Full Stack Development with Django (Python)

Course Duration: 150 Days

SNO	MODULE NAME	TOPIC
1	**Basic Understanding of programming**	1. What is programming language (types, uses) 2. Full stack development process 3. Github 4. Stack overflow 5. Linux + Windows (Basic Commands, setup, installation of software's) 6. IDE
2	**Core Python**	1. Introduction to python (history, applications, use) 2. Installation & setup of Python 3. Basic syntax of python 4. Keywords 5. Variables 6. Literals 7. Operators 8. Datatypes 9. Reading inputs from console 10. Conditional Statements 11. Looping Statements 12. Comprehension 13. Function (lambda function, map, filter, reduce, recursion) 14. File handling 15. Modules & Packages 16. OOPs 17. Exception Handling 18. Regular expression 19. Mostly uses modules (random, math, datetime, time etc.) 20. GUI Programming (Tkinter) 21. 2 Project
3	**SDLC**	1. Agile 2. Scrum 3. Team Work 4. Git

4	Database	1. SQL basics
		2. DML, DDL & DQL
		3. DDL: create, alter, drop
		4. SQL constraints:
		5. Not null, unique,
		6. Primary & foreign key, composite key
		7. DML: insert, update, delete and merge
		8. DQL : select
		9. Select distinct
		10. SQL where
		11. SQL operators
		12. SQL like
		13. SQL order by
		14. SQL joins
		15. Mysql functions
		16. Concat
		17. Max, min, sum
		18. Avg, count, abs
		19. Date functions
		20. Curtime
		21. Now
5	Data Structure	1. Revision of core python
		2. Data structure
		3. Linked List
		4. Stack
		5. Queue
		6. Tree
6	User interface or Frontend	1. Introduction to frontend
		2. HTML-5
		3. CSS-3
		4. JS
		5. JQuery
		6. Bootstrap
		7. ReactJS

7	**Backend (Django)**	1. Introduction to Django 2. Installation, setup, creating project 3. Administration panel 4. Creating views 5. URL mapping 6. Django Template language(if/else, loops, comments, filters) 7. Models 8. Django Forms 9. Page redirection 10. Sending Emails 11. File uploading 12. Integration Bootstrap with Django 13. Session and Cookies 14. Database connectivity with Django 15. REST API
8	**Deployment**	1. Introduction to cloud 2. Types of cloud 3. Deployment on cloud