



IITC

IT PROFESSIONAL ACADEMY



Web Development Bootcamp



תוכן עיניינים

נושאי לימוד

1. Intro basics
2. HTML & CSS
3. JavaScript basics
4. Front End development React & state management
5. Mid-Project
6. Backend development using Node.js & Mongo
7. Python fundamentals
8. SQL
9. Web Services
10. Advanced Git commands
11. Final project

Module 1: Intro basics

- Intro to WEB development fundamentals
- Basics Operating Systems
- Communication
- The Web
- HTTP Protocol
- Networks
- Command-line
- Web development frameworks
- MERN
- Github basics

Module 2: HTML & CSS

- Introduction to HTML
- Browsers and HTML
- Editor's Offline and Online
- Tags, Attribute and Elements
- Doctype Element
- Headings, Paragraphs, and Formatting Text
- Lists and Links
- Tables
- Introduction CSS
- Applying CSS to HTML
- Properties
- Selectors
- Specificity
- Margins, Padding, and Borders
- Box-model, Text and Font Properties
- Units

Module 3: JavaScript basics

- JavaScript syntax
- Comments
- Variables & difference between "let", "const" and "var"
- Functions
- Scope
- Data types (number, string, object, and array)
- Objects, This, and arrays
- Date and Time
- JavaScript string methods
- JavaScript array methods
- JavaScript object methods
- If-else statements
- Switch, Loops, Debugging, JSON
- Best practices / clean code
- Error handling
- Asynchronous code

Module 4: Front End development React & state management

- Introduction to React - SPA
- Using JSX
- Components, State, and Props
- Hooks
- Using the arrow function
- Destructuring
- Reusable components
- Passing props
- Forms
- Working with libraries
- Requests to API's
- Lifecycle of Components
- Rendering List and Portals
- Routers
- Children
- Redux / context
- Deployment
- Class components

Module 5: Mid-Project

- Working on the midterm project of the course.

Module 6: Backend development using Node.js & Mongo

- Overview
- Classes & instances
- Routing / Restful API's
- Express
- JSDBC
- HTTP Methods
- URL Building
- Middleware
- Templating
- Form Data
- Authentication
- JWT/Bcrypt
- Cookies, Sockets
- Debugging
- Best Practices
- Typescript
- OOP, Clean code
- Documentation

Module 7: Python fundamentals

- The code editor
- Introduction to Python
- Expressions, data and types
- Loops and conditionals
- Functions and modules
- String handling and regular
- Expressions
- Array and dictionaries
- Working with files
- API with Flask

Module 8: SQL

- Introduction to databases
- JS connection modules
- SQL basics
- Working with data lakes and non-SQL databases
- Join level SQL
- Relationships

Module 9: Web Services

- Introduction to web Services
- HTTP-based integration
- REST API
- Securing Web Services
- Best practices

Module 10: Advanced Git commands

- Git stash
- Git reset
- Cherry picking
- Pull requests and comments

Module 11: Final project

- Working on the final project of the course.