

Kamrul Academy Full Stack Web Development Course

Sprints 1–10: Technical Mastery (20 Weeks)

Sprint 1 (Weeks 1–2): HTML, CSS, and JavaScript Basics

- **Module 1:** First Steps into JavaScript
- **Module 2:** Program Flow
- **Module 3:** Functions
- **Module 4:** HTML & CSS I

Sprint 2 (Weeks 3–4): Git, Arrays, and Intermediate CSS

- **Module 1:** Git and GitHub Fundamentals
- **Module 2:** Objects and Arrays in JavaScript
- **Module 3:** Manipulating Arrays
- **Module 4:** HTML & CSS II (Layouts & Styling)

Sprint 3 (Weeks 5–6): Advanced JavaScript and Flexbox

- **Module 1:** Advanced Objects
- **Module 2:** Advanced Functions
- **Module 3:** JavaScript in the Wild (real-world usage)
- **Module 4:** HTML & CSS III (Flexbox & Responsive Design)

Sprint 4 (Weeks 7–8): DOM and Component-Based JavaScript

- **Module 1:** DOM Manipulation Techniques
- **Module 2:** Events and Event Handlers
- **Module 3:** Component Architecture Fundamentals
- **Module 4:** Asynchronous JavaScript and Promises

Sprint 5 (Weeks 9–10): Core React Development

- **Module 1:** React Components & JSX
- **Module 2:** React State and Props
- **Module 3:** React Hooks & Side Effects
- **Module 4:** Advanced Styling in React (CSS-in-JS, Bootstrap)

Sprint 6 (Weeks 11–12): Advanced React, Forms, and Testing

- **Module 1:** Client-side Routing with React Router
- **Module 2:** Form Management (onChange, onSubmit)
- **Module 3:** Form Validation with Yup
- **Module 4:** End-to-End Testing with Cypress.io

Sprint 7 (Weeks 13–14): React Architecture and Testing

- **Module 1:** Class Components and Lifecycle Methods
- **Module 2:** Order of Code Execution in React
- **Module 3:** Separation of Concerns (Hooks & Services)
- **Module 4:** Automated Testing with RTL and Jest

Sprint 8 (Weeks 15–16): State Management (Redux & Context API)

- **Module 1:** Reducer Pattern and Redux Design
- **Module 2:** Async Redux (Thunk and Middleware)
- **Module 3:** Modeling App State (Finite State Machines)
- **Module 4:** Context API for Global State Management

Sprint 9 (Weeks 17–18): Authentication, Authorization, and CRUD

- **Module 1:** Authentication vs Authorization Basics

- **Module 2:** Client-Side Authentication (JWT, Tokens, Secure Routes)
- **Module 3:** CRUD Interfaces using REST APIs
- **Module 4:** HTTP Requests and Backend Integration

Sprint 10 (Weeks 19–20): Back-End Fundamentals with Node, Express, and SQL

- **Module 1:** Node.js, Express Setup, Routing & Middleware
- **Module 2:** Relational Database Basics, SQL Queries with Knex
- **Module 3:** Multi-Table Queries, Database Modeling
- **Module 4:** Deployment on Heroku and Vercel, GitFlow for Deployment

Sprint 11 (Weeks 21–22): Career Readiness and Capstone Preparation

(Combines Career Skills from ACS 1–4)

- **Module 1:** General Code Assessment Practice & Technical Exams
- **Module 2:** GitHub Profile Enhancement & Open Source Contributions
- **Module 3:** LinkedIn Profile Optimization, Resume Building
- **Module 4:** Career Networking, Interview Preparation

 **Total Duration: 22 Weeks**