**Node.js Schedule for the FDP**

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| **Day** | **Morning** | **Afternoon** | **Hands-on** |
| **Day 1 – Node.js Fundamentals & HTTP Module** | • Introduction to Node.js and the Node Event Loop • Introduction to REST APIs and HTTP Methods • Node Modules and Core Modules: `fs`, `path`, `http` • Creating a Basic HTTP Server • Using Postman for API Testing | • Implementing Routing using Native Node.js • Performing File System Operations • Building Simple CLI-Based Tools | • Building a HTTP backend Server • Simple Todo CLI Tool with Node.js (file storage) |
| **Day 2 – Express.js & REST API Development** | • Introduction to Express.js • Middleware (custom & third-party) • Handling Client Data and Request Response Model | • PostgreSQL Integration and CRUD Operations • Modular Project Structure • API Routing & Controllers | • Building a RESTful API for an E-Commerce Business Application. |
| **Day 3 – Security and MongoDB Integration** | • Authentication & Authorization in Node.js • Environment configuration with `.env` • Hands-on: Adding Security to e-commerce-backend-server • Secure Password Storage and Token-based Authentication • Handling Protected Routes in Express | • NoSQL vs SQL: When to use which • MongoDB + Mongoose (schema, models, connection) • CRUD Operations with MongoDB using Mongoose | • Creating two versions of the e-commerce-backend-server API (MongoDB & PostgreSQL) |