







Alumni Guest Lecture on

Web Development on 31st August 2023 Organized by Department of Computer Science & Engineering



Participants: III Year B.Tech – Computer Science & Engineering Students – MITS

Resource Person: Mr. M. Purushotama Reddy (Alumnus of CSE 2014-2018 Batch), Working as Front-End Developer – Oracle, Bangalore.

A Guest Lecture on "Web **Development**" was organized by the Department of ComputerScience & Engineering for III B.Tech students.

The inauguration of the Guest Lecture was started at 11:10 A.M in WB – 314, the dignitaries were Dr. R. Kalpana, HOD – CSE, Mr. M. Purushotama Reddy, Working as Front-End Developer, Oracle, Bangalore, Dr. R. Kiran Kumar, Alumni Relation Officer, Mr. BSH. Shayeez Ahamed, Department Alumni Coordinator.

The lecture was started with opening remarks by, Dr. R. Kalpana who thanked Managementfor this great initiation of creating an opportunity to invite the Alumni members of the institute and enabling them to interact with the students and enlightening them with the current developments in the corporate world. Dr. R. Kiran Kumar has shown pleasure and promised to conduct many more lectures in future for the benefit of the students.

Mr. BSH. Shayeez Ahamed has introduced about the speaker and invited him to share his valuable experiences to the students. The number of students participated in the lecture were around 60.

After inaugural session, the main session was started at 11:20 A.M, Mr. M. Purushotama Reddy explained about Web Development in Computer Science.

The Internet isn't going anywhere. In fact, it's become a portal and primary method of research, connection, education, and entertainment in the world. As of 2021, there were 4.66 billion global Internet users — more than half the world's population.

Given the rapidly-increasing number of Internet users, it's no surprise that web development is a rapidly expanding industry. Between now and 2030, the employment of web developers is expected to grow by 13%, much faster than most other technology careers.

Web development refers to the creating, building, and maintaining of websites. It includes aspects such as web design, web publishing, web programming, and database management. It is the creation of an application that works over the internet i.e. websites.

The word Web Development is made up of two words, that is:

- Web: It refers to websites, web pages or anything that works over the internet.
- **Development:** It refers to building the application from scratch.

Web Development can be classified into two ways:

- Frontend Development
- Backend Development

Frontend Development

The part of a website where the user interacts directly is termed as front end. It is also referred to as the 'client side' of the application.

Front-end (or client-side) is the side of a website or software that you see and interact with as an Internet user. When website information is transferred from a server to a browser, front-end coding languages allow the website to function without having to continually "communicate" with the Internet.

Front-end code allows users to interact with a website and play videos, expand or minimize images, highlight text, and more. Web developers who work on front-end coding work on client-side development.

Popular Frontend Technologies

- HTML: HTML stands for HyperText Markup Language. It is used to design the front-end portion of web pages using markup language. It acts as a skeleton for a website since it is used to make the structure of a website.
- CSS: Cascading Style Sheets fondly referred to as CSS is a simply designed language intended to simplify the process of making web pages presentable. It is used to style our website.
- JavaScript: JavaScript is a scripting language used to provide a dynamic behavior to our website.
- **Bootstrap:** Bootstrap is a free and open-source tool collection for creating responsive websites and web applications. It is the most popular CSS framework for developing responsive, mobile-first websites. Nowadays, the websites are perfect for all browsers (IE, Firefox, and Chrome) and for all sizes of screens (Desktop, Tablets, Phablets, and Phones).
 - Bootstrap 4
 - Bootstrap 5

Backend Development

Backend is the server side of a website. It is part of the website that users cannot see and interact with. It is the portion of software that does not come in direct contact with the users. It is used to store and arrange data.

Back-end (or server-side) is the side that you don't see when you use the Internet. It's the digital infrastructure, and to non-developers, it looks like a bunch of numbers, letters, and symbols.

There are more back-end coding languages than front-end languages. That's because browsers — at the front-end — only understand HTML, CSS, and JavaScript, but a server — at the back-end — can be configured to understand pretty much any language.

Popular Backend Technologies

- PHP: PHP is a server-side scripting language designed specifically for web development.
- Java: Java is one of the most popular and widely used programming languages. It is highly scalable.
- **Python:** Python is a programming language that lets you work quickly and integrate systems more efficiently.
- **Node.js:** Node.js is an open source and cross-platform runtime environment for executing JavaScript code outside a browser.

Full stack developers

Full stack developers do bits of both backend and frontend. Depending on the problem at hand, they can switch cape and move stacks.

<u>Full stack developers</u> work in both the front-end and back-end sides of a website. They can create a website, application, or software program from start to finish. "Stack" refers to the different technologies that handle different functionalities on the same website, like the server, interface, etc.

Because full-stack developers require years in the field to build the necessary experience, this role is often sought after. Their all-around knowledge helps them optimize performance, catch issues before they occur, and help team members to understand different parts of a web service.

There are many other specific roles in web development, like system architects, AI, machine learning and security engineers. These roles require more specialized knowledge of one or more of the above types of development, so many professionals in these roles will start by gaining some general web development experience.

What does it take to become a web developer? Essentially, just three things: HTML, CSS and JavaScript—the three pillars of the web

Together, these three pillars make every website work, defining the content to be displayed (HTML), telling a browser how to display that content (CSS), and making the content interactive (JavaScript), respectively.

A web developer is well versed in these three technologies. They can read other people's code and make changes to it. They can find and debug bugs (shortcomings in existing code). A web developer might, at times, work on a new project (a new website) from scratch, or may have to work on an existing website and make it better. A typical day in the life of a web developer involves fixing bugs, developing new features (that is, enhancements) and webpages, and working with other developers to discuss ways to solve problems.

The session is completed at 12:15 P.M, and he clarified the queries of enthusiastic young minds with a great zeal during the interaction time.

The resource person was honored by a token of respectable appreciation by Dr. R. Kalpana CSE – HOD, Dr. R. Kiran Kumar, Alumni Relation Officer and all faculty members of the department.

Vote of Thanks: Mr. BSH. Shayeez Ahamed proposed a vote of thanks to Resource person, HOD and AlumniRelations Officer for attending the function. He extended his thanksto the Principal, and the Management for their support to conduct the training.

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మదనపల్లె,ఆగస్టు31(కురుక్షేత్రం ప్రతినిధి) : అంగళ్ళు సమీపంలోనిమదనపల్లె ఇన్స్ట్ర్ట్బూట్ ఆఫ్ టెక్నాలజీ అండ్ సైన్స్ మిట్స్ కళాశాలలో కంప్యూటర్ సైన్స్ అండ్ ఇంజనీరింగ్ విభాగము వారు

పురుషోత్తం రెడ్డి, డ్రంట్ ఎండ్ డెవలపర్, ఒరాకిల్, బెంగళూరు పాల్గొన్నారు. కార్యక్రమం లో ఆయన మాట్లాడుతూ వెబ్ డెవలప్మెంట్ పై విద్యార్థులు అవగాహన పెంచుకోవాలని అన్నారు. వెబ్ డిజైనింగ్ అనేది వెబ్ ద్వారా వినియోగదారుకు అందించబడేహొ ఒక వెబ్ పేజీ అని, వెబ్సైట్ లేఅవుట్ను సృష్టించడం మరియు కంటెంట్, చిత్రాలను జోడించడం ఇందులో ముఖ్యమైనవని ఆయన అన్నారు. వెబ్సైట్ డిజైన్లో క్లయింట్ అవసరాల విశ్లేషణ, వినియోగం, కాన్సెప్ట్ క్రియేషన్, లేఅవుట్ డిజైనింగ్ మొదలైనవి వెబ్ జ్రోవసేర్ ద్వారా ఓపెన్ చేయబడతాయని ఆయన అన్నారు. ముక్యంగా వెబ్ డిజైనింగ్ కు హెచ్ టి ఏం ఎల్ మరియు సి.ఎస్.ఎస్ కి ఫోటోషాప్ డిజైన్ సంభాషణ, ఫంక్షనాలిటీ ఇంప్లిమెంటేషన్ మొదలైనవి ఎంతో ముఖ్యమని విద్యార్థులు వీటిపై అవగహన పెంచుకోవాలని అన్నారు. జాబ్ ఇంటర్యూలకి ప్రతి ఒక్కరు వారి స్కిల్స్ ను పెపొందించుకొని హాజరు అవ్వాలని అన్నారు.మీరు హాజరవుతున్న కంపెనీకి సంబంధించిన సమచారాన్ని పూర్తిగా అధ్యయనం చేయాలి అని, ఎలాంటి ప్రశ్నలు వేస్తారో ఊహించి వాటికి జవాబులు ఎలా చెప్పాలో కూడా సిద్ధం కావాలి అన్నారు. ఏ ఇంటర్వ్యూకు అయిన సరేహొ ఒక పది నిమిషాల ముందరే హాజరవాలి అని, మొదటి ఇం(పెషనే బెస్ట్ ఇం(పెషన కలిగేలా మాట్లాదాలి అని అన్నారు. ప్రతి ఒక్కరు ధైర్యంగా, ఆత్మవిశ్వాసంతో వ్యవహరించాలి అని, సబ్జెక్టుమీద మంచి పట్టును డ్రదర్శించాలి అన్నారు. కార్యక్రమం వెబ్ డెవల ప్మెంట్ పై అవగాహన కార్యక్రమాన్ని నిర్వహించారు. ఈ లో కళాశాల కంఫ్యూటర్ సైన్స్ విభాగాధిపతి డాక్టర్ కల్పన, కోఆర్డినేటర్ కార్యక్రమానికి ముఖ్య అతిధిగా మిట్స్ కళాశాల పూర్వ విద్యార్ధి ఏం. షాయీజ్, అలుమ్ని కో ఆర్డినేటర్ డాక్టర్ కిరణ్ లు పాల్గొన్నారు.