Web Development and Angular

Digital </> Pioneers

ACADEMY

Web Development :

Web development is the process of creating applications or websites that can be accessed through the internet. It involves a combination of technologies to build the frontend (what users see) and the backend (the server-side logic).

Key Technologies:

•**HTML:** The structure of a webpage.

•**CSS:** The styling of a webpage.

•**JavaScript:** The behavior and interactivity of a webpage.

Frontend Development:

Focuses on the user interface and experience.
- **Frameworks:** React, Angular, Vue
- **Libraries:** jQuery, Bootstrap

Backend Development:

Handles server-side logic, databases, and APIs.
- **Languages:** Python, Ruby, JavaScript (Node.js), PHP
- **Frameworks:** Django, Ruby on Rails, Express.js
- **Databases:** MySQL, PostgreSQL, MongoDB

Angular

Angular is a popular TypeScript-based open-source framework for building dynamic web

applications. It's part of the MEAN (MongoDB, Express.js, Angular, Node.js) and MERN

(MongoDB, Express.js, React, Node.js) stacks.

Key Features:
- **Component-based architecture:** Breaking down the UI into reusable components.
- **TypeScript:** A superset of JavaScript that adds static typing.
- **Dependency injection:** Managing dependencies effectively.
- **Data binding:** Synchronizing data between the model and the view.
- **Routing:** Navigating between different views within the application.
- **Angular CLI:** A command-line interface for creating, developing, and serving Angular applications.

Topics to Learn:

- **Core Angular concepts:** Components, modules, services, dependency injection, routing, forms.

- **TypeScript:** Syntax, types, interfaces, classes.

- **HTML and CSS:** Building the structure and styling of components.

- **JavaScript:** Understanding the fundamentals for interacting with the DOM.

- **HTTP:** Making requests to backend servers.

- **Reactive programming:** Using RxJS for asynchronous operations.

- **Angular Material:** Pre-built UI components for faster development.

- **Testing:** Writing unit and integration tests.