Angular- Curriculum		
SNo.	Coverage	Details
1	Getting Started	Course Introduction What is Angular? Angular Versus Angular 2 Versus Latest Angular Version Setting Up the Project and First Application Editing the First Application Course Structure Getting the Most Out of the Course What is TypeScript? Setting Up a Basic Project Using Bootstrap for Styling
2	The Basics	Module Introduction Loading and Starting an Angular Application Important Components Creating a New Component Understanding the Role of AppModule and Component Declaration Using Custom Components Creating Components with the Command Line Input (CLI) and Nesting Components Working with Component Templates Working with Component Styles Understanding the Component Selector Assignment Solution What is Data Binding? String Interpolation Property Binding Property Binding Versus String Interpolation Event Binding Passing and Using Data with Event Binding Two-Way Data Binding Combining All Forms of Data Binding Assignment Solution Understanding Directives Using the ngIf Directive to Display Data Conditionally Enhancing the ngIf Directive with an Else Condition Styling Elements Dynamically with the ngStyle Directive Applying CSS Classes Dynamically with the ngClass Directive Displaying Lists Using the ngFor Directive Assignment Solution Getting the Index When Using the ngFor Directive
3	Course Project - the Basics	Project Introduction Planning the Application Setting Up the Application Creating Components Using Components Adding a Navigation Bar Creating a "Recipe" Model Adding Content to the Recipes' Components Displaying a List of Recipes Using the ngFor Directive Displaying Recipe Details Working on the ShoppingList Component Creating an "Ingredients" Model Creating and Displaying the Shopping List Adding a Shopping List Edit Section Wrapping Up and Next Steps
4	Debugging	Understanding Angular Error Messages Debugging Code in the Browser Using Source Maps Using the Augury Plug-In for Diving into Angular Applications

5	Components and Databinding Deep Dive	Module Introduction Splitting Applications into Components Property and Event Binding Overview Binding to Custom Properties Assigning an Alias to Custom Properties Binding to Custom Events Assigning an Alias to Custom Events Custom Property and Event Binding Summary Understanding View Encapsulation More on View Encapsulation Using Local References in Templates Getting Access to the Template and Document Object Model (DOM) with the @ViewChild Component Projecting Content into Components with ng-content Understanding the Component Lifecycle Seeing Lifecycle Hooks in Action Lifecycle Hooks and Template Access Getting Access to ng-content with the @ContentChild Parameter Decorator
6	Course Project - Components and Data Binding	Introduction Adding Navigation with Event Binding and the ngIf Directive Passing Recipe Data with Property Binding Passing Data with Event and Property Binding (Combined) Allowing the User to Add Ingredients to the Shopping List
7	Directives Deep Dive	ngFor and ngIf Directives Recap ngClass and ngStyle Recap Creating a Basic Attribute Directive Using the Renderer to Build a Better Attribute Directive Using the @HostListener() Decorator to Listen to Host Events Using the @HostBinding() Decorator to Bind to Host Properties Binding to Directive Properties What Happens Behind the Scenes on Structural Directives Building a Structural Directive Understanding the ngSwitch Directive
8	Course Project – Directives	Building and Using a Dropdown Directive
9	Using Services and Dependency Injection	Module Introduction Why would You Need Services? Creating a Logging Service Injecting the Logging Service into Components Creating a Data Service Understanding the Hierarchical Injector How Many Instances of Service are Required? Injecting Services into Other Services Using Services for Cross-component Communication Assignment Solution
10	Course Project - Services and Dependency Injection	Introduction Setting Up the Services Managing Recipes in a Recipe Service Using a Service for Cross-Component Communication Adding the Shopping List Service Using Services for Pushing Data from A to B Adding Ingredients to Recipes Passing Ingredients from Recipes to the Shopping List (Through a Service)

11	Changing Pages with Routing	Module Introduction Why do We Need a Router? Setting Up and Loading Routes Navigating with Router Links Understanding Navigation Paths Styling Active Router Links Navigating Programmatically Using Relative Paths in Programmatic Navigation Passing Parameters to Routes Fetching Route Parameters Fetching Route Parameters Reactively An Important Note about Route Observables Passing Query Parameters and Fragments Retrieving Query Parameters and Fragments Some Common Gotchas Setting Up Child (Nested) Routes Using Query Parameters – Practice Configuring the Handling of Query Parameters Redirecting and Wildcard Routes Outsourcing the Route Configuration An Introduction to Guards Protecting Routes with the canActivate() Method Protecting Child (Nested) Routes Using the canActivateChild() Method Using a Fake Authentication Service Controlling Navigation with the canDeactivate() Method Passing Static Data to a Route Resolving Dynamic Data with the Resolve Guard Understanding Location Strategies
12	Course Project – Routing	Planning the General Structure Setting Up Routes Adding Navigation to the Application Marking Active Routes Fixing Page Reload Issues Child Routes: Challenge Adding Child Routing Together Configuring Route Parameters Passing Dynamic Parameters to Links Styling Active Recipe Items Adding Editing Routes Retrieving Route Parameters Programmatic Navigation to the Edit Page One Note about Route Observables
13	Understanding Observables	Module Introduction Analyzing Angular Observables Getting Closer to the Core of Observables Building a Custom Observable Errors and Completion Observables Understanding Operators Subjects
14	Course Project – Observables	Improving the Reactive Service with Observables (Subjects)

15	Handling Forms in Angular Apps	Handling Forms in Angular Apps Module Introduction Why do We Need Angular's Help? Template-Driven (TD) Versus Reactive Approach Creating an Example Form Template-Driven (TD): Creating Forms and Registering the Controls Template-Driven (TD): Submitting and Using a Form Template-Driven (TD): Understanding Form State Template-Driven (TD): Accessing a Form Using the @ViewChild Decorator Template-Driven (TD): Adding Validation to Check User Input Template-Driven (TD): Using the Form State Template-Driven (TD): Displaying Validation Error Messages Template-Driven (TD): Set Default Values Using the ngModel Property Binding Template-Driven (TD): Using ngModel with Two-Way Binding Template-Driven (TD): Grouping Form Controls Template-Driven (TD): Handling Radio Buttons Template-Driven (TD): Setting and Patching Form Values Template-Driven (TD): Using Form Data Template-Driven (TD): Resetting Forms Introduction to the Reactive Approach Reactive: Form Template Setup Reactive: Creating a Form in Code Reactive: Syncing HTML and Form Reactive: Submitting a Form Reactive: Adding Validation Reactive: Getting Access to Controls Reactive: Grouping Controls Reactive: Arrays of FormControl (FormArray) Reactive: Creating Custom Validators Reactive: Using Error Codes Reactive: Creating a Custom Asynchronous Validator Reactive: Reacting to Status or Value Changes Reactive: Setting and Patching Values Assignment Solution
16	Course Project – Forms	Introduction TD: Adding the Shopping List Form Adding Validation to a Form Allowing Selection of Items in a List Loading Shopping List Items into a Form Updating Existing Items Resetting a Form Allowing the User to Clear (Cancel) a Form Allowing the Deletion of Shopping List Items Creating a Template for the (Reactive) Recipe Edit Form Creating a Form to Edit Recipes Syncing HTML with a Form Adding Ingredient Controls to a FormArray Adding New Ingredient Controls Validating User Input Submitting the Recipe Edit Form Adding the Delete and Clear (Cancel) Functionality Redirecting a User (After Deleting a Recipe) Adding an Image Preview Providing the Recipe Service Correctly Deleting Ingredients and Some Finishing Touches

17	Using Pipes to Transform the Output	Introduction and Why Pipes are Useful Using Pipes Parametrizing Pipes Learning More About Pipes Chaining Multiple Pipes Creating a Custom Pipe Parametrizing a Custom Pipe Example: Creating a Filter Pipe Pure and Impure Pipes (or: How to "Fix" the Filter Pipe?) Understanding the "Async" Pipe
18	Making HTTP Requests	A New Integrated Development Environment (IDE) Module Introduction How does Angular Interact with Backends? Anatomy of an HTTP Request Setting Up Backend (Firebase) Sending a POST Request Sending a GET Request Using Reactive Extensions for JavaScript (RxJS) Operators to Transform Response Data Using Types with HttpClient Outputting Posts Showing a Loading Indicator Using a Service for HTTP Requests Working of Services and Components Sending a DELETE Request Handling Errors Using Subjects for Error Handling Using the catchError Operator Error Handling and User Experience (UX) Setting Headers Adding Query Parameters Observing Different Types of Responses Changing the Response Body Type Introducing Interceptors Manipulating Request Objects Response Interceptors Multiple Interceptors
19	Course Project – HTTP	Module Introduction Setting Up Backend (Firebase) Setting Up the Data Storage Service Storing Recipes Fetching Recipes Transforming Response Data Resolving Data before Loading Fixing a Bug with the Resolver

20	Authentication and Route Protection in Angular Apps	Module Introduction Working of Authentication Adding the Authentication Page Switching between Authentication Modes Handling Form Input Preparing the Backend Preparing the Signup Request Sending the Signup Request Adding Loading Spinner and Error Handling Logic Improving Error Handling Sending Login Requests Handling Login Error Creating and Storing the User Data Reflecting the Authentication State in the User Interface (UI) Adding a Token to Outgoing Requests Attaching a Token with an Interceptor Adding Logout Adding Auto-Login Adding Auto-Logout Adding an Authentication Guard
21	Dynamic Components	Module Introduction Adding an Alert Modal Component Understanding the Different Approaches Using the ngIf Directive Preparing Programmatic Creation Creating a Component Programmatically Understanding entryComponents Data Binding and Event Binding
22	Angular Modules and Optimizing Angular Applications	Module Introduction What are Modules? Analyzing the AppModule Class Getting Started with Feature Modules Splitting Modules Correctly Adding Routes to Feature Modules Component Declarations ShoppingList Feature Module Understanding Shared Modules Understanding Core Modules Adding an Authentication Feature Module Understanding Lazy Loading Implementing Lazy Loading More Lazy Loading Preloading Lazy-Loaded Code Modules and Services Loading Services Differently Ahead-of-time (AOT) Compilation
23	Deploying an Angular Application	Module Introduction Deployment Preparations and Important Steps Using Environment Variables Deployment Example: Firebase Hosting

24	Bonus: Working with NgRx in Our Project	Module Introduction What is Application State? What is NgRx? Getting Started with Reducers Adding Logic to the Reducer Understanding and Adding Actions Setting Up the NgRx Store Selecting State Dispatching Actions Multiple Actions Preparing Update and Delete Actions Updating and Deleting Ingredients Expanding State Managing More States Using NgRx Removing Redundant Component State Management First Summary and Cleanup One Root State Setting Up Authentication Reducer and Actions Dispatching Authentication Actions Authentication Finished Important Note on Actions Exploring NgRx Effects Defining the First Effect Effects and Error Handling Logging in through NgRx Effects Managing User Interface (UI) State in NgRx Finishing the Login Effect Preparing Other Authentication Actions Adding Signup Further Authentication Effects Adding Auto-Login with NgRx Adding Auto-Logout Finishing Authentication Effects Using the Store DevTools The Router Store Getting Started with NgRx for Recipes Fetching Recipe Detail Data Fetching Recipes and Using the Resolver Fixing Authentication Redirect Updating, Deleting, and Adding Recipes Storing Recipes Using Effects
25	Bonus: Angular Universal	Module Introduction Adding Angular Universal Adding Angular Universal with NestJS Adding a Server-side Build Workflow Adding a NodeJS Server Pre-rendering an Application on the Server
26	Angular Animations	Introduction Setting Up the Starting Project Animation Triggers and State Switching between States Transitions Advanced Transitions Transition Phases The "Void" State Using Keyframes for Animations Grouping Transitions Using Animation Callbacks

27	Adding Offline Capabilities with Service Workers	Module Introduction Adding Service Workers Caching Assets for Offline Use Caching Dynamic Assets and URLs
28	A Basic Introduction to Unit Testing in Angular Apps	Introduction Why Unit Tests? Analyzing the Testing Setup (as Created by the Command Line Interface (CLI)) Running Tests (with the Command Line Interface (CLI)) Adding a Component and Some Fitting Tests Testing Dependencies: Components and Services Simulating Asynchronous Tasks Using "fakeAsync" and "Tick" Isolated versus Non-isolated Tests
29	Angular as a Platform and Closer Look at the Command Line Interface (CLI)	Module Introduction A Closer Look at the "ng new" Command Integrated Development Environment (IDE) and Project Setup Understanding the Configuration Files Important Command Line Interface (CLI) Commands The "angular.json" File - a Closer Look Angular Schematics - an Introduction The "ng add" Command Using Custom "ng generate" Schematics Updating Projects Using the "ng update" Command Deploying with the "ng deploy" Command Understanding "Differential Loading" Managing Multiple Projects in One Folder Angular Libraries - an Introduction
30	Angular Changes and New Features	First Look at Angular Elements