

Report on
Web Application Development Workshop

Date: 2nd JUNE ,2025 to 5th JUNE,2025

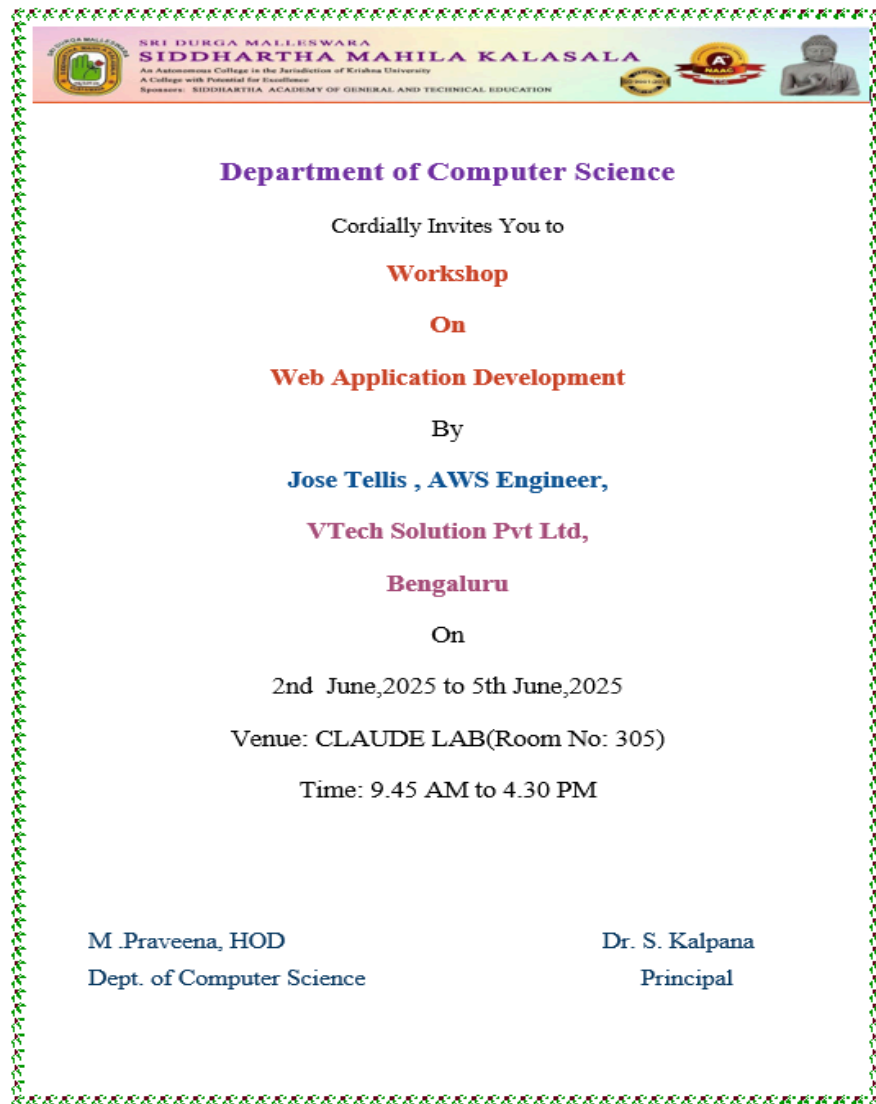
Venue: CLAUDE LAB (305)

Organizer: Department of computer science

Time:9.45 AM TO 4.30 PM

Participants: II BSC COMP(A),II BSC COMP(B)

1. INVITATION



2.Objective of the Program

The workshop on “Web Application Development” was conducted to equip participants with essential skills for developing a web application. The session covered various aspects of front-end and back-end development, including user interface design, server-side scripting, database integration, and deployment practices.

Description of the Programme:

This 4-day workshop provided participants with comprehensive training in building dynamic web applications using **Django**, **HTML**, **CSS**, **JavaScript**, and **SQLite**. Participants learned foundational web development concepts, including creating static web pages with HTML and CSS, and enhancing them with interactivity using JavaScript. They also gained hands-on experience with **Bootstrap** to create responsive web designs. The session also covered essential Python programming concepts, such as lists, tuples, dictionaries, and functions, to solidify participants' backend development skills. The workshop then introduced **Django**, covering its MVC architecture, models, views, templates, and the integration of an **SQLite database** for data management. By the end of the workshop, participants successfully built a **Zomato Clone**, applying the skills they learned to create a full-stack web application. This workshop equipped attendees with the tools and knowledge to develop, deploy, and maintain modern web applications.

DAY-1

The workshop commenced with a welcome note, followed by an introduction to the significance of web development in the modern tech landscape. The resource person, Mr. Jose Tellis, Senior Web Development Expert, covered the following key topics on

- **Command Prompt Basics:** Introduction to basic command-line operations for navigating directories and managing files.
- **HTML Boilerplate:** Understanding the basic structure of an HTML document, including essential tags like `<!DOCTYPE>`, `<html>`, `<head>`, and `<body>`.
- **Opening VSCode using Command Prompt:** Demonstrating how to launch and open projects in Visual Studio Code directly from the command line.
- **Block-level vs Inline Tags:** Explanation of the difference between block-level elements (e.g., `<div>`, `<p>`) and inline elements (e.g., ``, `<a>`).
- **Creating a Static Website:** Hands-on session where participants built a simple static website using HTML and CSS.

By the end of Day 1, participants had successfully created their first static website, with a solid understanding of HTML structure, basic tags, and using the command prompt to manage projects.

DAY-2

On Day 2, the workshop continued with a deeper dive into web development and basic programming concepts. The resource person, Mr. Jose Tellis, covered a variety of essential topics to enhance participants' skills in building dynamic web pages and understanding fundamental programming concepts. The topics covered included:

- **Creating Forms in HTML:** Introduction to HTML forms and input elements (e.g., text, radio buttons, checkboxes) for gathering user data.
- **Bootstrap Framework:** Getting started with Bootstrap to create responsive and mobile-first web designs quickly using pre-built components and grid systems.
- **Introduction to JavaScript:** Basics of JavaScript for adding interactivity to web pages, including variables, functions, and event handling.
- **Python Basics:** Covering essential Python data structures and functions:
 - **Lists, Tuples, Dicts, Sets:** Understanding the differences and use cases of each data type.
 - **Functions:** Defining and using functions, including parameters and return values.
 - **Types of Arguments:** Exploring different types of function arguments (positional, keyword, default, variable-length).

By the end of Day 2, participants had built interactive forms, learned how to use Bootstrap for responsive design, and gained foundational knowledge of JavaScript and Python programming concepts.

DAY-3

On Day 3, the workshop shifted focus to backend development using the **Django Web Framework** and **SQLite Database**. The resource person, Mr. Jose Tellis,

introduced essential concepts to build dynamic web applications and interact with databases. The topics covered included:

- **Introduction to Django Web Framework:** Overview of Django's MVC architecture, setting up a Django project, and creating basic views and URLs.
- **Django Models:** Understanding how to define models to represent data and work with Django's ORM (Object-Relational Mapping).
- **SQLite Database Concepts:** Introduction to SQLite as a lightweight relational database, and how to configure it with Django.
- **Connecting Django with SQLite:** Practical session on setting up database connections, running migrations, and performing CRUD (Create, Read, Update, Delete) operations.
- **Lab Session:** Participants worked on hands-on exercises to create a simple Django-based web application with a connected SQLite database.

By the end of Day 3, attendees had a solid understanding of Django's framework for web development and were able to integrate an SQLite database into their applications.

DAY-4

On the final day of the workshop, participants applied their knowledge to build a real-world application. The resource person, Mr. Jose Tellis, guided the participants through the process of developing a **Zomato Clone** using the **Django Framework** and **SQLite Database**. The topics covered included:

- **Project Overview:** Introduction to the Zomato Clone project—understanding the basic features such as restaurant listings, menu display, and user reviews.
- **Building Models:** Creating models to represent restaurants, menus, and user reviews within the Django framework.
- **Database Integration:** Using SQLite to store data and implementing Django's ORM for querying and displaying restaurant information.
- **Implementing Views and Templates:** Creating views to fetch data from the database and displaying it through Django templates for a dynamic user experience.
- **Final Project:** Participants worked in teams to build the Zomato Clone, incorporating all the concepts from the previous days, including frontend and

backend integration.

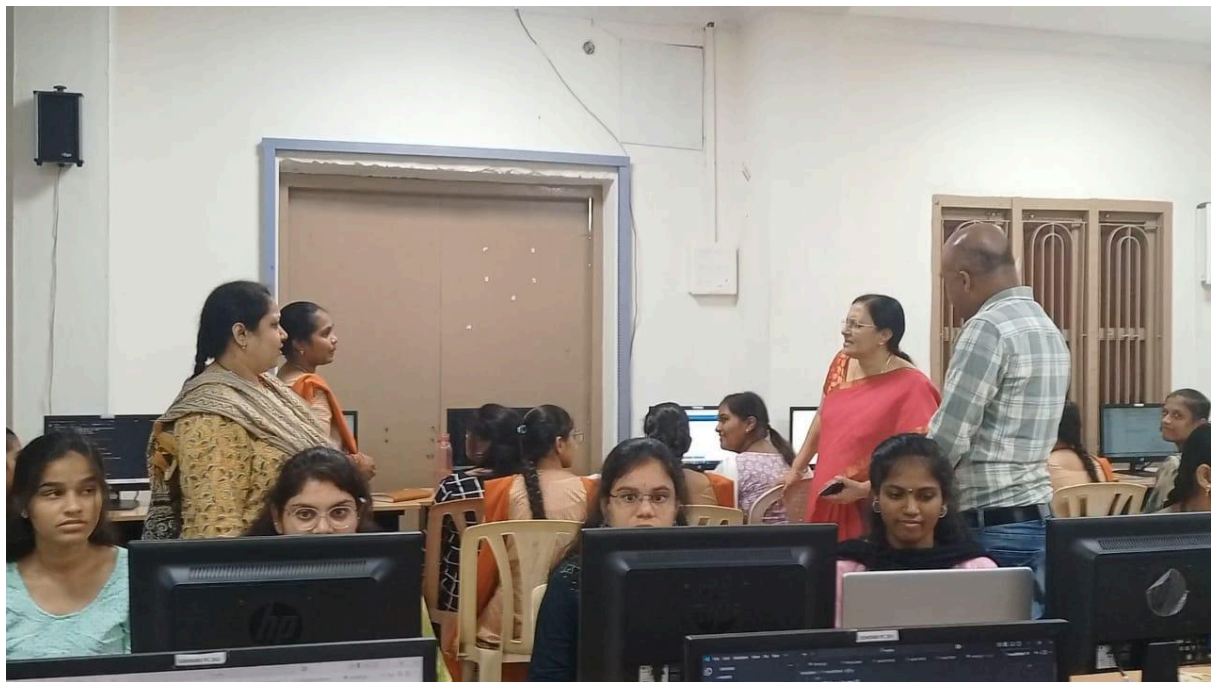
By the end of Day 4, participants had successfully created their own Zomato Clone application, showcasing their ability to integrate Django, SQLite, and essential web development techniques into a working product.

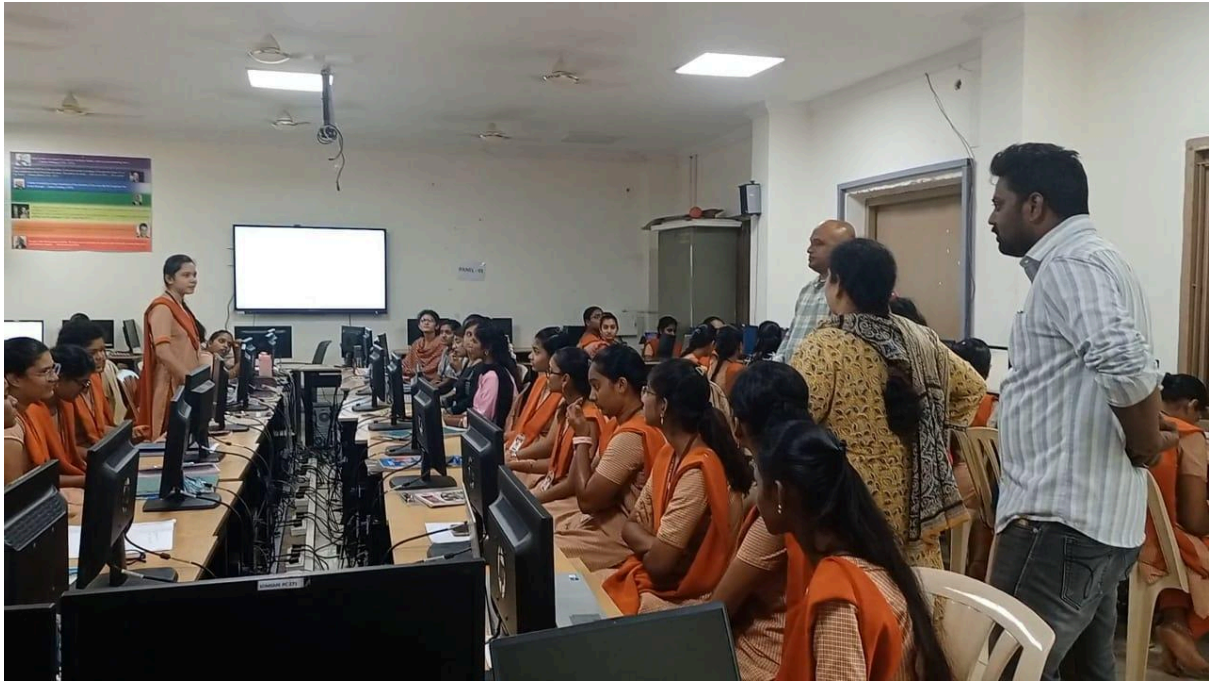
3. Key Topics Covered

Web Application Development using Python (Django), HTML, CSS, JavaScript, and SQLite

1. Introduction to Web Application Architecture
2. Setting up Django Environment and Project Structure
3. Understanding Django Models, Views, and Templates (MVT)
4. Creating and Managing SQLite Databases
5. Django ORM and QuerySet Operations
6. User Authentication and Authorization in Django
7. Designing Front-End using HTML and CSS
8. Adding Interactivity with JavaScript
9. Form Handling and Data Validation in Django
10. URL Routing and Navigation in Django
11. Using Django Admin for Backend Management
12. Static Files and Media Management in Django
13. Final Project: Building a Complete Zomato clone Application using Django Framework and SQLite database.

4.Photos





5. Outcomes of Web Application Development Workshop

Topic: Web Application Development using Python (Django), HTML, CSS, JavaScript, and SQLite

1. Participants gained hands-on experience in full-stack web development.
2. Teams successfully built dynamic web applications from scratch.
3. Improved understanding of Django's MVC (Model-View-Controller) architecture.
4. Enhanced front-end development skills using HTML, CSS, and JavaScript.
5. Learned how to create responsive and user-friendly interfaces.
6. Implemented CRUD (Create, Read, Update, Delete) operations using Django.
7. Established database connectivity and performed queries with SQLite.
8. Explored Django templates for rendering dynamic HTML content.
9. Practiced using forms and validations for user input.
10. Learned to structure a Django project with apps, models, views, and templates.
11. Improved skills in team collaboration and version control (Git).

12. Applied JavaScript for interactive front-end features (e.g., form validation, dynamic updates).
13. Designed consistent and modern UI layouts using CSS frameworks.
14. Received feedback from mentors on code quality and usability.
15. Strengthened problem-solving and logical thinking.
16. Boosted confidence to pursue independent web development projects using Django stack.

6 .No.Of Participants:82

7.List of Participants:

| S.N o | ROLL NUMBER | NAME OF THE STUDENT | CLASS |
|----------|----------------|-------------------------------------|-------------------|
| 1 | 234101S | KONDAPALLI JAHNAVI KRISHNA | II BSC COMP SEC-A |
| 2 | 234102S | SHAIK GOUSIA | II BSC COMP SEC-A |
| 3 | 234103S | SHAIK RESHMA | II BSC COMP SEC-A |
| 4 | 234104S | SOMAYAJULA NAGA SAI VARA LAKSHMI | II BSC COMP SEC-A |
| 5 | 234105S | SYED ANJUM | II BSC COMP SEC-A |
| 6 | 234131S | AITA CHANDRIKA DEVI | II BSC COMP SEC-A |
| 7 | 234132S | ANAGANI HARSHA SRI | II BSC COMP SEC-A |
| 8 | 234133S | BATHINA JHANSI | II BSC COMP SEC-A |
| 9 | 234134S | BATHINAPATI PRASANNA LAKSHMI | II BSC COMP SEC-A |
| 10 | 234135S | BETHA CHANDRIKA DEVI | II BSC COMP SEC-A |
| 11 | 234136S | BODASINGHU DURGA DEVI | II BSC COMP SEC-A |
| 12 | 234137S | BUGATHA SYAMALA | II BSC COMP SEC-A |
| 13 | 234138S | CHADALA DEEPIKA | II BSC COMP SEC-A |
| 14 | 234139S | CHINNI JAHNAVI | II BSC COMP SEC-A |
| 15 | 234141S | DUGGIRALA DURGA MALLESWARI | II BSC COMP SEC-A |
| 16 | 234142S | GARAPATI ROJMARY | II BSC COMP SEC-A |
| 17 | 234143S | GARISEPALLI SAI SRUTHI | II BSC COMP SEC-A |
| 18 | 234144S | GEDELA LOHITHA SRI | II BSC COMP SEC-A |
| 19 | 234145S | GOPA SAI | II BSC COMP SEC-A |
| 20 | 234146S | KANAKALA PUJITHA | II BSC COMP SEC-A |
| 21 | 234147S | KARAKA KIRANMAI | II BSC COMP SEC-A |
| 22 | 234148S | KILARI JYOTHI | II BSC COMP SEC-A |
| 23 | 234149S | KOLLI ANUSHA | II BSC COMP SEC-A |

| | | | |
|----|---------|--------------------------------|-------------------|
| 24 | 234150S | LADI SANDHYA | II BSC COMP SEC-A |
| 25 | 234151S | MADDIRALA LAKSHMI | II BSC COMP SEC-A |
| 26 | 234153S | MARISARLA PUNYAVATHI | II BSC COMP SEC-A |
| 27 | 234154S | MAVURI NAVYA SRI | II BSC COMP SEC-A |
| 28 | 234155S | NANDAM BHARANI | II BSC COMP SEC-A |
| 29 | 234156S | NEELAPALA ANUSHA | II BSC COMP SEC-A |
| 30 | 234157S | PALLANTI BHAVANI | II BSC COMP SEC-A |
| 31 | 234158S | PARUCHURI SRI VAISHNAVI | II BSC COMP SEC-A |
| 32 | 234159S | PASUPULETI VENNELA PRIYA | II BSC COMP SEC-A |
| 33 | 234160S | PIKA SRI LAKSHMI | II BSC COMP SEC-A |
| 34 | 234161S | PONAMALA RESHMA SREE | II BSC COMP SEC-A |
| 35 | 234162S | RAMISETTI SUSHMANJALI | II BSC COMP SEC-A |
| 36 | 234163S | REGULAGADDA NIKITHA LAKSHMI | II BSC COMP SEC-A |
| 37 | 234164S | SHAIK PARVEEN | II BSC COMP SEC-A |
| 38 | 234165S | SHAIK RIZWANA | II BSC COMP SEC-A |
| 39 | 234166S | SIRIPURAPU JAHNAVI | II BSC COMP SEC-A |
| 40 | 234167S | THURIMELLA KANAKA MAHA LAKSHMI | II BSC COMP SEC-A |
| 41 | 234168S | VANUKURU PRASANNA | II BSC COMP SEC-A |
| 42 | 234169S | VATALA PALLAVI | II BSC COMP SEC-A |
| 43 | 234201s | A.Shanmukhi | II BSC COMP SEC-B |
| 44 | 234202s | B.Neha sri | II BSC COMP SEC-B |
| 45 | 234203s | B.Lekha Sree Durga | II BSC COMP SEC-B |
| 46 | 234204s | V.Deekshitha | II BSC COMP SEC-B |
| 47 | 234205s | P.Ramya | II BSC COMP SEC-B |
| 48 | 234206s | Sk.Mehar Sulthana | II BSC COMP SEC-B |
| 49 | 234207s | Ch.Manju Naga Sudha | II BSC COMP SEC-B |
| 50 | 234231s | A.Tejaswi | II BSC COMP SEC-B |
| 51 | 234232s | A.Sravanthi | II BSC COMP SEC-B |
| 52 | 234233s | A.Triveni | II BSC COMP SEC-B |
| 53 | 234235s | B.Gowri manga | II BSC COMP SEC-B |
| 54 | 234236s | B.Nandini | II BSC COMP SEC-B |
| 55 | 234237s | Ch.Saraswathi | II BSC COMP SEC-B |
| 56 | 234238s | D.Neeraja | II BSC COMP SEC-B |
| 57 | 234239s | E.Srilatha | II BSC COMP SEC-B |
| 58 | 234241s | G.Prajwala | II BSC COMP SEC-B |
| 59 | 234242s | G.Charishma | II BSC COMP SEC-B |
| 60 | 234243s | I.Ramya pavani sai sri | II BSC COMP SEC-B |
| 61 | 234244s | K.Latha sri | II BSC COMP SEC-B |
| 62 | 234246s | K.Viditha reddy | II BSC COMP SEC-B |
| 63 | 234247s | K.Dhikshitha | II BSC COMP SEC-B |
| 64 | 234249s | M.Lakshmi tirupathamma | II BSC COMP SEC-B |
| 65 | 234250s | M.Sri vidya | II BSC COMP SEC-B |
| 66 | 234251s | N.Meenakshi | II BSC COMP SEC-B |

| | | | |
|----|---------|------------------------|-------------------|
| 67 | 234252s | O.Bhavani | II BSC COMP SEC-B |
| 68 | 234253s | O.Deepika | II BSC COMP SEC-B |
| 69 | 234254s | P.Vani | II BSC COMP SEC-B |
| 70 | 234255s | P.Joshna | II BSC COMP SEC-B |
| 71 | 234256s | P.Ramya sri | II BSC COMP SEC-B |
| 72 | 234257s | P.Vani sri aparna | II BSC COMP SEC-B |
| 73 | 234258s | P.Sirisha | II BSC COMP SEC-B |
| 74 | 234259s | P.Naga jyothi | II BSC COMP SEC-B |
| 75 | 234260s | SK.Shafreen | II BSC COMP SEC-B |
| 76 | 234261s | S.Lakshmi tirupathamma | II BSC COMP SEC-B |
| 77 | 234262s | T.Sandhya | II BSC COMP SEC-B |
| 78 | 234263s | T.Nikhitha | II BSC COMP SEC-B |
| 79 | 234264s | U.Harshitha | II BSC COMP SEC-B |
| 80 | 234265s | V.Jahnavi | II BSC COMP SEC-B |
| 81 | 234266s | Y.Akshitha | II BSC COMP SEC-B |
| 82 | 234267s | J.Hema sri | II BSC COMP SEC-B |

8.Areas for Improvement

- Some participants suggested incorporating more interactive exercises and hands-on projects to reinforce technical concepts.
- Some participants recommended follow-up sessions or workshops focused on advanced Django features, API integration, and real-world deployment scenarios.

9.Feedback Summary

- The workshop was highly informative, engaging, and provided hands-on experience in web application development.
- The tools and technologies covered, such as Django, HTML, CSS, JavaScript, and SQLite, were practical and relevant for real-world development.
- Participants found the sessions valuable, but suggested incorporating more advanced topics and additional coding challenges.