is attractive and interesting for the trainees such as through PPT slides +short video documentaries. Needless to say that if the training provider puts his heart and soul into these otherwise non-technical components, the image of the Pakistani workforce would undergo a positive transformation in the local as well as international job markets.

To maintain interest and motivation of the trainees throughout the course, modern techniques such as:

• Motivational Lectures
• Success Stories
• Case Studies

These techniques would be employed as an additional training tool wherever possible (these are explained in the subsequent section on Training Methodology).

Lastly, evaluation of the competencies acquired by the trainees will be done objectively at various stages of the training and a proper record of the same will be maintained. Suffice to say that for such evaluations, practical tasks would be designed by the training providers to gauge the problem-solving abilities of the trainees.

(i) Motivational Lectures

The proposed methodology for the training under reference employs motivation as a tool. Hence besides the purely technical content, a trainer is required to include elements of motivation in his/her lecture. To inspire the trainees to utilize the training opportunity to the full and strive towards professional excellence. Motivational lectures may also include general topics such as the importance of moral values and civic role & responsibilities as a Pakistani. A motivational lecture should be delivered with enough zeal to produce a deep impact on the trainees. It may comprise of the following:

• Clear Purpose to convey the message to trainees effectively.
• Personal Story to quote as an example to follow.
• Trainees Fit so that the situation is actionable by trainees and not represent a just idealism.
• Ending Points to persuade the trainees on changing themselves.

A good motivational lecture should help drive creativity, curiosity, and spark the desire needed for trainees to want to learn more.

The impact of a successful motivational strategy is amongst others commonly visible in increased class participation ratios. It increases the trainees' willingness to be engaged on the practical tasks for a longer time without boredom and loss of interest because they can see in their mind's eye where their hard work would take them in short (1-3 years); medium (3 -10 years) and long term (more than 10 years).

As this tool is expected that the training providers would make arrangements for regular well planned motivational lectures as part of a coordinated strategy interspersed throughout the training period as suggested in the weekly lesson plans in this document.

Course-related motivational lectures online link is available in **Annexure-II**.

(ii)   Success Stories

Another effective way of motivating the trainees is using Success Stories. Its inclusion in the weekly lesson plan at regular intervals has been recommended till the end of the training.

A success story may be disseminated orally, through a presentation, or using a video/documentary of someone that has risen to fortune, acclaim, or brilliant achievement. A success story shows how a person achieved his goal through hard work, dedication, and devotion. An inspiring success story contains compelling and significant facts articulated clearly and easily comprehendible words. Moreover, it is helpful if it is assumed that the reader/listener knows nothing of what is being revealed. The optimum impact is created when the story is revealed in the form of:-

- Directly in person (At least 2-3 cases must be arranged by the training institute)
- Through an audio/ videotaped message (2-3 high-quality videos must be arranged by the training institute)

It is expected that the training provider would collect relevant high-quality success stories for inclusion in the training as suggested in the weekly lesson plan given in this document.

The suggestive structure and sequence of a sample success story and its various shapes can be seen in **Annexure III**.

(iii)   Case Studies

Where a situation allows, case studies can also be presented to the trainees to widen their understanding of the real-life specific problem/situation and to explore the solutions.

In simple terms, the case study method of teaching uses a real-life case example/a typical case to demonstrate a phenomenon in action and explain theoretical as well as practical aspects of the knowledge related to the same. It is an effective way to help the trainees comprehend in depth both the theoretical and practical aspects of the complex phenomenon in depth with ease. Case teaching can also stimulate the trainees to participate in discussions and thereby boost their confidence. It also makes the classroom atmosphere interesting thus maintaining the trainee interest in training till the end of the course.

Depending on suitability to the trade, the weekly lesson plan in this document may suggest case studies be presented to the trainees. The trainer may adopt a PowerPoint presentation or video format for such case studies whichever is deemed suitable but only those cases must be selected that are relevant and of a learning value.

The Trainees should be required and supervised to carefully analyze the cases.

For this purpose, they must be encouraged to inquire and collect specific information/data, actively participate in the discussions, and intended solutions to the problem/situation.

Case studies can be implemented in the following ways: -

i.   A good quality trade-specific documentary (At least 2-3 documentaries must be arranged by the training institute)

ii.   Health &Safety case studies (2 cases regarding safety and industrial accidents must be arranged by the training institute)

iii.   Field visits(At least one visit to a trade-specific major industry/

	site must be arranged by the training institute)
Entry-level of trainees	For an advanced course of AI(Robotics) proposed entry level is minimum bachelors in relevant subject, so expectations from the trainees are: • Have knowledge of Programming Concepts • Have studied languages such as HTML, CSS, Java Script, Python, Angular JS • Have concept of Web Development • Having a knowledge of Freelancing Platform
Learning Outcomes of the course	By the end of this course, students will be able to: • Build dynamic web applications with Django. • Understand and implement the MVC pattern. • Work with databases using ORM in Django. • Implement measures to protect against common web vulnerabilities. • Create robust APIs for seamless integration. • Deploy Django applications and optimize for scalability. • Master AngularJS fundamentals like directives, two-way data binding, and filters. • Develop controllers, scopes, and use dependency injection for application logic. • Implement advanced features such as client-side routing, form handling, and security considerations, following best practices for code organization and deployment.
Course Execution Plan	The total duration of the course: **3 months (12 Weeks)** Class hours: **4 hours per day** Theory: **20%** Practical: **80%** Weekly hours: **20 hours per week** Total contact hours: **260 hours**
Companies offering jobs in the respective trade	**Enterprise Applications:** • Many enterprises use Django for building the backend of their web applications, handling business logic, data management, and user authentication. • Angular can be employed for creating dynamic and responsive user interfaces, enabling a smooth user experience for complex enterprise applications. **Content Management Systems (CMS):** • Django is well-suited for developing content management systems where content creation, editing, and publishing are key features. • Angular can enhance the user interface of the CMS, providing a modern and interactive experience for content authors and administrators. **E-Commerce Platforms:** • As described in the previous answer, combining Django with Angular is a powerful choice for building e-commerce platforms. Django handles the backend logic, data storage, and user authentication, while Angular

facilitates a dynamic and engaging user interface.

Collaborative Web Applications:

- Applications that require real-time collaboration, such as project management tools, can benefit from Django's backend capabilities and Agular's ability to create dynamic and interactive interfaces.

Data Dashboards and Analytics Platforms:

- Django can be used to process and manage data on the server, while Angular can be employed to build data visualization components and interactive dashboards.

Educational Platforms:

- Learning management systems and educational platforms can utilize Django for backend functionality, such as user management and content delivery, while Angular can be employed to create a modern and responsive frontend for a better learning experience.

Healthcare Information Systems:

- Applications in the healthcare sector often require robust backend systems for handling sensitive patient data. Django can provide the necessary backend infrastructure, while Angular can be used to build user interfaces for healthcare professionals and administrators.

Job Opportunities	- Software Development Agencies - E-Commerce Platforms - Education Technology Companies - Enterprise Solutions Providers - IT Consultancies
No of Students	25
Learning Place	Classroom / Lab
Instructional Resources	1. Python Django Tutorials In Hindi: https://youtu.be/5BDgKJFZMl8?si=CcMOjszdfKoJM7sV 2. Complete Django Course for 2023: https://youtu.be/Mezody4yiXw?si=z_jtoKwNSX9GKxh 3. Angular JS Course: https://youtu.be/PSRhmtiRNm4?si=8eQfujSBy2fxZUaV

4. AngularJS For Beginners:

https://www.udemy.com/course/angularjs-for-beginners-udemy/

Create Web Applications, Create Hybrid Apps for Android & iOS, Create single page applications

Online Course Website

Udemy	https://www.udemy.com/
Coursera	https://www.coursera.org/
Udacity	https://www.udacity.com/
edX	https://www.edx.org/
Skillshare	https://www.skillshare.com/en/
LinkedIn Learning	https://www.linkedin.com/learning/
Codecademy	https://www.codecademy.com/
Harvard University	https://pll.harvard.edu/
URDU IT Academy	https://www.urduitacademy.com/

<div align="center">**MODULES**</div>

Scheduled Weeks	Module Title	Days	Hours	Learning Units	Home Assignment
Week 1	**Introduction to Front-End Development**	**Day 1**	**Hour 1**	Introduction to HTML	
			Hour 2	Working with Links and Images	
			Hour 3	Understanding HTML Forms	
			Hour 4	Semantic HTML and Multimedia	
		Day 2	**Hour 1**	Introduction to CSS	
			Hour 2	Layout and Positioning	
			Hour 3	Responsive Design and Flexbox	• **Task 1**
			Hour 4	CSS Grid and Advanced Techniques	
		Day 3	**Hour 1**	Introduction to JavaScript	*Details may be seen at Annexure-I*
			Hour 2	Control Flow and Conditionals	
			Hour 3	Understanding of Loops and Arrays	
			Hour 4	Understanding of Functions	
		Day 4	**Hour 1**	Understanding of Objects and JSON	
			Hour 2	Understanding of DOM Manipulation	
			Hour 3	Understanding of Asynchronous JavaScript	

			Hour 4	Final Project	
		Day 5	Hour 1	Bootstrap Fundamentals	
			Hour 2	Additional Native Components	
			Hour 3	Understanding of Form Components	
			Hour 4	Understanding of Bootstrap Plugins and Third-Party Plugins	
Week 2	Introduction of Python Programming	Day 1	Hour 1	Python Variables and Constants	
			Hour 2	Python Class and Objects	
			Hour 3	Python Array Implementation	
			Hour 4	• Python File Methods • Python Keywords and Identifiers • Python Tuples	
		Day 2	Hour 1	• Python Sets • Python Different Modules • python dictionary • Python Strings	• **Task 2** _Details may be seen at Annexure-I_
			Hour 2	• python dictionary • Python Strings	
			Hour 3	• Python Directory and File Management System • Python Data Type Conversion	
			Hour 4	• Python Numbers • Python Namespace and Scope • Python Global, Local and Nonlocal	

				variables	
		Day 3	**Hour 1**	• Python Global Keyword • Python Iterators • Python Iterations Using for	
			Hour 2	• Python Inheritance • Python Multiple Inheritance	
			Hour 3	• Python Function Arguments • Python Functions • Python break statement	
			Hour 4	• Python continue statement • Python Errors and Exceptions • Python User Defined Exception	
		Day 4	**Hour 1**	• Python OOP Approach	
			Hour 2	• Python Operator Overloading • Python Statements and Comments • Python Pass Statement	
			Hour 3	• Python Generators • Python Decorators	
			Hour 4	• Python Conditional Statements	
		Day 5	**Hour 1**	• Python Loops	
			Hour 2	• Improving the views using templates • Python Matrix Implementation	

			Hour 3	• Python Regular Expressions • Python List Comprehension	
			Hour 4	• Python Recursion • Python Input, Output and Import	
Week 3	**Introduction to Django and Displaying Hyperlinks Project**	**Day 1**	**Hour 1**	Understanding the Framework	
			Hour 2	Features of Django	
			Hour 3	Django web server	
			Hour 4	Understanding Django environment	
		Day 2	**Hour 1**	A simple 'Hello world' application	
			Hour 2	Django architecture	• **Task 3** *Details may be seen at Annexure-I*
			Hour 3	MVC vs MVT Architectural Pattern	
			Hour 4	Starting a project	
		Day 3	**Hour 1**	Django apps	
			Hour 2	Activating our first app	
			Hour 3	A view that displays a hyperlink	
			Hour 4	Mapping the views to URLs	
		Day 4	**Hour 1**	Running our first app	

			Hour 2	Improving the views using templates	
			Hour 3	The improved templates	
			Hour 4	Template inheritance	
		Day 5	Hour 1	Sending data from URL to view	
			Hour 2	Sending data from view to template	
			Hour 3	Lab Practice	
			Hour 4	Lab Practice	
Week 4	CREATING A WEBSITE - PROJECT	Day 1	Hour 1	Starting a project	
			Hour 2	Creating an app inside the project	
			Hour 3	Activating the app	
			Hour 4	Creating model for our site	• **Task 4** *Details may be seen at Annexure-I*
		Day 2	Hour 1	Converting the model into a table	
			Hour 2	Examples for Fields in Models	
			Hour 3	Basic data access using Django shell	
			Hour 4	Saving objects into database	
		Day 3	Hour 1	Retrieving objects from database	

			Hour 2	Modifying objects of database	
			Hour 3	Sorting objects	
			Hour 4	Filtering objects	
		Day 4	Hour 1	Deleting objects	
			Hour 2	Making changes in the data model	
			Hour 3	Create test cases for models, views, and other components	
			Hour 4	Create views, templates for database	
		Day 5	Hour 1	Security Considerations	
			Hour 2	Documentation and Deployment	
			Hour 3	Hands-on Lab Practice	
			Hour 4	Hands-on Lab Practice	
Week 5	Creating Administration Panel and First Page of our Site	Day 1	Hour 1	Using the admin interface	
			Hour 2	Customizing the admin interface	• **Task 5** _Details may be seen at Annexure-I_
			Hour 3	Adding users	
			Hour 4	Data access and modification using admin panel	

		Day 2	Hour 1	Giving permissions to users	
			Hour 2	Implement the First Page of website	
			Hour 3	The Django template system	
			Hour 4	Template Inheritance	
		Day 3	Hour 1	Improving the website	
			Hour 2	Adding background color for web pages	
			Hour 3	Adding banner to the web site	
			Hour 4	Adding background image in the web pages	
		Day 4	Hour 1	Storing and displaying images	
			Hour 2	Adding users to our site	
			Hour 3	Uploading the information by user	
			Hour 4	Changing the administration interface title	
		Day 5	Hour 1	User Registration and Login Functionality	
			Hour 2	Password Recovery and Reset Options	
			Hour 3	Customizing User Profiles and Preferences	
			Hour 4	Hands-on Practice	

Week 6	Django Forms Creation, Email Functionality and Template Language	Day 1	Hour 1	Understanding of Forms in Django and its types	
			Hour 2	• HTML Forms • Django Forms • Form Fields	
			Hour 3	Method for Creating Contact Us Form	
			Hour 4	• Form Class • HTML Integration • View Handling • CSRF Protection	
		Day 2	Hour 1	Implementation of Form Field Examples	
			Hour 2	• Text Fields • Textarea Fields • Choice Fields • File Upload Fields • Validation	• **Task 6**
			Hour 3	Configuring Email Settings • Settings.py Configuration • SMTP Servers	*Details may be seen at Annexure-I*
			Hour 4	Sending Emails with Django • Email Sending Methods • Text and HTML Emails • Dynamic Content • Attachments • Testing Email Sending	
		Day 3	Hour 1	Django Template Language	
			Hour 2	Django Template Tags: • Variable Rendering • Template Tags • Custom Template Tags	
			Hour 3	If/Else: • Conditional	

				Statements	
				• Boolean Values	
			Hour 4	If/Elif/Else: • Extended Conditional Statements	
		Day 4	**Hour 1**	For: • Iteration in Templates • Loop Variables	
			Hour 2	Comments: • Commenting Syntax	
			Hour 3	Filters: • Built-in Filters • Custom Filters	
			Hour 4	Using Templates to Display Data in the Site: • Integrate Templates • Rendering Context Data • Template Inheritance	
		Day 5	**Hour 1**	Django Form Validation • Built-in Validators • Custom Validators • Error Handling	
			Hour 2	Django's Middleware • Understanding the middleware in Django • Common Use Cases • Order of Execution	
			Hour 3	User Authentication in Django • User Models • User Registration • Login and Logout • Password Reset	
			Hour 4	Hands-on Practice	

Week 7	• **Integrating Bootstrap into Django** • **Sessions and Cookies** • **Using Other Databases in Django** • **Django RESTful API**	Day 1	Hour 1	Understanding the Sessions	
			Hour 2	Understanding the Cookies	
			Hour 3	Creating Sessions and implementation	
			Hour 4	Creating Cookies and implementation	
		Day 2	Hour 1	Overview Database	
			Hour 2	Understanding of DBMS and RDBMS	
			Hour 3	Overview of Django default database (SQLite)	
			Hour 4	Connecting Django to other databases • PostgreSQL • MySQL	• **Task 7** _Details may be seen at Annexure-I_
		Day 3	Hour 1	Configuring database settings in Django	
			Hour 2	Migrating data between different databases	
			Hour 3	Configuring MySQL database	
			Hour 4	Working with MySQL in Django	
		Day 4	Hour 1	Configuring Oracle database	
			Hour 2	Working with Oracle in Django	
			Hour 3	Hand-on Practice	

			Hour 4	Hand-on Practice	
		Day 5	**Hour 1**	Understanding of REST Framework	
			Hour 2	Understanding of Django and RESTful APIs	
			Hour 3	Building a Simple Django API	
			Hour 4	Setting up Django REST framework	
Week 8	• **Django RESTful API** • **Deploymen t and Best Practices** • **Real-world Project** • **Live Project Implementa tion** • **Introduction to Angular JS**	**Day 1**	**Hour 1**	RESTful structure • GET • POST • PUT • DELETE	
			Hour 2	Build models for our Django app	
			Hour 3	Model serializer	
			Hour 4	Views and View Sets in RESTful Framework	
		Day 2	**Hour 1**	Router in RESTful Framework	• **Task 8** *Details may be seen at Annexure-I*
			Hour 2	Authentication and Authorization	
			Hour 3	CRUD Operations with Django REST Framework	
			Hour 4	Hands-on Practice (RESTful API)	
		Day 3	**Hour 1**	Deploying a Django API to platforms like Heroku or AWS	
			Hour 2	Building a To-Do List API	

			Hour 3	Project life cycle	
			Hour 4	Creating a functional website in Django	
		Day 4	Hour 1	Project Activity (Django)	
			Hour 2	Project Activity (Django)	
			Hour 3	Overview of Angular JS	
			Hour 4	AngularJS JavaScript Framework	
		Day 5	Hour 1	Key Features and Benefits	
			Hour 2	Setting Up the Development Environment	
			Hour 3	Hello World in AngularJS	
			Hour 4	Hands-on Practice	
Week 9	• **Understanding the Basics of Angular JS** • **Working with Templates and Views** • **AngularJS Controller** • **Services and Dependency Injection** • **Forms and Validation** • **Directives and Custom Directives**	Day 1	Hour 1	MVC Architecture in AngularJS	
			Hour 2	Directives and Data Binding	
			Hour 3	Expressions and Filters	• **Task 9** *Details may be seen at Annexure-I*
			Hour 4	Controllers and Scopes	
		Day 2	Hour 1	Introduction to Templates	
			Hour 2	Two-Way Data Binding	

				Hour 3	• AngularJS Directive • ng-repeat and ng-if Directives	
				Hour 4	Routing in AngularJS	
			Day 3	Hour 1	AngularJS controllers	
				Hour 2	Controller methods	
				Hour 3	Controllers in External files	
				Hour 4	Overview of Services	
			Day 4	Hour 1	Creating Custom Services	
				Hour 2	Dependency Injection in AngularJS	
				Hour 3	Common Built-in Services	
				Hour 4	Forms in AngularJS	
			Day 5	Hour 1	Form Controls and Validation	
				Hour 2	Custom Validation	
				Hour 3	Handling Form Submission	
				Hour 4	Built-in Directives	
Week 10	• **Directives and Custom Directives** • **Introduction to AngularJS Components**		Day 1	Hour 1	Creating Custom Directives	• **Task 10** *Details may be seen at Annexure-I*
				Hour 2	Directive Communication	

	• **Testing in AngularJS** • **Advanced Topics** • **Building a Real-World Project**		**Hour 3**	Best Practices for Using Directives	
			Hour 4	Understanding Components	
		Day 2	**Hour 1**	Creating and Using Components	
			Hour 2	Component Communication	
			Hour 3	Lifecycle Hooks in Components	
			Hour 4	Overview of Testing in AngularJS	
		Day 3	**Hour 1**	Unit Testing with Jasmine and Karma	
			Hour 2	End-to-End Testing with Protractor	
			Hour 3	Best Practices for Testing	
			Hour 4	Advanced Data Binding Techniques	
		Day 4	**Hour 1**	Animation in AngularJS	
			Hour 2	Internationalization and Localization	
			Hour 3	Performance Optimization Tips	
			Hour 4	Applying the Learned Concepts	
		Day 5	**Hour 1**	Building a Simple SPA	
			Hour 2	Project Structure and Best Practices	

			Hour 3	Deployment Considerations	
			Hour 4	Project Activity (Angular)	
Week 11	• **Getting Started and Profile Optimization** • **Winning Jobs and Writing Proposals** • **Time Management and Scaling Your Business** • **Legal and Ethical Considerations** • **Final Strategies and Q&A**	**Day 1**	**Hour 1**	• Introduction to Freelancing Platforms • Overview of Upwork and Fiverr	
			Hour 2	• Creating a Winning Profile • Crafting an effective headline and bio	
			Hour 3	• Navigating the Platforms • Setting Up Payment Methods	
			Hour 4	• Showcasing Your Skills in a Portfolio • Uploading Samples and Projects	
		Day 2	**Hour 1**	Writing Persuasive Proposals Tailoring proposals to job descriptions	• **Task 11** _Details may be seen at Annexure-I_
			Hour 2	Bidding Strategies Setting competitive rates	
			Hour 3	Job Search Techniques Advanced search filters on Upwork and Fiverr	
			Hour 4	Successfully Completing Projects Effective communication during projects	
		Day 3	**Hour 1**	Balancing Multiple Projects Creating a realistic schedule	
			Hour 2	Scaling Your Freelance Business Hiring freelancers as a	

				client	
			Hour 3	Keeping Up with Industry Trends Continuous learning and skill development	
			Hour 4	Building a Personal Brand Creating a professional website	
		Day 4	**Hour 1**	Understanding Freelancer Rights and Responsibilities Contract negotiations and agreements	
			Hour 2	Taxation and Financial Management Keeping track of income and expenses	
			Hour 3	Advanced Strategies for Upwork and Fiverr Success Building Long-Term Client Relationships	
			Hour 4	Leveraging Upwork and Fiverr Features Using premium features to stand out	
		Day 5	**Hour 1**	Recap of Key Takeaways	
			Hour 2	Open Forum for Questions and Answers	
			Hour 3	Implementing Strategies for Success	
			Hour 4	Practice Session	
Week 12	• **Project Activity (Django)**	**Day 1**	**Hour 1**		• **Task 12**

			Hour 2	Build a Complete Website in Django (Part 1)	
• **Project Activity (Angular JS)** • **Freelancing Platform Activity**			Hour 3		**Final Project**
			Hour 4		
		Day 2	Hour 1	Build a Complete Website in Django (Part 2)	
			Hour 2		
			Hour 3		
			Hour 4		
		Day 3	Hour 1	Build a Complete Website in Angular JS (Part 1)	
			Hour 2		
			Hour 3		
			Hour 4		
		Day 4	Hour 1	Build a Complete Website in Angular JS (Part 2)	
			Hour 2		
			Hour 3		
			Hour 4		
		Day 5	Hour 1		

			Hour 2	Build an Account on Freelancing Platform	
			Hour 3		
			Hour 4		

Tasks for Certificate in Web (Python/ Django + Angular)

Task No.	Task	Description	Week
1.	**Front-End Fundamentals**	Develop a Responsive Website with HTML, CSS, and JavaScript, Integrating Bootstrap	**Week 1**
2.	**Python Fundamental**	Python Programming Fundamentals and Advanced Topics Overview	**Week 2**
3.	**Django Hyperlink Display Project**	Build Django Hyperlink Display Project	**Week 3**
4.	**Django Database**	Built a Django website with database integration	**Week 4**
5.	**Admin Panel**	Built Admin Panel, Site Page, Implemented User Features	**Week 5**
6.	**Develop Forms, Email, Templates**	Develop a Django project with validated forms, email functionality, template customization, user authentication, and advanced template usage	**Week 6**
7.	**Django RESTful API**	implementation of a Django RESTful API for data services.	**Week 7**
8.	**Django Website**	Combine all the concept to build real world project.	**Week 8**
9.	**User Registration Form**	Build a simple user registration form using AngularJS.	**Week 9**
10.	**Angular Website**	Combine all the concept to build real world project.	**Week10**
11.	**Fiverr & Upwork**	Build an account on freelancing platform like Fiver and Upwork	**Week11**
12.	**Final Project**	Combining all the topics covered in the course to build a complete Python (Django) website.	**Week12**
13.	**Final Project**	Combining all the topics covered in the course to build a complete Angular JS website.	**Week12**

Motivational Lectures
Web (Python/ Django + Angular)

The Rise of Django: https://www.youtube.com/watch?v=rIWJWy3_njo

This video provides an overview of the impact that Django is having on various industries and highlights some of the breakthroughs that have been made in recent years.

What Is Django And How It Works? https://www.youtube.com/watch?v=sPZeuiViku8

Django is a very powerful framework run on python and used by some of the biggest tech companies. We will also discuss the MVT architecture on which Django is built.

Django Rest Framework: https://www.youtube.com/watch?v=-M8D1UKZf0o

In this video, I have explained about Django rest framework. You will learn the Django rest framework. Django rest framework is used to create rest API using a python programming language.

Introduction to Angular: https://www.youtube.com/watch?v=0LhBvp8qpro

In this video, I will explain to you everything you need to get started with the Angular framework. Angular is a very popular framework used to create single-page applications (SPA). This video will cover an Angular Project in Hindi wherein we will be building a client-side Todos List app from scratch

The Upwork Success Story: https://www.youtube.com/watch?v=IJJVUUYAkO4

Transformed client's digital presence with strategic marketing on Upwork, resulting in a 150% increase in sales within three months

My Success Story | Fiverr Freelancing: https://www.youtube.com/watch?v=GPjkpVIL3a0

In this video, I'm unveiling my Fiverr journey from zero to $12,000 with Fiverr tips due to this you can earn money online.

Workplace/Institute Ethics Guide

Work ethic is a standard of conduct and values for job performance. The modern definition of what constitutes good work ethics often varies. Different businesses have different expectations. Work ethic is a belief that hard work and diligence have a moral benefit and an inherent ability, virtue, or value to strengthen character and individual abilities. It is a set of values-centered on the importance of work and manifested by determination or desire to work hard.

The following ten work ethics are defined as essential for student success:

1. **Attendance:**

   Be at work every day possible, plan your absences don't abuse leave time. Be punctual every day.

2. **Character:**

   Honesty is the single most important factor having a direct bearing on the final success of an individual, corporation, or product. Complete assigned tasks correctly and promptly. Look to improve your skills.

3. **Team Work:**

   The ability to get along with others including those you don't necessarily like. The ability to carry your weight and help others who are struggling. Recognize when to speak up with an idea and when to compromise by blend ideas together.

4. **Appearance:**

   Dress for success set your best foot forward, personal hygiene, good manner, remember that the first impression of who you are can last a lifetime

5. **Attitude:**

   Listen to suggestions and be positive, accept responsibility. If you make a mistake, admit it. Values workplace safety rules and precautions for personal and co-worker safety. Avoids unnecessary risks. Willing to learn new processes, systems, and procedures in light of changing responsibilities.

6. **Productivity:**

   Do the work correctly, quality and timelines are prized. Get along with fellows, cooperation is the key to productivity. Help out whenever asked, do extra without being asked. Take pride in your work, do things the best you know-how. Eagerly focuses energy on accomplishing tasks, also referred to as demonstrating ownership. Takes pride in work.

7. **Organizational Skills:**

Make an effort to improve, learn ways to better yourself. Time management; utilize time and resources to get the most out of both. Take an appropriate approach to social interactions at work. Maintains focus on work responsibilities.

8. **Communication:**

Written communication, being able to correctly write reports and memos. Verbal communications, being able to communicate one on one or to a group.

9. **Cooperation:**

Follow institute rules and regulations, learn and follow expectations. Get along with fellows, cooperation is the key to productivity. Able to welcome and adapt to changing work situations and the application of new or different skills.

10. **Respect:**

Work hard, work to the best of your ability. Carry out orders, do what's asked the first time. Show respect, accept, and acknowledge an individual's talents and knowledge. Respects diversity in the workplace, including showing due respect for different perspectives, opinions, and suggestions.