

UI Full Stack (3 Months)

Duration: 3 Months (~120 Hours)

Mode: Live Online / Classroom

Role after completion: UI Full Stack Developer

Certifications prepared: Meta/Google Full Stack (academy), FreeCodeCamp Full Stack (optional)

Tools & Technologies: HTML, CSS, JS, React, Angular (essentials), Node.js, Express, MongoDB/MySQL, JWT, Docker (intro), CI/CD basics, Git & GitHub, Netlify/Vercel/Render

Syllabus

Week 1: UI & JS Essentials

- HTML5/CSS3 responsive recap, componentized UI thinking
- Modern JS (ES6+): modules, async/await, fetch
- Accessibility and SEO hygiene
- Assignment

Week 2: React & Angular Essentials

- React: hooks, state, forms, routing quickstart
- Angular: components, services, routing quickstart
- Choosing the right framework for the problem
- Assignment

Week 3: Backend APIs

- Express API patterns: routes, middleware, controllers
- Data modeling basics (MongoDB & SQL comparison)
- Error handling and API versioning
- Assignment

Week 4: Databases & Persistence

- MongoDB with Mongoose (NoSQL)
- SQL with MySQL/PostgreSQL basics (DDL, DML, joins)
- Persistence strategy and migrations overview
- Assignment
- Mock Interview 1

Week 5: Auth & Security

- JWT and session patterns, cookies vs tokens
- OAuth 2.0 overview (Google login)
- Input validation and common web vulns (XSS, CSRF)

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- Assignment

Week 6: DevOps Basics

- Git branching, PR workflow, code reviews
- Docker for dev/test, compose basics
- CI/CD overview (GitHub Actions)
- Assignment

Week 7: Cloud & Integrations

- Deploy frontend (Netlify/Vercel) and backend (Render/AWS)
- Third-party APIs: payments (Stripe), maps (Google), email (SendGrid)
- Observability basics (logs, uptime)
- Assignment

Week 8: Production Readiness

- Performance & caching basics, CDN usage
- Feature flags, env configs, error boundaries
- Team project handoff and documentation
- Assignment
- Mock Interview 2

Projects

- Social Media Mini-App (posts, likes, auth, feeds)
- Job Portal (listings, applications, employer/admin views)
- Event Management (events, tickets, payments, dashboards)