Fundamentals of Web Application Development

Course Objectives:
- Understand the core principles of web design, including user experience (UX) and user interface (UI) design.

- Gain proficiency in essential web development tools like HTML, CSS, and potentially JavaScript.
- Learn to design and build responsive websites that adapt to different screen sizes and devices.

- Develop an understanding of best practices for web design, including accessibility and SEO (Search Engine Optimization).
- Work on practical projects to apply your acquired knowledge and build a web design portfolio.

Module 1: Introduction to Web Design
- What is web design? Understanding the different roles involved (designer, developer).
- The web design process: planning, information architecture, wireframing, prototyping.
- Core principles of UX/UI design: usability, accessibility, visual hierarchy, typography.
- Building Blocks of the Web
- Introduction to HTML: structure and syntax, creating basic web pages.
- Understanding CSS: styling web pages with selectors, properties, and values.
- Introduction to responsive web design (RWD) concepts for adapting websites to various devices.

Module 2: Visual Design for the Web
- Design principles: color theory, composition, layout, typography for web.
- Image optimization for the web: file formats, compression techniques.
- Introduction to design software (optional) for creating website graphics.

Module 3 Advanced Web Development
- Introduction to JavaScript (optional): adding interactivity to web pages.
- Understanding web fonts and their integration into websites.
- Content Management Systems (CMS) overview: (e.g., WordPress)

Module 4: Website Optimization and Deployment
- Search Engine Optimization (SEO) basics: optimizing website content for search engines.
- Website accessibility guidelines: ensuring your website is usable for everyone.
- Website deployment: uploading your website to a web server