DATE		TOPICS	PROJECT / ASSIGNMENT	
		Backend - Node JS		
May 9 2024	**Week 1**	Introduction to Back-End - Request-Response Model / Client Server Architecture. Installation, REPL / CLI. Global Variables - (__ dirname , __filename, require, Module, Process, Console, setInterval). Thread, The Event Loop. & The Thread Pool. Module System - Importing, Exporting & Types. Built in / Core Modules - (FS). Blocking & Non-Blocking. File System - Synchronous. File System - Asynchronous.		
May 10 2024		Built in / Core Modules II - (HTTP). Creating A Web Server. Routing. Local Modules. NPM & 3rd Party Modules. Node_Modules, Package.JSON & PackageLock.JSON. Packages - Types of Packages & Installs.		
May 16 2024	**Week 2**	Intro To Express. Express Web Server. HTTP Methods. GET requests. Routing in Express. POST Requests.		
May 17 2024		Dynamic Web Pages. URL Parameters. Templating - Regular Templating. Template Engines / Server Side Rendering (HandleBars / EJS / Mustache). Partials. Passing Variables. Helper Functions: if / else, each. Using Multiple Layouts		
May 23 2024	**Week 3**	Static Rendering. * * * * Corporate Website Project * * * *		
May 24 2024		Chaining Routes MiddleWare - local & 3rd Party Routers FileStructure / MVC Architecture & Refactoring Environment Variables		
May 30 2024	**Week 4**	MongoDB - intro & installation. CRUD in MongoDB. MongoDB Compass. MonogoDB Atlas.		
May 31 2024		Mongoose. Schemas & Models. CRUD in Mongoose. * * * * T O-D O-L I S T P R O J E C T * * * *		
Jun 6 2024	**Week 5**	Data Modeling & Advanced Mongoose: Advanced Schemas (required, maxLength / minLength, lowercase, unique, default, enum, validate). Mongoose Hooks, Methods & Statics. Useful methods : limit(), sort(), populate(), countDocuments(), skip(), select() Advanced Features I : Uploading Files * * * * B L O G P R O J E C T * * * * / * * * * C L A S S I F I E D S P R O J E C T * * * *		
Jun 7 2024		Authentication, Authorization & Security. Advanced Features II : Sending Emails & Text Messages. Error Handling & Debugging - Try / Catch / finally / throw, Custom Error Handler Function + Mongoose Validation , .then() .catch(), NodeJSDebugger. Pagination.		
Jun 13 2024	**Week 6**	Authentication ...CONTD		
Jun 14 2024		Advanced Features III : Payment Integration. API & RESTful API Design. PUT / PATCH requests. DELETE requests.		
Jun 20 2024	**Week 7**	Git & Deployment. Writing API Documentation. Recap. * * * * FINAL PROJECT * * * * (INVOICE / E-Commerce / Social Network / Video Streaming).		
Jun 21 2024		* * * * FINAL PROJECT * * * * CONTD, **EXAMINATION**		