

Lectures	Curriculum	Description	Resource
Lecture 1	Introduction to Backend	Explanation of FSD Architecture	
Lecture 2	Node JS	Setup of development env. HTTP Module, Server using Http	
Lecture 3	Express JS	Introduction to Express.js Sever using express, GET/POST Request Named and Default export in Backend	
Lecture 4	Middlewares	Middlewares Intro, implement examples	
Lecture 5	Authentiaction- Bcrypt	Authentication and Authorization Intro, Bcrypt Intro, installation	
	Assignment	Encryption using Comparison using bcrypt, Basic Login-Reg Implementation	
Lecture 6	Authorization- JWT n Session Cookies	JWT Tokens and Session Cookies Intro, generate Tokens	
Lecture 7	JWT Tokens	Generate and verify tokens, grant access to pages once token is verified	
Lecture 8	Tokens and Refresh Token	Invalidating Tokens, Refresh Tokens	
Lecture 9	Database Fundamentals	SQL vs NoSQL	
Lecture 10	Mongo DB	MongoDB Intro (Installation, all basic methods for CRUD)	
Lecture 11	Mongo DB	Practice Mongo Queries on powershell	
Lecture 12	BED - DB Integration	Integrate with Mongoose, Schema and Models	
	Assignment	Build basic blog Application to perform CRUD Operations	
Lecture 13	WebSockets	Real-time applications with WebSockets	
Lecture 14	Multer	File uploads with Multer	
	Assignment	Build a Form to allow user to upload their profile picture and resume	
Lecture 15	Node JS	Implement pagination in the backend	
Lecture 16	Integration	FED + BED Integration	

Assignment		In E-commerce Website, add functionality to register the users and store in DB, make an admin to remove and add more users to the registered users list, Products in the cart after checkout, all products..etc
Lecture 17	Node JS Events	Events Module, The EventEmitter Object
Lecture 18	Socket IO	Chat App Introduction, Socket IO Understanding Instaling libraries
Lecture 19	Chat- Application using socket IO	Emitting messages functionality, defining middlewares to get the signal from within of the server
Lecture 20	Chat- Application using socket IO	Receiving messages functionality, defining middlewares to get the signal from client
Assignment		Build a realtime chat application to talk to a friend
Lecture 21	Node JS- File System	Understanding FS Module, Read Files Methods
Lecture 22	Node JS- File System	Methods to create a file
Lecture 23	Node JS- File System	Updating FS Methods
Lecture 24	Node JS- File System	Ways to Delete a File using FS, Renaming the files
Assignment		Implement FS module to generate a file while working on a certain project
Lecture 25	Node JS- Email	The Nodemailer Module, Send an Email, Multiple Receivers
Lecture 26	Final Project work	The Nodemailer Module, Send an Email, Multiple Receivers
Lecture 27 - 32	Final Project work	Work on a fullstack project based on student's personal idea