

An Autonomous Institute

WORKSHOP - FULL

STACK DEVELOPMENT

Date of the Event	<mark>15</mark> -07-2024
Title of the Event	FULL STACK DEVELOPMENT
Organized by	Dept of Computer Science and Engineering MVJCE,
	Bangalore
Venue	Auditorium, MVJ College of Engineering

Event Format:

The event was split into two parts: a morning session and an afternoon session. During each, the speaker covered full stack Java development in detail, covering theoretical as well as practical topics. 4th sem students of CSE/AIML/CG/ISE and DS 530 Students attending this event.

Report - WORKSHOP- FULL STACK DEVELOPMENT, organized by Department of CSE:

The CSE Department of MVJCE was proud to host this event for all the students. The speaker of the workshop 'FULL STACK DEVELOPMENT' covered the following components of full stack development:

Speaker at the Event:

Mr. Anantha Somayaji has about 33+ years of experience that includes my 23+ years in the IT industry and 10+ years as an Electronics Engineer. Presently from November 2021, with the role of a Corporate Trainer in Full Stack development, he is in the process of incubating a startup titled "5KL" (meaning 5k lines of coding practice), with an aim to provide a strong platform for the learning and certifications, according to the needs of Industry 4.0 and trends. Collaborating with strategic partners such as E2E Management Services and other institutions to deliver

cutting-edge IT training and application development solutions.

His IT Career includes the roles of Product Manager, Project Manager, Software Developer, Senior Quality Analyst, Test Engineer Corporate Trainer in Technical Areas. He has worked in both Product and Services companies and to name a few are, IBM India Pvt. Ltd, Mphasis, Satyam Computer Services Limited, Tele logic India Pvt. Ltd, etc.

He has led a successful software development unit, specializing in delivering tailored solutions such as School Management Systems (.NET) and Doctor Online (Java) for diverse clients, including multinational corporations like ALLEGIS. Managed the development of a Business Intelligence platform (.NET) for Allegis Group. Worked as a Senior Test Manager floated and managed about more than 10 test teams for various products of IBM-Rational-Tele logic products.



Fig 1: Guest Speaker Mr. Anantha Somayaji delivering the workshop on Full Stack development **Morning Session:**

Core Programming Skills:

IDE – Integrated Development Environment

Contains all tools and compilers needed to code in a particular language

• Easier to create and debug complex projects

Know everything properly about programming language and basic concepts

1. Libraries and Utilities

Frontend: Libraries like jQuery, React, and Angular provide reusable components and utilities to streamline UI development.

Backend: Utilities such as Lodash, Moment.js, and Axios help with tasks like data manipulation, date handling, and HTTP requests.

2. Advanced Programming

- Concepts such as asynchronous programming, closures, and higher-order functions in JavaScript.
- Advanced features in backend languages like decorators in Python or streams in Node.js.

3. Database Concepts

- **SQL Databases**: MySQL, PostgreSQL used for relational data storage.
- **NoSQL Databases**: MongoDB, Cassandra used for flexible, scalable data storage.

4. UI/UX – Web Technologies

UI / UX is as equally important as technology and functioning

It factors in EQ of the customer, and makes it easier to use for them

5. Frameworks

Used to simplify building an entire application from scratch.

- **Frontend**: React, Angular, Vue.js - these frameworks help in building dynamic user interfaces with better state management and component-based architecture.

- **Backend**: Express (Node.js), Django (Python), Ruby on Rails - these frameworks streamline server-side development with tools and predefined structures.

6. Testing

Important practice to do while programming

These components collectively enable a developer to handle both the client-side (frontend) and server-side (backend) aspects of web development, ensuring a seamless, full-stack development process.

Major Stacks:

• MEAN, MERN, .NET Framework, PHP, Java, Python

Afternoon session:

The Following concepts were discussed like , Java Full Stack:, Core Java, JUnit, Java 8 Features, JSP Servlets – Server functions, Advanced Java, J2EE, Spring – Framework, MYSQL / MSSQL / Oracle, HTML, CSS, JS, Bootstraps.



Fig 2 : 4^{th} sem students of CSE/AIML/CG/ISE,DS attending the event



Fig 3: Mr Srikanth addressing the students regarding the importance and opportunity of this workshop.

Outcome of the Event:

During the workshop sessions students gained knowledge in full stack development concepts which assist in understanding how the projects are developed and gained knowledge of several frameworks and tools available. Students got awareness on upcoming booming jobs which is related to development.

Faculty Coordinators:

Prof. Krishnanaryan

Assistant Professor, Dept. Of CSE