Program Structure

General:

Live Teaching -
- Live **Teaching** sessions from Monday – Saturday from 08:45 AM to 05:45 PM.

Graded Assessments
- For the **Milestone graded assessment (quiz and project)**, the submission timeline will be
  - Graded Quiz- 45 minutes
  - Graded Assignment- 1 hour 20 minutes

Course Name	Days	Date	Topic	Sub-Topics
Prerequisite	0	Pre- Requisite	JavaScript Fundamentals	ES6+, DOM Manipulation, Callbacks, Promises, Async/Await
			React Basics	JSX, Components, Props, State, Lifecycle Methods, Event Handling
			CSS & Styling	CSS Basics, Flexbox, Grid, Styled Components (Optional)
			Git & Version Control	Git Basics (clone, add, commit, push)
			API & HTTP Requests	Fetch API, Axios, RESTful API Calls
			Node.js & Express.js	Basic Server Setup, Routing
			Database Basics (Optional)	CRUD Operations in SQL/NoSQL
React	1	28-02-2025	React Project Setup React Components & Props	create-react-app, Understanding Project Structure, Build Tools (Webpack, Babel) Functional & Class Components, Props, Event Handling
	2	01-03-2025	React State & Lifecycle Styling in React	State Management, Component Lifecycle Methods CSS, Bootstrap, Styled Components
	3	03-03-2025	Reusable Components & Form Handling	Using Controlled & Uncontrolled Components, PropTypes, Form Handling with Formik
	4	04-03-2025	React Router & Navigation	Routing Concepts, Dynamic Routing, Navigation
	5	05-03-2025	Higher Order Components & Context API React Hooks	HOC, Render Props, Context API, Code Splitting useState, useEffect, useContext, Custom Hooks
ADO.Net, EF Core & Asp.Net Core Advanced	6	06-03-2025	Doubt clarification ASP.Net core concepts	Recap/referesher of ASP dotnet Core concpets
	7	07-03-2025	Doubt clarification ASP.Net core concepts	Recap/referesher of ASP dotnet Core concpets
	8	08-03-2025	Authentication and Authorization in ASP.NET Core	Overview of ASP.NET Core authentication and authorization Implementing role-based and claims-based authorization Configuring authentication schemes (e.g., cookies, JWT)
	9	10-03-2025	State Management - Redux REST API Concepts & Integration	Redux Store, Actions, Reducers, Middleware (Thunk & Saga) CRUD Operations, Error Handling, Best Practices
	10	11-03-2025	Backend Users, Contacts, and JWT Authentication	Overview of JSON Web Tokens (JWT) and their role in authentication Setting up a backend service to handle user authentication and contacts management Integrating JWT authentication in a React application
	11	12-03-2025	Authentication in .NET & React	JWT Token Authentication, ASP.NET Core Identity, Role-based Authentication
Application Testing & Integration	12	13-03-2025	React with Backend Integration (ASP.NET Core API)	Fetch API, Axios, Connecting React with ASP.NET Core Web API, Handling CORS
Capstone	13	14-03-2025	Project Kickoff Implementing Routing & API Calls	Capstone by learners
	14	15-03-2025	Authentication & Authorization	
	15	17-03-2025	**Milestone**	
	16	18-03-2025	State Management using Redux/ngrx	Capstone by learners
	17	19-03-2025	Real-time Features & Performance Optimization Final Integration & Debugging	
	18	20-03-2025	Project Demo Evaluation	Castone review by faculty