### Part -01

## **Core JavaScript**

- Introduction
- Syntax
- DataType
- Statement
- Comments
- Let, var, const
- Operators
- Statement
- Conditional Statement
- Loops
- Functions
- Scope
- Hoisting
- Callback, Async, Promise
- Array
- Object
- JSON
- Errors
- RegExp
- Strict mode
- Document Object Model
- JavaScript Events
- Browser Object Model
- Projects

### Node, Express, Mongodb

- Introduction
- Node Modules
- Npm, yarn interface with package management
- Server with node JS
- Routing system
- Express Server
- Express App structure
- Router
- Controllers
- Middlewares
- Errors Handlers
- Template Engine with EJS / Handlebars / Pug
- Image upload ( Multer / Express Uploader / etc )
- Nodemailer for sending Email
- Integrate third party API
- Complete CRUD Apps with EJS / Handlebars / Pug
- Mongodb install & setup

### Part -02

- Mongo Shell with compass
- Collection
- Schema
- Oueries
- Data Relationship
- Mongoose in mongodb
- Models Schema
- Schema Types
- Complete Product Apps with mongodb
- Mongodb cloud server manage
- JSON Web Token ( JWT )
- Session & Cookie Management
- Complete User authentication with profile login
- Complete project (Education Board Result System / Student Data Management )

#### **REST API**

- Introduction
- Postman / Insomnia interface
- API data structure
- Routes
- CRUDS API
- Authenticate API with JWT
- Data fetch from REST API by fetch API, axios, JavaScript AJAX
- Basic API Project with DOM Operation

# Modern JavaScript with ES5 - ES6+

- Introduction
- Pillar of OOP
- Object Recap with property & methods
- Constructor function with property & methods
- Accessors
- Prototypes
- Iterables
- Sets
- Maps
- Class
- Bbject
- Property & methods
- constructor
- Static methods
- Inheritance with Extends
- Magic methods
- Create a crud with ES6 + class based javascript
- Webpack & Babel environment setup like React JS
- Complete Projects with Webpack & Babel

