Online Training
on Back End Web Development 101
(with Self Mastery and Employment Sprint Course)

Training Calendar

Training Schedule	
No. of Training Days	14
Training Dates and Time	September 26, 2022 – October 13, 2022

Day	Date	Topic	Sub-topic	Trainer
1 and 2	September 26 - 27, 2022 Monday and Tuesday	Orientation		**Bayan Academy**
		Introduction to Backend Web Development	What is backend web development?	**Aldrin B. Tamayo**
			Overview	
		Terminal	What is Terminal and why do we need to know its commands?	
			Terminal installation guide	
			The Basics of Terminal commands	
		Node JS	Introduction to Node JS	**Aldrin B. Tamayo**
			What is Node used for?	
			Node JS installation guide	
			The Node JS REPL	
			Running Node JS files	
			Process and Argv	
			File System Module	
3	September 28, 2022 Wednesday	Modules and NPM	Modules.exports	**Aldrin B. Tamayo**
			Requiring a directory	
			NPM	
			Installing Packages	
			Adding Global Packages	
			Package.json	
			Installing all dependencies for a project	
		Creating Servers using Express	Introduction to Express JS	**Aldrin B. Tamayo**
			First Express App	
			The Request and Response Objects	
			Basics of Express Routing	
			Query Strings	
			Auto-restart with Nodemon	

4 and 5	September 29 - 30, 2022 Thursday and Friday	Creating Dynamic HTML with templating	What is templating?	**Aldrin B. Tamayo**
			Configuring Express for EJS	
			Setting The Views Directory	
			EJS Interpolation Syntax	
			Passing Data to templates	
			Subreddit Template Demo	
			Conditionals in EJS	
			Loops in EJS	
			More complex Subreddit Demo	
			Serving Static assets in Express	
			Bootstrap and Express	
			EJS and Partials	
		RESTful Routes	Get vs Post Requests	**Aldrin B. Tamayo**
			Defining Express Post Routes	
			Parsing the Request body	
			Intro to REST	
			RESTful comments overview	
			RESTful comments index	
			RESTful comments new	
			Express redirects	
			RESTful comments show	
			The UUID package	
			RESTful comments update	
			Express Method Override	
			RESTful comments delete	
6	October 3, 2022 Monday	MongoDB	Introduction to Databases	**Aldrin B. Tamayo**
			SQL vs NoSQL Databases	
			Why do we need to know MongoDB?	
			MongoDB installation guide	
			The Mongo Shell	
			What BSON?	
			Create using Mongo	
			Read using Mongo	
			Update using Mongo	
			Delete using Mongo	
			Additional Mongo Operators	
7	October 4, 2022 Tuesday	Connecting to Mongo with Mongoose	What is Mongoose?	**Aldrin B. Tamayo**
			Connecting Mongoose to Mongo	
			Mongoose Model	
			Create Many	
			Read using Mongoose	

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			Update using Mongoose	
			Deleting using Mongoose	
			Mongoose Schema Validation	
			Additional Schema Constraints	
			Validating Mongoose Updates	
			Mongoose Validation Errors	
			Model Instance Methods	
			Adding Model Static Methods	
			Mongoose Virtuals	
			Defining Mongoose Middleware	
8	October 5, 2022 Wednesday	Mongoose with Express	Basic Setup of Express and Mongoose	**Aldrin B. Tamayo**
			Our Model	
			Products Index	
			Products Details	
			Creating Products	
			Updating Products	
			Tangent on Category Selector	
			Deleting Products	
			Filtering by Category	
		Middleware	Introduction to Express Middleware	**Aldrin B. Tamayo**
			Using Morgan: Logger Middleware	
			Defining our own Middleware	
			Middleware Practice	
			Setting up a 404 route	
			Password Middleware demo	
			Protecting Specific routes	
9 and 10	October 6 - 7, 2022 Thursday and Friday	Handling Errors in Express Apps	Express' built-in error handler	**Aldrin B. Tamayo**
			Defining custom error handlers	
			Our custom error class	
			Handling Async Errors	
			Handling more Async errors	
			Defining an Async utility	
			Differentiating Mongoose errors	
		Data Relationship with Mongo	Introduction to Mongo Relationships	**Aldrin B. Tamayo**
			SQL Relationships overview	
			One to Few	
			One to Many	
			Mongoose Populate	
			One to Millions	
			Mongo Shema Design	
11			Defining Product Models	

	Date	Topic	Subtopic	Trainer
	October 10, 2022 Monday	Mongo Relationships with Express	Note about farm model	**Aldrin B. Tamayo**
			Create new farms	
			Farms show page	
			Creating products for a farm	
			Finishing touches	
			Deletion Mongoose Middleware	
		Express Router & Cookies	Introduction to Express router	**Aldrin B. Tamayo**
			Express router and Middleware	
			Introduction to Cookies	
			Sending Cookies	
			Cookie Parser Middleware	
			Signing Cookies	
12	October 11, 2022 Tuesday	Express Session and Flash	Introduction to Sessions	**Aldrin B. Tamayo**
			Express Session	
			Introduction to Flash	
			Res. Locals and Flash	
		Authentication	Authentication vs Authorization	**Aldrin B. Tamayo**
			How to not store passwords	
			Cryptographic Hashing Functions	
			Password salts	
			Introduction to Bcrypt	
			Auth Demo: Setup	
			Auth Demo: Registering	
			Auth Demo: Login	
			Auth Demo: Staying logged in with session	
			Auth Demo: Logout	
			Auth Demo: Require Login Middleware	
			Auth Demo: Refactoring to model methods	
13	October 12, 2022	SELF-MASTERY/ EMPLOYMENT SPRINT		Bayan Academy
14	October 13, 2022	FIN-ED		BPI

Prepared by	Approved by
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For concerns and questions, please contact:

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OPLAN Trabaho
One Plan for Labor Alignment and Networking

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<td>This training is part of Bayan Academy's **One Plan for Labor Alignment and Networking or OPLAN Trabaho** campaign created to address the needs of unemployed and outplaced workers brought about by Covid-19.</td>
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