

Backend Development

1	Introduction & Project Overview	
	<p>PHP & MySQL Crash Course</p> <p>PHP</p> <ul style="list-style-type: none">• Array• Loop• Object• Function <p>MySQL</p> <ul style="list-style-type: none">• Database Operations• Table Operations• Data Manipulation• Conditions• Comparison Operators• Sorting• Functions• Joining Tables	
2	<p>Designing The Project Database</p> <ul style="list-style-type: none">• Type Of Table Relationship.<ul style="list-style-type: none">◦ One-to-One (1:1)◦ One-to-Many (1:N)◦ Many-to-One (N:1)◦ Many-to-Many (N:M)• Creating ER Diagram	
	<p>Converting Design in Laravel migration</p> <ul style="list-style-type: none">• Migration<ul style="list-style-type: none">◦ Generating Migrations◦ Migration Structure◦ Running Migrations◦ Tables◦ Columns◦ Indexes◦ Events• Seeder• Factories	
	<p>Route, Middleware & blade</p> <ul style="list-style-type: none">• Route<ul style="list-style-type: none">◦ Basic Routing◦ Route Parameters◦ Named Routes◦ Route Groups◦ Route Model Binding◦ Fallback Routes◦ Rate Limiting◦ Form Method Spoofing◦ Accessing the Current Route◦ Cross-Origin Resource Sharing (CORS)◦ Route Caching• Middleware<ul style="list-style-type: none">◦ Global Middleware◦ Assigning Middleware to Routes◦ Middleware Groups◦ Sorting Middleware	

	<ul style="list-style-type: none"> ○ Middleware Parameters ○ Terminable Middleware <ul style="list-style-type: none"> ● Blade Templates <ul style="list-style-type: none"> ○ Displaying Data ○ Blade Directives ○ Components ○ Building Layouts ○ Forms ○ Stacks ○ Service Injection ○ Rendering Inline Blade Templates ○ Rendering Blade Fragments ○ Extending Blade 	
	<p>Controllers, Requests, Responses, URL Generation, Session, Validation</p> <ul style="list-style-type: none"> ● Controllers <ul style="list-style-type: none"> ○ Basic Controllers ○ Controller Middleware ○ Resource Controllers ○ Dependency Injection and Controllers ● Requests <ul style="list-style-type: none"> ○ Interacting With The Request ○ Input ○ Files ● Responses <ul style="list-style-type: none"> ● Creating Responses ● Redirects ● Other Response Types ● URL Generation <ul style="list-style-type: none"> ○ The Basics ○ URLs for Named Routes ○ URLs for Controller Actions ● Session <ul style="list-style-type: none"> ○ Retrieving Data ○ Storing Data ○ Flash Data ○ Deleting Data ○ Regenerating the Session ID ● Validation <ul style="list-style-type: none"> ○ Form Request Validation ○ Manually Creating Validators ○ Working With Validated Input ○ Working With Error Messages ○ Available Validation Rules ○ Conditionally Adding Rules ○ Validating Arrays ○ Validating Files ○ Validating Passwords 	

	<ul style="list-style-type: none"> ○ Custom Validation Rules 	
3	<p>Model Relationship, Eloquent ORM</p> <p>Eloquent</p> <ul style="list-style-type: none"> ● Relationships <ul style="list-style-type: none"> ○ One to One ○ One to Many ○ One to Many (Inverse) / Belongs To ○ Has One of Many ○ Has One Through ○ Has Many Through ○ Many to Many Relationships ○ Polymorphic Relationships ● Serialization ● Mutators & Casting ● Collections ● Querying Relations <ul style="list-style-type: none"> ○ Relationship Methods vs. Dynamic Properties ○ Querying Relationship Existence ○ Querying Relationship Absence ○ Querying Morph To Relationships ● Aggregating Related Models <ul style="list-style-type: none"> ○ Counting Related Models ○ Other Aggregate Functions ○ Counting Related Models on Morph To Relationships ● Eager Loading <ul style="list-style-type: none"> ○ Constraining Eager Loads ○ Lazy Eager Loading ○ Preventing Lazy Loading ● Inserting and Updating Related Models <ul style="list-style-type: none"> ○ The save Method ○ The create Method ○ Belongs To Relationships ○ Many to Many Relationships ● Touching Parent Timestamps 	
4	<p>& Query Builder</p> <ul style="list-style-type: none"> ● Running Database Queries <ul style="list-style-type: none"> ○ Chunking Results ○ Streaming Results Lazily ○ Aggregates ● Select Statements ● Raw Expressions ● Joins ● Unions ● Basic Where Clauses <ul style="list-style-type: none"> ○ Where Clauses ○ Or Where Clauses ○ Where Not Clauses 	

- JSON Where Clauses
 - Additional Where Clauses
 - Logical Grouping
- Advanced Where Clauses
 - Where Exists Clauses
 - Subquery Where Clauses
 - Full Text Where Clauses
- Ordering, Grouping, Limit and Offset
 - Ordering
 - Grouping
 - Limit and Offset
- Conditional Clauses
- Insert Statements
 - Upserts
- Update Statements
 - Updating JSON Columns
 - Increment and Decrement
- Delete Statements
- Pessimistic Locking
- Debugging

5 Authentication & Authorization

Authentication

- Introduction
 - Starter Kits
 - Database Considerations
 - Ecosystem Overview
- Authentication Quickstart
 - Install a Starter Kit
 - Retrieving the Authenticated User
 - Protecting Routes
 - Login Throttling
- Manually Authenticating Users
 - Remembering Users
 - Other Authentication Methods
- HTTP Basic Authentication
 - Stateless HTTP Basic Authentication
- Logging Out
 - Invalidating Sessions on Other Devices
- Password Confirmation
 - Configuration
 - Routing
 - Protecting Routes
- Adding Custom Guards
 - Closure Request Guards
- Adding Custom User Providers
 - The User Provider Contract
 - The Authenticatable Contract
- Social Authentication
- Events

Authorization

- Introduction
- Gates

	<ul style="list-style-type: none"> ○ Writing Gates ○ Authorizing Actions ○ Gate Responses ○ Intercepting Gate Checks ○ Inline Authorization ● Creating Policies <ul style="list-style-type: none"> ○ Generating Policies ○ Registering Policies ● Writing Policies <ul style="list-style-type: none"> ○ Policy Methods ○ Policy Responses ○ Methods Without Models ○ Guest Users ○ Policy Filters ● Authorizing Actions Using Policies <ul style="list-style-type: none"> ○ Via the User Model ○ Via Controller Helpers ○ Via Middleware ○ Via Blade Templates ○ Supplying Additional Context 	
6	Helpers	
7	Localization	
	Cache	
8	Mail	
9	Events	
10	Notifications	
11	Artisan Console	
12	HTTP Client	
13	Queues	
14	Task Scheduling	
15	Breeze : Official Package	
21	Socialite : Official Package	
23	Image::crop : Unofficial	
24	Laravel-permission : Unofficial	
25	Payment Gateway - SSLCommerce PHP Reusable Traits & Repository Pattern	
26 - 36	Project - Ecommerce	
	Refractor The Entire Project to Implement the Repository Pattern	