

Full stack
Development
Curriculum

Course Objective.

The goal of the full stack development course is to give you all the skill sets needed to build professional, scalable and modern software applications and web pages.

Technologies.

- HTML
- CSS
- JavaScript
- Git & Github
- React
- NodeJS
- ExpressJS
- MongoDB
- Web Hosting

Duration: 26 weeks.

Time:

- Week days: 9:30am - 1:30pm (3 days a week)
- Weekend: 10am - 4pm (Saturday & Sunday)





Curriculum

Section 1: Getting started with web development, Deep drive in basic web design languages: HTML & CSS

First Week: Understanding Web Development, Environment Setup & Introduction to HTML

- Introduction to Web Development
- Setting up the development workspace
- Introduction to HTML
- Understanding HTML Tags
- Doing more with HTML attributes: displaying images on the web page
- Understanding the hyperlinks
- Basic Styling with Inline CSS
- First HTML Task

Second Week: HTML Continues

- Creating tables on web page
- Creating order and unordered lists
- Understanding elements display types
- Embedding third party web pages and resources with iframes
- Writing special characters with HTML entities
- Second HTML Task
- Deep drive in Web Forms
- Working with Medias: videos and Audios
- HTML Project 1 & Review

Third Week: HTML Project and Introduction to CSS

- HTML Project 2 & Review

- Introduction to CSS
- Understanding different Color format
- Changing elements backgrounds
- Doing more with borders
- Understanding padding and margin
- Modifying Texts and Fonts

Fourth Week: HTML Project and Introduction to CSS

- CSS Display & Visibility
- Controlling elements positions on web page
- CSS Challenge 1
- Selecting elements more dynamically
- Managing content overflow
- Floating block elements for positioning
- Doing more with CSS pseudo classes
- Creating virtual elements with Pseudo elements
- CSS Challenge 2

Section 2: Advanced CSS, Introduction to Programming, JavaScript Fundamentals

Fifth Week: CSS Continues, Introducing CSS 3

- Styling Navigation Bars
- Creating dropdowns
- Selecting more dynamically with attributes
- Styling Web Forms with CSS
- CSS Challenge 3
- Introducing CSS3: Advanced CSS Background
- Adding multiple background colour with gradients
- Using third party fonts from the web
- Improving experience with transitions
- Working with Animations

Sixth Week: CSS3 Continues

- Displaying additional information with designed tooltips
- Modifying images look with filters

- Dividing text contents to multiple Columns
- Arranging block elements the professional way with flexbox and grid
- Building responsive web pages with Media queries
- Reusing components with CSS Variables

Seventh Week:

CSS Project 1, 2 & 3 and Reviews

Eight Week: Introduction to Programming, JavaScript Basics

- Introduction to Programming
- Getting Started with JavaScript
- Using Operators for programming operations
- Understanding different data types
- Working with JavaScript Strings
- JavaScript Challenge 1
- Working with Numbers
- Developing Programs with Conditions
- Creating Reusable code with Functions

Section 3: JavaScript Deep drive.

Ninth Week: JavaScript Continues, Document Object Model

- Keeping similar data dynamically with arrays
- JavaScript Challenge 2
- Tracking data with Objects
- Working with Dates
- Running programs multiple times with loops
- JavaScript Challenge 3
- Creating Objects creators with Constructor Functions
- Selecting Document elements for JavaScript Operations
- Modifying elements content and value
- JavaScript Challenge 4

Tenth Week: JavaScript Conclusion

- Listening to events
- Traversing the elements Nodes
- Elements Creation and deletion
- JavaScript Challenge 5

- Handling screen sizes with JS
- Managing browser location and history
- JavaScript Popup alerts
- Doing more with JavaScript Timers
- JavaScript Challenge 6
- Using document cookie for temporal storage
- Storing data in the browser with Storage objects

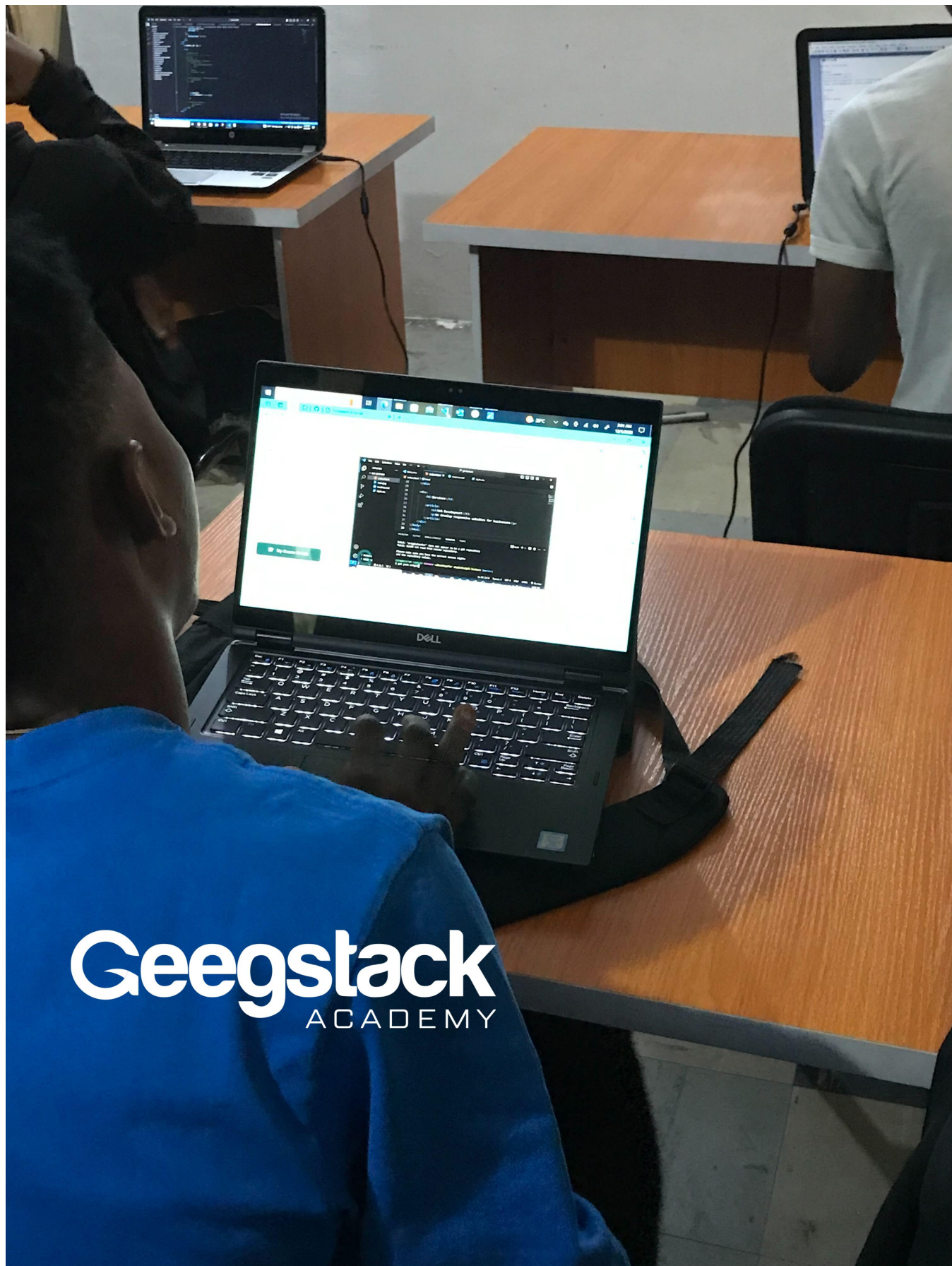
Eleventh Week: JavaScript API, JavaScript ES2015

- Consuming third party data with API
- ES 2015 features

Twelfth Week: Frontend Projects

- JavaScript Projects 1 & 2
- Projects Review





Section 4: Git and Github, Frontend Project hosting, React Fundamentals

React: Using third party Plugins, Frontend Projects

Week 13: Git & Github

- Why Git
- Using Git commands to manage updates on codebase
- Keeping codes and Collaboration on Github
- Hosting projects on Vercel

Week 14: React Fundamentals

- Why React?
- Setting up React environment
- React Basics
- Introducing JSX
- Elements Rendering
- Understanding the component types and props
- Getting started with Hooks
- Updating data with states
- Handling events
- Understanding Forms.

Week 15: React Conclusion, Projects

- Rendering elements on Conditions
- React Styling
- Using React Router to navigate
- Consuming third-party data
- Production Builds & Hosting
- React Projects 1
- Project review

Week 16: React Project 2, Mid-stack Break

- React Projects 2
- Project review
- Frontend Advanced Resources & Projects reference
- Mid-stack Break

Section 5: Introduction to Server-side scripting,

Building Dynamic Web Pages, Working with database, Building APIs, The Geegstack Store Project

Week 17: Introduction to Server-side, Environment Setup & Introduction to NodeJS

- How the web works
- Static vs Dynamic Web Pages
- Understanding server-side scripting.
- Setting up the development workspace
- Introduction to NodeJS
- Building a Command Line Weather Application

Week 18: NodeJS Continues

- Building a simple server in NodeJS
- Understanding the Request methods
- Building a Simple Dynamic Website with NodeJS
- Working with NPM

Week 19: ExpressJS Fundamentals

- Introduction to ExpressJS
- Express Request and Response Objects
- Serving Static files with ExpressJS
- Collecting Data from post request

Week 20: Working with Database

- Introduction to Database
- Working with MongoDB in ExpressJS
- User Authentication and Authorization

Concluding Section: Uploading Projects on Heroku, Student Projects, Going forward as a full stack developer

Week 21: Building RESTful APIs

- Introduction to API Development
- The Geegstack Store API Project Setup
- Building Models and Database Connection
- Building the Routes

- Routes Completion and Testing

Week 22: Full stack Projects hosting

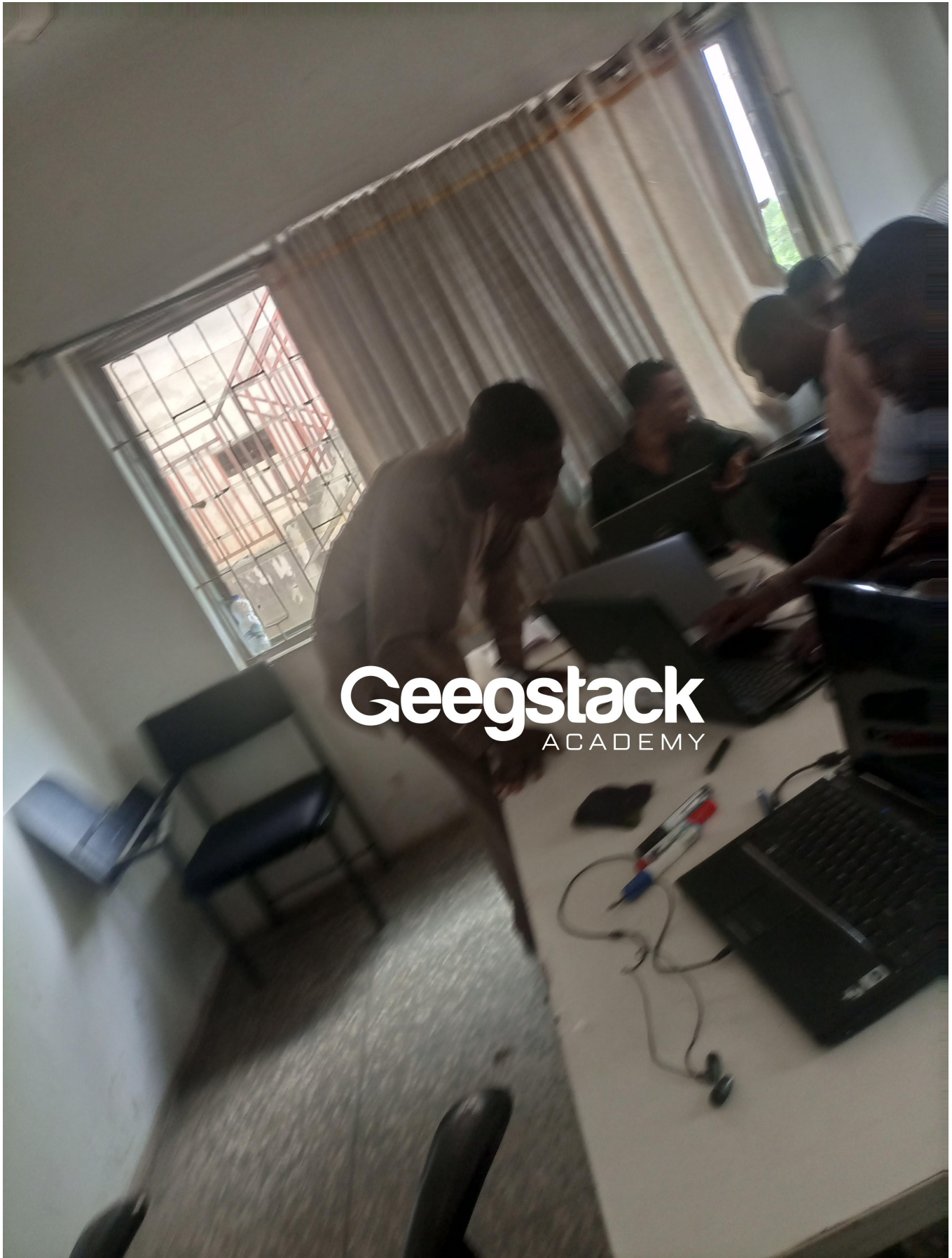
- Uploading Projects on Heroku
- Student Project 1 & Review
- Student Project 2 & Review

Week 23 - 25: Full stack Projects & Presentation

Week 26: Going forward as a full stack developer

- Advanced resources references
- How to independently learn any technology quickly
- Seminar on landing first paid job or project

CURRICULUM ENDS.



Other Benefits:

- Minimum of 15 practical projects
- Monthly Data Subscription throughout the program
- Mentorship until first paid job

Program Cost

Learning mode	Cost
Boarding & Internship	NGN400,000
Boarding	NGN300,000
Week days	NGN205,000
Weekends	NGN190,000
Online	NGN175,000

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

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