



K L Deemed to be University
Department of Computer Science and Engineering-Honors -- KLVZA
Course Handout
2022-2023, Odd Sem

Course Title	:PYTHON FULL STACK DEVELOPMENT WITH DJANGO
Course Code	:21TS2101AA
L-T-P-S Structure	: 0-1-4-4
Pre-requisite	:
Credits	: 4
Course Coordinator	:Deepak V
Team of Instructors	:
Teaching Associates	:

Syllabus :PYTHON Attributes, Properties, Methods and Types. NameSpaces, Constructors, oops Concepts — Inheritance, Time, OS, Random, RE. File Handling. GIT- Git Integration with PYcharm IDE, GIT Commands PyTests Introduction, Installation, integrating pytest to Pycharm IDE, Assertions, Running subset of tests from test suite, Run tests in parallel, fixtures, parameterized tests, Python connectivity with Databases MYSQL, MongoDB CRUD operations. Flask Introduction, Introduction to Web Key features and key terms in Web, Client-Server Architecture, About Flask framework, Characteristics of Flask framework, Installation in Virtual Environment, Flask application structure, Phases in Flask Application Creation, Routing, App Settings, URL Building, HTTP methods, Templates, Working with Static, Media Files, Request Objects, Sending Form Data to Template, Advanced Features of Flask, Pagination, Database connectivity MongoDB, Sqlite3, MySQL, Page Restrictions using decorators, Cookies, Sessions Handling Exceptions and Errors, Flash Message, Working with Mails, App Deployment, Introduction: Introduction to Web, Key features and key terms in Web, Client-Server Architecture, Features of Django framework, Characteristics of Django framework, Installation in Virtual Environment Django commands, Phases in Django Project Creation, Create a Project, Creation of Apps and their Structure, Working with ADMIN, Console, Creating Views, URL Mapping, Template System, Working with Models, Page Re-directions, Set-up E-Mails, Types of Views, Form Processing, static, media files handling, Advanced Features of Django, Pagination, Database connectivity Sqlite3, MySQL, Page Restrictions using decorators, Cookies, Sessions, Caching, Migrations, Deployment free web Hosting Domains, Identifying and fixing security threats in Django framework based web applications. Penetration Testing Tools: Nmap, dirb, gobuster, john the ripper, curl, nikto, Searchsploit, burpsuite, sqlmap

Text Books :1. Head First Python: A Brain-Friendly Guide by Paul Barry 2. Flask Web Development, O'Reilly, Miguel Grinberg 3. Mastering Django, NigelGeorge 4. Django for Beginners, William S Vincent

MOOCS :Django For Everybody 1. <https://www.coursera.org/specializations/django> Become a Django Developer 2. <https://www.linkedin.com/learning/paths/become-a-django-developer> Programming Fundamentals using Python 3. <https://infytq.infosys.com/home> Object- Oriented Programming using Python 4. <https://infytq.infosys.com/home> Data Structures & Algorithms using Python 5. <https://infytq.infosys.com/home> Securing Django Applications 6. <https://www.1inkedin.com/learning/securing-django-applications> Secure Coding in Python 7. <https://www.linkedin.com/learning/secure-coding-in-python>

COURSE OUTCOMES (COs):

CO NO	Course Outcome (CO)	PO/PSO	Blooms Taxonomy Level (BTL)
CO5	Apply suitable design technique to solve given real world problems.	PO2,PO3	3

COURSE OUTCOME INDICATORS (COIs)::

Outcome No.	Highest BTL	COI-1
CO5	3	Btl-3 Analyze and apply suitable design technique to solve given real world problems.

PROGRAM OUTCOMES & PROGRAM SPECIFIC OUTCOMES (POs/PSOs)

Po No.	Program Outcome
PO1	Engineering Knowledge:Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
PO2	Problem Analysis: Identify, formulate, review research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences
PO3	Design/Development of Solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations
PO4	Conduct Investigations of Complex Problems:Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions for complex problems that cannot be solved by straightforward application of knowledge, theories and techniques applicable to the engineering discipline.
PO5	Modern Tool Usage:Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
PO6	The Engineer and Society:Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
PO7	Environment and Sustainability:Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development
PO8	Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice
PO9	Individual and Team Work: Function effectively as an individual, and as a member or

	leader in diverse teams, and in multidisciplinary settings.
PO10	Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions
PO11	Project Management and Finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
PO12	Life-long Learning: Recognize the need for, and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological change.
PSO1	An ability to design and develop software projects as well as Analyze and test user requirements.
PSO2	An Ability to gain working Knowledge on emerging software tools and technologies.

Lecture Course DELIVERY Plan: NO Delivery Plan Exists

Lecture Session wise Teaching – Learning Plan

No Session Plans Exists

Tutorial Course DELIVERY Plan:

List of Experiments supposed to finish in Open Lab Sessions:

Lab session no	List of Experiments	CO-Mapping
1	Demonstration on working and Analyzing on How Blog – Like / Dislike Counter	CO5
2	Password Generator	CO5
3	Password Generator	CO5
4	Blog – Like / Dislike Counter	CO5
5	Working and Analyzing on How to Generate QR Codes with Python	CO5
6	Working and Analyzing on How to Generate QR Codes with Python	CO5
7	Explanation on PostgreSQL Database using CRUD operations	CO5
8	Explanation on PostgreSQL Database using CRUD operations	CO5
9	Demonstration on Gift Shop Management Application	CO5

Lab session no	List of Experiments	CO-Mapping
10	Demonstration on Gift Shop Management Application	CO5
11	Demonstration on Gift Shop Management Application	CO5
12	Demonstration on Gift Shop Management Application	CO5

Tutorial Session wise Teaching – Learning Plan

SESSION NUMBER : 1

Session Outcome: 1 Demonstration on working and Analyzing on How Blog – Like / Dislike Counter

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
60	Demonstration on working and Analyzing on How Blog – Like / Dislike Counter	1	Chalk	Seminars
50	Demonstration on working and Analyzing on How Blog – Like / Dislike Counter	1	Chalk	Seminars

SESSION NUMBER : 2

Session Outcome: 1 Password Generator

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
60	Password Generator	1	Chalk	Seminars
40	Password Generator	1	Chalk	Group Discussion

SESSION NUMBER : 3

Session Outcome: 3 Password Generator

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
60	Password Generator	2	Chalk	Group Discussion
40	Password Generator	1	Chalk	Seminars

SESSION NUMBER : 4

Session Outcome: 1 Blog – Like / Dislike Counter

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
40	Blog – Like / Dislike Counter	1	Chalk	Seminars
60	Blog – Like / Dislike Counter	1	Chalk	Group Discussion

SESSION NUMBER : 5**Session Outcome: 2** Working and Analyzing on How to Generate QR Codes with Python

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
60	Working and Analyzing on How to Generate QR Codes with Python	2	Chalk	Seminars
40	Working and Analyzing on How to Generate QR Codes with Python	1	Chalk	Seminars

SESSION NUMBER : 6**Session Outcome: 4** Working and Analyzing on How to Generate QR Codes with Python

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
60	Working and Analyzing on How to Generate QR Codes with Python	1	Chalk	Seminars
40	Working and Analyzing on How to Generate QR Codes with Python	1	Chalk	Seminars

SESSION NUMBER : 7**Session Outcome: 6** Explanation on PostgreSQL Database using CRUD operations

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
60	Explanation on PostgreSQL Database using CRUD operations	1	Chalk	Seminars
50	Explanation on PostgreSQL Database using CRUD operations	1	Chalk	Seminars

SESSION NUMBER : 8**Session Outcome: 6** Explanation on PostgreSQL Database using CRUD operations

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods

60	Explanation on PostgreSQL Database using CRUD operations	1	Chalk	Seminars
50	Explanation on PostgreSQL Database using CRUD operations	1	Chalk	Seminars

SESSION NUMBER : 9**Session Outcome: 6** Demonstration on Gift Shop Management Application

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
60	Demonstration on Gift Shop Management Application	1	Chalk	Seminars
40	Demonstration on Gift Shop Management Application	1	Chalk	Seminars

SESSION NUMBER : 10**Session Outcome: 8** Demonstration on Gift Shop Management Application

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
60	Demonstration on Gift Shop Management Application	1	Chalk	Seminars
40	Demonstration on Gift Shop Management Application	1	Chalk	Seminars

SESSION NUMBER : 11**Session Outcome: 8** Demonstration on Gift Shop Management Application

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
60	Demonstration on Gift Shop Management Application	1	Chalk	Seminars
40	Demonstration on Gift Shop Management Application	1	Chalk	Group Discussion

SESSION NUMBER : 12**Session Outcome: 7** Demonstration on Gift Shop Management Application

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
60	Demonstration on Gift Shop Management Application	1	Chalk	Seminars

40	Demonstration on Gift Shop Management Application	1	Chalk	Seminars
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Practical Course DELIVERY Plan:

Tutorial Session no	Topics	CO-Mapping
1	Password Generator	CO5
2	Password Generator	CO5
3	Blog – Like / Dislike Counter	CO5
4	Demonstration on working and Analyzing on How Blog – Like / Dislike Counter	CO5
5	Working and Analyzing on How to Generate QR Codes with Python	CO5
6	Working and Analyzing on How to Generate QR Codes with Python	CO5
7	Explanation on PostgreSQL Database using CRUD operations	CO5
8	Explanation on PostgreSQL Database using CRUD operations	CO5
9	Demonstration on Gift Shop Management Application	CO5
10	Demonstration on Gift Shop Management Application	CO5
11	Demonstration and working on Hospital Management system	CO5
12	Demonstration and working on Hospital Management system	CO5
13	Demonstration and working on Hospital Management system	CO5

Practical Session wise Teaching – Learning Plan

SESSION NUMBER : 1

Session Outcome: 1 Understanding of Password Generation

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Attendance and Introduction	2	Talk	--- NOT APPLICABLE ---

40	Explanation of how to generate a password	2	Talk	--- NOT APPLICABLE ---
50	Experiment on Password Generator	3	Talk	--- NOT APPLICABLE ---

SESSION NUMBER : 2**Session Outcome: 1 Password Generation**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Attendance and Recap	2	Talk	--- NOT APPLICABLE ---
40	Explanation on how to generate a password	2	PPT	--- NOT APPLICABLE ---
50	Experiment on Password Generator	3	Talk	--- NOT APPLICABLE ---

SESSION NUMBER : 3**Session Outcome: 1 Blog – Like / Dislike Counter**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Attendance and Recap	4	PPT	--- NOT APPLICABLE ---
40	Explanation on Blog – Like / Dislike Counter	4	PPT	--- NOT APPLICABLE ---
50	Experiment on Blog – Like / Dislike Counter	4	PPT	--- NOT APPLICABLE ---

SESSION NUMBER : 4**Session Outcome: 1 Demonstration on working and Analyzing on How Blog – Like / Dislike Counter**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Attendance and Recap	4	PPT	--- NOT

				APPLICABLE ---
40	Explanation on How Blog – Like / Dislike Counter Works	4	PPT	--- NOT APPLICABLE ---
50	Experiment on Blog – Like / Dislike Counter	4	PPT	--- NOT APPLICABLE ---

SESSION NUMBER : 5**Session Outcome: 1** Working and Analyzing on How to Generate QR Codes with Python

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Attendance and Recap	4	PPT	--- NOT APPLICABLE ---
40	Explanation on Working and Analyzing on How to Generate QR Codes with Python	4	PPT	--- NOT APPLICABLE ---
50	Experiment on Generating QR Codes with Python	4	PPT	--- NOT APPLICABLE ---

SESSION NUMBER : 6**Session Outcome: 1** Working and Analyzing on How to Generate QR Codes with Python

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Attendance and Recap	4	PPT	--- NOT APPLICABLE ---
40	Explanation on Working and Analyzing on How to Generate QR Codes with Python	4	PPT	--- NOT APPLICABLE ---
50	Experiment on Generating QR Codes with Python	4	PPT	--- NOT APPLICABLE ---

SESSION NUMBER : 7**Session Outcome: 1** Explanation on PostgreSQL Database using CRUD operations

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods

10	Attendance and Recap	4	PPT	--- NOT APPLICABLE ---
40	Explanation on PostgreSQL Database using CRUD operations	4	PPT	--- NOT APPLICABLE ---
50	Experiment on PostgreSQL Database using CRUD operations	4	PPT	--- NOT APPLICABLE ---

SESSION NUMBER : 8**Session Outcome: 1** Explanation on PostgreSQL Database using CRUD operations

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Attendance and Recap	4	PPT	--- NOT APPLICABLE ---
40	Explanation on PostgreSQL Database using CRUD operations	4	PPT	--- NOT APPLICABLE ---
50	Experiment on PostgreSQL Database using CRUD operations	4	PPT	--- NOT APPLICABLE ---

SESSION NUMBER : 9**Session Outcome: 1** Demonstration on Gift Shop Management Application

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Attendance and Recap	4	PPT	--- NOT APPLICABLE ---
40	Demonstration on Gift Shop Management Application	4	PPT	--- NOT APPLICABLE ---
50	Experiment on Gift Shop Management Application	4	PPT	--- NOT APPLICABLE ---

SESSION NUMBER : 10**Session Outcome: 1** Demonstration on Gift Shop Management Application

Time(min)	Topic	BTL	Teaching-Learning	Active Learning
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			Methods	Methods
10	Attendance and Recap	4	PPT	--- NOT APPLICABLE ---
40	Demonstration on Gift Shop Management Application	4	PPT	--- NOT APPLICABLE ---
50	Experiment on Gift Shop Management Application	4	PPT	--- NOT APPLICABLE ---

SESSION NUMBER : 11**Session Outcome: 1** Demonstration and working on Hospital Management system

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Attendance and Recap	4	PPT	--- NOT APPLICABLE ---
40	Explanation on Hospital Management system	2	PPT	--- NOT APPLICABLE ---
50	Experiment on Hospital Management system	3	PPT	--- NOT APPLICABLE ---

SESSION NUMBER : 12**Session Outcome: 1** Demonstration and working on Hospital Management system

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Attendance and Recap	2	PPT	--- NOT APPLICABLE ---
40	Demonstration and working on Hospital Management system	2	PPT	--- NOT APPLICABLE ---
50	Experiment on Hospital Management system	3	PPT	--- NOT APPLICABLE ---

SESSION NUMBER : 13**Session Outcome: 1** Demonstration and working on Hospital Management system

Time(min)	Topic	BTL	Teaching-	Active
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			Learning Methods	Learning Methods
10	Attendance and Recap	2	PPT	--- NOT APPLICABLE ---
40	Demonstration and working on Hospital Management system	2	PPT	--- NOT APPLICABLE ---
50	Experiment on Hospital Management system	3	PPT	--- NOT APPLICABLE ---

Skilling Course DELIVERY Plan:

Skilling session no	Topics/Experiments	CO-Mapping
1	Attributes, Properties, Methods and there Types. NameSpaces Constructors	CO5
2	Explanation using OOps Concepts- Inheritance, Abstraction, Encapsulation, Polymorphism. Collections	CO5
3	Explanation using Collections,Exception Handling, Modules-DateTime, OS, Random, RE.File Handling.GIT Git Integration with PyCharm IDE	CO5
4	Explanation on PyTests- Installation,integrating pytest to --- PyCharm IDE,Assertions, running subset of tests from test suite,run tests in parallel, fixtures, parameterized tests.	CO5
5	Explanation on Python connectivity with Databases, MYSQL, MongoDB CRUD operations.	CO5
6	Explanation on Web,Key features and key terms in Web,Client-Server Architecture, About Flask framework, Characteristics of Flask framework	CO5
7	Explanation using Virtual Environment, Flask application --- structure. Phases in Flask Application Creation - Routing	CO5
8	Explanation using URL Building, HTTP methods, Templates, Working with Static, Media Files	CO5
9	Explanation on Request Objects, Sending Form Data to Template, Advanced Features of Flask- Pagination	CO5
10	Explanation on Database connectivity MongoDB,Sqlite3,MySQL	CO5

Skilling session no	Topics/Experiments	CO-Mapping
11	Explanation on Database connectivity MongoDB, Sq1ite3,MySQL	CO5
12	Explanation on Page Restrictions using decorators, -- Cookies, Sessions, Handling Exceptions and Errors, Flash Message, Working with Mails, App Deployment	CO5
13	Explanation on Web, Key features and key terms in Web, Client-Server Architecture, Features of Django frameworkCharacteristics of Django framework, Installation in Virtual Environment	CO5
14	Explanation to Create a Project, Creation of Apps and their Structure, Working with ADMIN Console	CO5
15	Explanation to Create Views, URL Mapping, Template System	CO5
16	Explanation on Set-up E-Mails, Types of Views	CO5
17	Explanation on Database connectivity Sq1ite3,MySQLPage Restrictions	CO5
18	Explanation on Database connectivity Sq1ite3,MySQLPage Restrictions using decorators	CO5
19	Explanation on Pagination,Cookies	CO5
20	Explanation on Identifying and fixing security threats in Django framework- based web applications	CO5
21	Explanation using penetration testing tools	CO5
22	Explanation using penetration testing tools	CO5
23	Explanation using penetration testing using tool - 1	CO5
24	Explanation using penetration testing using tool - 2	CO5
25	penetration testing Attributes, Properties, Methods	CO5
26	penetration testing OOPs Concepts- Inheritance	CO5

Skilling Session wise Teaching – Learning Plan

SESSION NUMBER : 1

Session Outcome: 1 Attributes, Properties, Methods and there Types. NameSpaces Constructors

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	2	Talk	Seminars
10	Handout Explanation	2	Chalk	Seminars
20	Discussion on Evaluation Components	2	Chalk	Group Discussion
10	Discussion on Moocs Certification & Project	2	Chalk	Group Discussion
50	Attributes, Properties, Methods and there Types. NameSpaces Constructors	2	Chalk	Seminars
5	Summary	2	Chalk	Seminars

SESSION NUMBER : 2

Session Outcome: 2 Explanation using 00ps Concepts- Inheritance, Abstraction, Encapsulation, Polymorphism. Collections

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Recap and Attendance	2	Chalk	Group Discussion
40	Explanation using 00ps Concepts- Inheritance, Abstraction, Encapsulation, Polymorphism. Collections	2	Chalk	Group Discussion
50	Experiment on 00P's Concepts	1	Chalk	Group Discussion

SESSION NUMBER : 3

Session Outcome: 3 Explanation using Co11ections,Exception Handling, Modules- DateTime, OS, Random, RE.File Handling.GIT Git Integration with PyCharm IDE

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Recap and Attendance	2	Talk	Seminars
40	Explanation using Collections,Exception Handling Modules-DateTime, OS, Random, RE.File Handling.GIT Git Integration with PyCharm IDE	2	Talk	Group Discussion
50	Programs Practices using Co11ections,Exception Handling, Modules- DateTime, OS, Random, RE.File Handling.GIT Git Integration with PyCharm IDE	2	Talk	Group Discussion

SESSION NUMBER : 4

Session Outcome: 4 Explanation on PyTests- Installation,integrating pytest to --- PyCharm IDE,Assertions, running subset of tests from test suite,run tests in parallel, fixtures, parameterized tests.

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Recap and Attendance	2	Chalk	Group Discussion
40	Explanation on PyTests- Installation,integrating pytest to --- PyCharm IDE,Assertions, running subset of tests from test suite,run tests in parallel, fixtures, parameterized tests.	2	Chalk	Group Discussion
50	Programs on PyTests- Installation,integrating pytest to --- PyCharm IDE,Assertions, running subset of tests from test suite,run tests in parallel, fixtures, parameterized tests.	2	Chalk	Group Discussion

SESSION NUMBER : 5

Session Outcome: 5 Explanation on Python connectivity with Databases, MYSQL, MongoDB CRUD operations

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Recap and Attendance	2	Chalk	Group Discussion
40	Explanation on Python connectivity with Databases, MYSQL, MongoDB CRUD operations.	2	Chalk	Group Discussion
50	Programs practice on Python connectivity with Databases, MYSQL, MongoDB CRUD operations.	2	Chalk	Group Discussion

SESSION NUMBER : 6

Session Outcome: 6 Explanation on Web,Key features and key terms in Web,Client-Server Architecture, About Flask framework, Characteristics of Flask framework

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Recap and Attendance	2	Chalk	Group Discussion
40	Explanation on Web,Key features and key terms in Web,Client-Server Architecture, About	2	Chalk	Group Discussion

	Flask framework, Characteristics of Flask framework			
50	Program practice on Web, Key features and key terms in Web, Client-Server Architecture, About Flask framework, Characteristics of Flask framework	2	Chalk	Group Discussion

SESSION NUMBER : 7

Session Outcome: 7 Explanation using Virtual Environment, Flask application --- structure. Phases in Flask Application Creation - Routing

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Recap and Attendance	2	Chalk	Group Discussion
40	Explanation using Virtual Environment, Flask application --- structure. Phases in Flask Application Creation - Routing	2	Chalk	Group Discussion
50	Programs using Virtual Environment, Flask application --- structure. Phases in Flask Application Creation - Routing	2	Chalk	Group Discussion

SESSION NUMBER : 8

Session Outcome: 8 Explanation using URL Building, HTTP methods, Templates, Working with Static, Media Files

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Recap and Attendance	2	Chalk	Group Discussion
40	Explanation using URL Building, HTTP methods, Templates, Working with Static, Media Files	2	Chalk	Group Discussion
50	Programs using URL Building, HTTP methods, Templates, Working with Static, Media Files	2	Chalk	Group Discussion

SESSION NUMBER : 9

Session Outcome: 9 Explanation on Request Objects, Sending Form Data to Template, Advanced Features of Flask- Pagination

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Recap and Attendance	2	Chalk	Group Discussion

40	Explanation on Request Objects, Sending Form Data to Template, Advanced Features of Flask- Pagination	2	Chalk	Group Discussion
50	Programs on Request Objects, Sending Form Data to Template, Advanced Features of Flask- Pagination	2	Chalk	Group Discussion

SESSION NUMBER : 10**Session Outcome: 10** Explanation on Database connectivity MongoDB,Sqlite3,MySQL

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Recap and Attendance	2	Chalk	Group Discussion
40	Explanation on Database connectivity MongoDB,Sqlite3,MySQL	2	Chalk	Group Discussion
50	prgrams on Database connectivity MongoDB,Sqlite3,MySQL	2	Chalk	Group Discussion

SESSION NUMBER : 11**Session Outcome: 10** Explanation on Database connectivity MongoDB, Sq1ite3,MySQL

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Recap and Attendance	2	Chalk	Group Discussion
40	Explanation on Database connectivity MongoDB, Sq1ite3,MySQL	2	Chalk	Group Discussion
50	Programs on Database connectivity MongoDB, Sqlite3,MySQL	2	Chalk	Group Discussion

SESSION NUMBER : 12**Session Outcome: 10** Explanation on Page Restrictions using decorators, -- Cookies, Sessions, Handling Exceptions and Errors, Flash Message, Working with Mails, App Deployment

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Recap and Attendance	2	Chalk	Group Discussion
40	Explanation on Page Restrictions using decorators, -- Cookies, Sessions, Handling Exceptions and Errors, Flash Message, Working with Mails, App Deployment	2	Chalk	Group Discussion

50	Programs on Page Restrictions using decorators, - - Cookies, Sessions, Handling Exceptions and Errors, Flash Message, Working with Mails, App Deployment	2	Chalk	Group Discussion
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SESSION NUMBER : 13

Session Outcome: 10 Explanation on Web, Key features and key terms in Web, Client-Server Architecture, Features of Django framework Characteristics of Django framework, Installation in Virtual Environment

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Recap and Attendance	2	Chalk	Group Discussion
40	Explanation on Web, Key features and key terms in Web, Client-Server Architecture, Features of Django framework Characteristics of Django framework, Installation in Virtual Environment	2	Chalk	Group Discussion
50	Programs on Web, Key features and key terms in Web, Client-Server Architecture, Features of Django framework Characteristics of Django framework, Installation in Virtual Environment, Django commands	2	Chalk	Group Discussion

SESSION NUMBER : 14

Session Outcome: 1 Explanation to Create a Project, Creation of Apps and their Structure, Working with ADMIN Console

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Recap and Attendance	1	Chalk	Seminars
40	Explanation to Create a Project, Creation of Apps and their Structure, Working with ADMIN Console	1	Talk	Seminars
50	Programs on Create a Project, Creation of Apps and their Structure, Working with ADMIN Console	1	Talk	Seminars

SESSION NUMBER : 15

Session Outcome: 1 Explanation to Create Views, URL Mapping, Template System

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Recap and Attendance	1	Chalk	Seminars

40	Explanation to Create Views, URL Mapping, Template System	2	Talk	Seminars
50	Programs on Create Views, URL Mapping, Template System	2	PPT	Seminars

SESSION NUMBER : 16**Session Outcome: 1** Explanation on Set-up E-Mails, Types of Views

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Recap and Attendance	1	Chalk	Seminars
40	Explanation on Set-up E-Mails, Types of Views	2	Talk	Seminars
50	Programs on Set-up E-Mails, Types of Views	3	PPT	Seminars

SESSION NUMBER : 17**Session Outcome: 1** Explanation on Database connectivity Sq1ite3,MySQLPage Restrictions

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Recap and Attendance	1	Chalk	Seminars
40	Explanation on Database connectivity Sq1ite3,MySQLPage Restrictions using decorators	2	Talk	Seminars
50	Programs on Database connectivity Sqlite3,MySQLPage Restrictions using decorators	3	PPT	Seminars

SESSION NUMBER : 18**Session Outcome: 1** Explanation on Database connectivity Sq1ite3,MySQLPage Restrictions using decorators

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Recap and Attendance	1	Talk	Seminars
40	Explanation on Database connectivity Sq1ite3,MySQLPage Restrictions using decorators	2	Chalk	Seminars
50	Programs on Database connectivity Sqlite3,MySQLPage Restrictions using decorators	3	PPT	Seminars

SESSION NUMBER : 19

Session Outcome: 1 Explanation on Pagination, Cookies

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Recap and Attendance	1	Talk	Seminars
40	Explanation on Pagination, Cookies	2	Chalk	Seminars
50	Programs on Pagination, Cookies	3	Chalk	Seminars

SESSION NUMBER : 20**Session Outcome: 1** Explanation on Identifying and fixing security threats in Django framework- based web applications

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Recap and Attendance	1	Chalk	Seminars
40	Explanation on Identifying and fixing security threats in Django framework-based web applications	2	Talk	Seminars
50	Programs on Identifying and fixing security threats in Django framework-based web applications	3	Talk	Seminars

SESSION NUMBER : 21**Session Outcome: 1** Explanation using penetration testing tools

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Recap and Attendance	1	Chalk	Seminars
40	Explanation using penetration testing tools	2	Talk	Seminars
50	Programs using penetration testing tools	3	PPT	Seminars

SESSION NUMBER : 22**Session Outcome: 1** Explanation using penetration testing tools

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Recap and Attendance	1	Chalk	Seminars
40	Explanation using penetration testing tools	2	Talk	Seminars
50	Programs using penetration testing tools	3	Talk	Seminars

SESSION NUMBER : 23**Session Outcome: 1** Explanation using penetration testing using tool - 1

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Recap and Attendance	1	Chalk	Seminars
40	Explanation using penetration testing using tool - 1	2	Talk	Seminars
50	Program using penetration testing using tool - 1	3	Talk	Seminars

SESSION NUMBER : 24**Session Outcome: 1** Explanation using penetration testing using tool - 2

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Recap and Attendance	1	Chalk	Seminars
40	Explanation using penetration testing using tool - 2	2	Talk	Seminars
50	Programs using penetration testing using tool - 2	3	Talk	Seminars

SESSION NUMBER : 25**Session Outcome: 2** Attributes, Properties, Methods

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Recap and Attendance	1	Talk	Seminars
40	Attributes, Properties, Methods	2	Talk	Seminars
50	Attributes, Properties, Methods	2	PPT	Seminars

SESSION NUMBER : 26**Session Outcome: 1** OOPs Concepts- Inheritance

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Recap and Attendance	1	Chalk	Seminars
40	OOPs Concepts- Inheritance	2	Talk	Seminars
40	OOPs Concepts- Inheritance	2	Talk	Seminars

WEEKLY HOMEWORK ASSIGNMENTS/ PROBLEM SETS/OPEN ENDED PROBLEM-SOLVING EXERCISES etc:

Week	Assignment Type	Assignment No	Topic	Details	co
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COURSE TIME TABLE:

	Hour	1	2	3	4	5	6	7	8	9
Day	Component									
Mon	Theory	-	-	---	---	--	--	-	---	---
		-	-					-		
		-	-					-		
	Tutorial	-	-	---	---	--	--	-	---	---
Tue		-	-					-		
		-	-					-		
		-	-					-		
	Lab	-	-	---	---	V-S1,V-S2,V-S3,V-S4	V-S1,V-S2,V-S3,V-S4	-	---	---
Wed		-	-					-		
		-	-					-		
		-	-					-		
	Skilling	-	-	---	---	--	--	-	---	---
Thu		-	-					-		
		-	-					-		
		-	-					-		
	Theory	-	-	---	---	--	--	-	---	---
Fri		-	-					-		
		-	-					-		
		-	-					-		
	Tutorial	-	-	---	---	--	--	-	---	---
Sat		-	-					-		
		-	-					-		
		-	-					-		
	Lab	-	-	---	---	V-S8,V-S9,V-S10,V-S11	V-S8,V-S9,V-S10,V-S11	-	---	---
Sun		-	-					-		
		-	-					-		
		-	-					-		
	Skilling	-	-	---	---	--	--	-	---	---
Mon		-	-					-		
		-	-					-		
		-	-					-		
	Theory	-	-	---	---	--	--	-	---	---
Tue		-	-					-		
		-	-					-		
		-	-					-		
	Tutorial	-	-	---	---	--	--	-	---	---
Wed		-	-					-		
		-	-					-		
		-	-					-		
	Lab	-	-	---	---	V-S8,V-S9,V-S10,V-S11	V-S8,V-S9,V-S10,V-S11	-	---	---
Thu		-	-					-		
		-	-					-		
		-	-					-		
	Skilling	-	-	---	---	--	--	-	---	---
Fri		-	-					-		
		-	-					-		
		-	-					-		
	Theory	-	-	---	---	--	--	-	---	---
Sat		-	-					-		
		-	-					-		
		-	-					-		
	Tutorial	-	-	---	---	--	--	-	---	---
Sun		-	-					-		
		-	-					-		
		-	-					-		
	Lab	-	-	---	---	V-S8,V-S9,V-S10,V-S11	V-S8,V-S9,V-S10,V-S11	-	---	---
Mon		-	-					-		
		-	-					-		
		-	-					-		
	Skilling	-	-	---	---	--	--	-	---	---

		-	-					-		
		-	-					-		
	Lab	-	-	---	---	--	--	-	---	---
Fri	Skilling	-	-	---	---	V-S8,V-S9,V-S10,V-S11	V-S8,V-S9,V-S10,V-S11	-	---	---
	Theory	-	-	---	---	---	---	-	--	--
	Tutorial	-	-	---	---	---	---	-	--	--
	Lab	-	-	---	---	---	---	-	--	--
Sat	Skilling	-	-	---	---	---	---	-	V-S15,V-S16,V-S17,V-S18	V-S15,V-S16,V-S17,V-S18
	Theory	-	-	---	---	---	---	-	--	--
	Tutorial	-	-	---	---	---	---	-	--	--
	Lab	-	-	---	---	---	---	-	--	--
Sun	Skilling	-	-	---	---	---	---	-	V-S15,V-S16,V-S17,V-S18	V-S15,V-S16,V-S17,V-S18
	Theory	-	-	---	---	---	---	-	---	---
	Tutorial	-	-	---	---	---	---	-	---	---
	Lab	-	-	---	---	---	---	-	---	---
	Skilling	-	-	---	---	---	---	-	---	---
	Theory	-	-	---	---	---	---	-	---	---
	Tutorial	-	-	---	---	---	---	-	---	---
	Lab	-	-	---	---	---	---	-	---	---

REMEDIAL CLASSES:

Supplement course handout, which may perhaps include special lectures and discussions that would be planned, and schedule notified according

SELF-LEARNING:

Assignments to promote self-learning, survey of contents from multiple sources.

S.no	Topics	CO	ALM	References/MOOCs
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DELIVERY DETAILS OF CONTENT BEYOND SYLLABUS:

Content beyond syllabus covered (if any) should be delivered to all students that would be planned, and schedule notified accordingly.

S.no	Advanced Topics, Additional Reading, Research papers and any	CO	ALM	References/MOOCs
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EVALUATION PLAN:

Evaluation Type	Evaluation Component	Weightage/Marks		Assessment Dates	Duration (Hours)	CO5
End Semester Summative Evaluation Total= 40 %	SEM End Project	Weightage	15		180	15
		Max Marks	100			100
	Lab End Semester Exam	Weightage	10		180	10
		Max Marks	100			100
	Skill Sem-End Exam	Weightage	15		180	15
		Max Marks	100			100
In Semester Summative Evaluation Total= 35 %	Lab In Semester Exam	Weightage	10		180	10
		Max Marks	100			100
	MOOCs Certification	Weightage	5		180	5
		Max Marks	100			100
	Skill In-Sem Exam	Weightage	10		180	10
		Max Marks	100			100
	Prototype Demonstration	Weightage	10		180	10
		Max Marks	100			100
In Semester Formative Evaluation Total= 25 %	MOOCs Review	Weightage	5		180	5
		Max Marks	100			100
	Skilling Continuous Evaluation	Weightage	10		180	10
		Max Marks	100			100
	Hackathon	Weightage	10		180	10
		Max Marks	100			100

ATTENDANCE POLICY:

Every student is expected to be responsible for regularity of his/her attendance in class rooms and laboratories, to appear in scheduled tests and examinations and fulfill all other tasks assigned to him/her in every course

In every course, student has to maintain a minimum of 85% attendance to be eligible for appearing in Semester end examination of the course, for cases of medical issues and other unavoidable circumstances the students will be condoned if their attendance is between 75% to 85% in every course, subjected to submission of medical certificates, medical case file and other needful documental proof to the concerned departments

DETENTION POLICY :

In any course, a student has to maintain a minimum of 85% attendance and In-Semester Examinations to be eligible for appearing to the Semester End Examination, failing to fulfill these conditions will deem such student to have been detained in that course.

PLAGIARISM POLICY :

Supplement course handout, which may perhaps include special lectures and discussions

COURSE TEAM MEMBERS, CHAMBER CONSULTATION HOURS AND CHAMBER VENUE DETAILS:

Supplement course handout, which may perhaps include special lectures and discussions

Name of Faculty	Delivery Component of Faculty	Sections of Faculty	Chamber Consultation Day (s)	Chamber Consultation Timings for each day	Chamber Consultation Room No:	Signature of Course faculty:
Ashesh Kinjirapu	P	9-MA,16-MA,3-MA	-	-	-	-
Ashesh Kinjirapu	S	16-MA,3-MA,9-MA	-	-	-	-
Ashesh Kinjirapu	T	16-MA,3-MA,9-MA	-	-	-	-
Deepak V	P	17-MA	-	-	-	-
Deepak V	S	17-MA	-	-	-	-
Deepak V	T	17-MA	-	-	-	-
RADHA MOTHUKURI	P	11-MA,4-MA	-	-	-	-
RADHA MOTHUKURI	S	4-MA,11-MA	-	-	-	-
RADHA MOTHUKURI	T	4-MA,11-MA	-	-	-	-
PRAVEEN TUMULURU	P	8-MA,1-MA	-	-	-	-
PRAVEEN TUMULURU	S	1-MA,8-MA	-	-	-	-
PRAVEEN TUMULURU	T	1-MA,8-MA	-	-	-	-
Kunda	P	18-MA	-	-	-	-

Prasad						
Kunda Prasad	S	18-MA	-	-	-	-
Kunda Prasad	T	18-MA	-	-	-	-
Veerraju Gampala	P	15-MA	-	-	-	-
Veerraju Gampala	S	15-MA	-	-	-	-
Veerraju Gampala	T	15-MA	-	-	-	-
Feroz Khan	P	10-MA,2-MA	-	-	-	-
Feroz Khan	S	2-MA,10-MA	-	-	-	-
Feroz Khan	T	2-MA,10-MA	-	-	-	-

GENERAL INSTRUCTIONS

Students should come prepared for classes and carry the text book(s) or material(s) as prescribed by the Course Faculty to the class.

NOTICES

Most of the notices are available on the LMS platform.

All notices will be communicated through the institution email.

All notices concerning the course will be displayed on the respective Notice Boards.

Signature of COURSE COORDINATOR

(Deepak V)

Signature of Department Prof. Incharge Academics & Vetting Team Member

Department Of CSE-Honors

HEAD OF DEPARTMENT:

Approval from: DEAN-ACADEMICS

(Sign with Office Seal) [object HTMLDivElement]