**Full Stack Development**

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Full Stack development is the technology which is used in web-based application development. The term full stack has evolved recently while web technologies such as PHP, ASP.NET, Java were existing for more than past 10-15 years. The term stack comes from the stack of tools and framework which comes into play for developing three different parts of web-based projects. First of these different parts are front end technologies which comprises of HTML, CSS, JavaScript, bootstrap, React, etc. Second part comprises of application development which has all the business logic and can be developed in PHP, ASP.NET, Java, Express, NodeJS, Python, etc. Finally, the third part comprises of database which can be either relational database management system like SQL Server, Oracle, PostgreSQL, MySQL, or NoSQL database like MongoDB.

A complete knowledge of any one of popular stacks will enable a Software Engineer to work as full stack developer. The common stacks are MERN which comprises of MongoDB, Express, React and NodeJS; MEAN which replaces React of MERN by Angular JS for front end development. Similarly, LAMP which comprises of Linux, Apache, MySQL, and PHP is another popular stack. Django based on python with Flutter and Ruby on Rails are other popular stacks. Similarly, ASP.NET with C# or VB and JSP, Java servlets are also part of full stack application development.

A full stack developer reduces the cost of project as complete set of skills possessed by him/her helps in reducing the team size and thus cost also. It also helps in effective team communication and integration of projects as team members are aware of the work done by other team members. This also reduces the constraint of working in an office premise and work can easily be done from a home laptop equipped with internet. Thus, several startups can make big profit in this technology as very big teams work can be done by a smaller number of skilled Engineers.

Several other specializations like Data Science, Artificial Intelligence, Block Chain, Cyber Security, IOT, etc. are gaining importance day by day but as we know web-based applications are needed by all companies these skills will not wither away with time and can give huge profits in long run. All big software companies like Google, Microsoft, Amazon, Adobe, Infosys, TCS are constantly hiring full stack developers on a very good pay scale.

Bennett University provides this course in form of a specialization in which two core courses are taken up by students and two electives from four courses can be taken by full stack students. The first-year students of 2021 were given a two-hour workshop and they were so impressed with the workshop that around 40% of students took this specialization from thirteen other specializations. Students are constantly groomed for web-based development projects. Bennett University also has tie up with other full stack companies like Xebia and reaching out other companies for collaboration.

Bennett University also has an active full stack club with enthusiastic team of core members and around 150 students from 2nd year onwards. It is anticipated that several students of 1st year will also become part of this club. Around 4-5 teams of 5-6 members each are actively doing development work for several startup ideas. Like this students aim to make their projects success and apart from skills enhancement they can earn a new source of income. Bennett University aims to become a Centre of Excellence for full stack development so that other University students can tie up with us and come here for projects and workshops. These projects will also be showcased to Industry experts for their assessment and like this students can be encouraged and even given internship and job offers.