



RC-1995047

Frontend Development Curriculum

Course Objective.

The goal of the Frontend Development course is to give you all the skill sets you will need to build the interface of professional, scalable and modern software and web pages – and to collaborate with others using the tools and workflows the industry demands in 2026.

Technologies.

- **HTML**
- **CSS**
- **JavaScript**
- **TypeScript**
- **Git & Github**
- **React**
- **Web Hosting**
- **AI Coding Tools**

Duration: 12 weeks. Time:

- Week days: 9:00am – 1:00pm (3 days a week)
- Weekend: 10am – 4pm (Saturday & Sunday)





CURRICULUM

Section 1: Web Foundations — HTML, CSS & Responsive Design

Week 1: HTML — Structure & Semantics

- Introduction to Web Development
- Setting up the development workspace
- Introduction to HTML
- Understanding HTML tags and attributes
- Working with images and hyperlinks
- Creating tables, ordered and unordered lists
- Understanding element display types
- Embedding third-party content with iframes
- Writing special characters with HTML entities
- Deep dive in Web Forms
- Working with media: videos, audios & SVG Graphics
- Semantic HTML5 elements
- HTML Tasks 1 & 2
- HTML Project 1 & Review

Week 2: CSS — Styling, Layout & CSS3

- Introduction to CSS
- Understanding color formats
- Backgrounds, borders, padding and margin
- Modifying texts and fonts
- CSS Display and Visibility
- Controlling element positions: static, relative, absolute, fixed

- Selecting elements dynamically: pseudo-classes and pseudo-elements
- Managing content overflow
- Flexbox — arranging elements professionally
- Grid — building structured layouts
- CSS Variables for reusable styling
- CSS3: gradients, transitions and animations
- Using third-party fonts from the web
- Modifying images with CSS filters
- CSS Challenges 1, 2 & 3

Week 3: Responsive Design, AI-Assisted UI & CSS Projects

- Building responsive web pages with media queries
- Mobile-first design approach
- Understanding breakpoints and responsive units
- Responsive navigation bars and dropdowns
- Styling web forms with CSS
- Introduction to AI-assisted UI building with v0.dev
- Generating UI components with AI and reviewing them critically
- Understanding where AI-generated CSS breaks and how to fix it
- CSS Project 1, 2 & 3 Review

Section 2: JavaScript, TypeScript & AI-Augmented Development

Week 4: Introduction to Programming, JavaScript Basics & AI Coding Tools

- Introduction to Programming
- Getting started with JavaScript
- Using operators for programming operations
- Understanding data types

- Working with strings and numbers
- Developing programs with conditions
- Creating reusable code with functions
- Setting up Cursor IDE as the primary development environment
- Introduction to GitHub Copilot
- Using AI to explain unfamiliar code and debug errors
- Understanding what AI tools cannot do — thinking critically as a developer
- JavaScript Challenge 1



Week 5: JavaScript Deep Dive — Data Structures & the DOM

- Keeping similar data dynamically with arrays
- Tracking data with objects
- Working with dates
- Running programs multiple times with loops
- Creating object constructors with Constructor Functions
- Selecting document elements for JavaScript operations
- Modifying element content and values
- Creating and deleting elements
- Traversing element nodes
- Listening to and handling events
- Storing data in the browser with Local Storage and Session Storage
- JavaScript Challenges 2, 3 & 4

Week 6: Modern JavaScript — ES2015+ & API Consumption

- ES2015+ features: let, const, arrow functions, template literals
- Destructuring, spread and rest operators
- Modules: import and export
- Promises and the event loop
- Async/await for asynchronous operations
- Error handling with try/catch
- Introduction to APIs and how they work
- Consuming third-party data with the Fetch API
- Handling and displaying live API data on the Page
- Using AI assistance to integrate unfamiliar APIs faster
- JavaScript Challenges 5 & 6
- JavaScript Project 1 & Review

Week 7: TypeScript Fundamentals

- Why TypeScript? Problems it solves in large codebases
- Setting up a TypeScript development environment
- Primitive types: string, number and boolean
- Arrays, tuples and enums
- Interfaces and type aliases
- Union types and type inference
- Writing functions with typed parameters and return types
- Introduction to generics
- Using TypeScript with the DOM
- Introduction to generics
- Migrating an existing JavaScript file to TypeScript
- TypeScript Challenge 1

Week 8: Git, GitHub & Developer Workflow & JS/TS Projects

- Why version control matters
- Core Git commands: init, add, commit, push, pull
- Branching and merging
- Resolving merge conflicts

- Collaborating on GitHub with pull requests
- Reviewing code on GitHub
- Using GitHub Copilot within the development workflow
- Deploying frontend projects on Vercel
- JavaScript Project 2 — API-powered application: build & review
- TypeScript Project — refactoring JavaScript Project 1 with TypeScript
- Writing a professional GitHub README for your projects
- Ensuring all projects are live and portfolio-ready



Section 3: Frontend Engineering with React

Week 9: React Fundamentals

- Why React? Problems it solves over vanilla JavaScript
- Setting up the React development environment
- React project structure and how it works
- Introducing JSX
- Functional components
- Understanding props
- Managing state with useState
- Handling side effects with useEffect
- Event handling in React
- Working with forms in React
- Using AI assistance to scaffold and review components
- React Challenge 1

Week 10: React Advanced & React with TypeScript

- Conditional rendering
- React Router: navigating between pages
- React styling: CSS modules and inline styles
- Consuming third-party APIs in React components
- Introduction to React with TypeScript
- Typing props and state with TypeScript interfaces
- Handling typed events in React
- Production builds and how they work
- Deploying a React app on Vercel
- React Project 1 & Review



Week 11: React Projects — Real Client Brief Format

- Understanding how to read and interpret a client brief
- Scoping a project: identifying features, pages and components
- Planning a component tree before building
- React Project 2 — built from a simulated local business brief
- Connecting the frontend to a live third-party API
- Deploying the finished project on Vercel
- Writing a portfolio case study for the project

- React Project 3 — student-chosen brief: build & review
- Group project presentations

Section 4: Portfolio, Career & Going Forward as a Frontend Developer

Week 12: Career & Business Launch

- How to independently learn any new technology quickly
- Building a learning system that keeps you relevant in an AI-driven industry
- Portfolio cleanup: all projects live, documented and polished
- GitHub profile review: pinned repositories, bio and README quality
- Introduction to freelancing as a frontend developer
- Finding your first clients
- Pitching a web design solution to a non-technical business owner
- Scoping and pricing a frontend project
- Optimising your LinkedIn profile for tech opportunities
- Introduction to Upwork and international freelance platforms
- Writing a winning proposal and cover letter
- Frontend Advanced Resources & Project References



CURRICULUM ENDS

Other Benefits:

- 10 practical projects
- Frontend Development Certificate
- Business & Career Launch Program
- Post graduation mentorship

Program Cost

Learning mode	Program Price
Private Class	NGN520,000
Boarding & Internship	NGN350,000
Boarding	NGN270,000
Week days	NGN160,000
Weekends	NGN150,000
Online	NGN130,000

Payment Method

Transfer to:

Account Number: **4091698613**

Bank: **Polaris Bank**

Account Name: **Geegstack Academy of Software Engineering Ltd.**

For More Enquiry, Call or WhatsApp:

08050885112

or

08126430670