

# SKYPARK ITECH

## 15-Days Full Stack Development Internship Syllabus (Theory + Practical)

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### Day 1 – Introduction to Full Stack Development

#### Theory:

- **What is Full Stack Development**
- **Frontend vs Backend vs Database**
- **Tools & Technologies:** HTML, CSS, JS, React, Node.js, MongoDB

#### Practical:

- Setup: VS Code, Node.js, MongoDB Compass
- Create a simple **“Hello SKYPARK ITECH”** webpage

### Day 2 – HTML Basics

#### Theory:

- Headings, paragraphs, links, images, lists, tables, forms
- Semantic HTML

#### Practical:

- Build **homepage layout**
- Add headings, paragraphs, images, links, forms

### Day 3 – CSS Basics

#### Theory:

- CSS syntax, selectors, colors, fonts, margins, padding, box model

#### Practical:

- Style homepage with **buttons, colors, hover effects**

### Day 4 – Advanced CSS & Responsive Design

### Theory:

- Flexbox, CSS Grid, Bootstrap basics
- Responsive design principles

### Practical:

- Make page **responsive**
- Add **Navbar, Cards, Grid Layout**

## Day 5 – JavaScript Basics

### Theory:

- Variables, loops, conditions, functions
- DOM manipulation

### Practical:

- Button click events
- Simple **form validation**

## Day 6 – Advanced JavaScript

### Theory:

- ES6 features: let/const, arrow functions, template literals
- Arrays, objects, event handling

### Practical:

- Dynamic list: **Add/Edit/Delete items**
- Display content dynamically

## Day 7 – React.js Basics

### Theory:

- Components, JSX, Props, State
- Functional vs Class Components

### Practical:

- Create React project
- Build **“Welcome” component**

## Day 8 – React Practical

### Theory:

- State management, conditional rendering, event handling

### Practical:

- Build **interactive Counter or To-Do App**

## Day 9 – Node.js & Express.js

### Theory:

- Backend development basics
- Routing and REST API

### Practical:

- Setup Node.js server
- Create **GET & POST API endpoints**
- Test APIs using Postman

## Day 10 – MongoDB Database

### Theory:

- NoSQL database: Collections, Documents
- CRUD operations

### Practical:

- Connect Node.js with MongoDB
- Insert, Read, Update, Delete data

## Day 11 – Frontend & Backend Integration

### Theory:

- API integration: Fetch API / Axios

### Practical:

- Display backend data in React
- Example: **Product List or Quiz Questions**

## Day 12 – Mini Project Part 1

### **Theory:**

- Project Setup: E-Commerce / Chat App / Quiz / Expense Tracker
- Plan frontend pages, backend routes, database

### **Practical:**

- Setup folders & project structure
- Create frontend layout & backend structure
- Create MongoDB collections

## **Day 13 – Mini Project Part 2**

### **Theory:**

- Backend logic
- Authentication (JWT) if required

### **Practical:**

- Connect frontend to backend APIs
- Implement **CRUD** operations

## **Day 14 – Mini Project Part 3**

### **Theory:**

- Frontend integration
- Styling, responsive design, validation

### **Practical:**

- Complete project
- Test all features, fix bugs

## **Day 15 – Conclusion & Presentation**

### **Theory:**

- Review Full Stack concepts
- Best development practices

### **Practical:**

- Demo project