

## Annexure A: Training Agenda of Angular & .Net Training and Certification Program

Henry Harvin® Angular & .Net Curriculum				
Module No.	Module Name	Sub-Module		
Module 1	Introduction to Angular	<ul> <li>What is Angular?</li> <li>Features of AngularJS and Angular AngularJS (vs) Angular</li> <li>Steps to Setup for Local Development Environment</li> <li>Executing the First Angularjs program using NodeJS and NPM</li> <li>Executing the First Angularjs program using Visual Studio</li> </ul>		
Module 2	Displaying Data using Templates	<ul> <li>About Directives</li> <li>Components Properties and Interpolation</li> <li>Built-In Directive         <ul> <li>ngIF</li> <li>ngFor</li> <li>ngSwitch</li> </ul> </li> <li>Creating a class for data (Model object)</li> <li>Template Expressions</li> <li>Working with Arrays</li> <li>External HTML Template File</li> </ul>		
Module 3	Data Binding	<ul> <li>Binding properties and Interpolation</li> <li>One-way Binding / Property Binding</li> <li>Event Binding</li> <li>Two-way Binding</li> <li>Two-way binding with NgModel</li> <li>Attribute Binding</li> <li>Style and Class Binding</li> </ul>		
Module 4	Styles Binding In Component	<ul> <li>Style and Class Bindings</li> <li>Built-In Directives - NgStyle &amp; NgClass</li> <li>Using Component Styles</li> <li>Special selectors</li> <li>Loading Styles into Component</li> </ul>		
Module 5	Advanced Component Features	<ul> <li>Revising what components are?</li> <li>Components Lifecycle Hooks</li> <li>Dynamic components using ngComponentOutlet</li> </ul>		



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Module 6	Template Driven Forms	<ul> <li>Introduction</li> <li>Create the component that controls the form</li> <li>Create a template with the initial form layout</li> <li>Bind data properties to each form input control with the ngModel two-way data binding syntax</li> <li>Add the name attribute to each form input control</li> <li>Add custom CSS to provide visual feedback</li> <li>Show and hide validation error messages</li> <li>Handle form submission with ngSubmit</li> <li>Disable the form's submit button until the form is valid</li> <li>Resetting the form</li> </ul>
Module 7	Reactive Forms	<ul> <li>Reactive Forms Introduction</li> <li>More Form Controls</li> <li>Form Control Properties</li> <li>SetValue and patch value</li> <li>Validating Form Elements</li> <li>Submitting and Resetting forms</li> <li>Observing and Reacting to Form Changes</li> <li>Using FormBuilder</li> </ul>
Module 8	Pipes	<ul> <li>Built-in Pipes</li> <li>Using parameters and chaining Pipes</li> <li>Custom Pipes</li> <li>Parameterized Custom Pipe</li> <li>Pipes and Change Detection</li> <li>Pure and Impure pipe</li> </ul>
Module 9	Custom Directive	<ul> <li>Custom Attribute Directive</li> <li>Using HostListener</li> <li>Using HostBinding</li> <li>Custom Validator Directive</li> </ul>
Module 10	Dependency Injection	<ul> <li>Understanding Dependency Injection</li> <li>Understanding DI in Angular Framework</li> <li>ReflectiveInjector</li> <li>Exploring Provider</li> <li>Types of Tokens</li> <li>Types of Dependencies</li> <li>Configuring DI using Providers</li> <li>Implementing DI in Angular</li> </ul>
Module 11	Services In Angular	<ul> <li>Building and Injection</li> <li>Services and Dependency Injection</li> <li>Custom Services</li> <li>Service using another Service</li> <li>Built-In \$http Service</li> </ul>



		Promises and Observables
		Get Request
		<ul> <li>Configuring and Navigating</li> </ul>
		<ul> <li>Parameterized routes</li> </ul>
Module 12  Routing  Routing Strategies  Understanding Route Parameters  Router Hooks  AppModule as Root Module  Feature modules  Lazy Loading a Module  Shared Module  Typescript concepts  JavaScript concepts  JavaScript concepts  Reference & Value Types  Nullable Types  Constants & Fields  Properties, Methods, Events & Del  Generics  Interfaces  Working with Chars, Strings & Ter  Enums, Arrays.  Assembly Loading & Reflection  Serialization  Asynchronous programming  The Idea Behind Exception  Exceptions & Errors  Types of Exception  Control Flow in Exceptions  Use of try, catch, finally, throw, and Handling.  In-built and User Defined Exception  Collection Classes  List, Dictionary, Hashtable  IEnumerable, IList, IQueryable  Thread Basics  Foreground, Background Threads	<ul> <li>Nested (or) Child Routes</li> </ul>	
	<ul> <li>Routing Strategies</li> </ul>	
	odule 12  Routing  Routing  Routing  Routing  Routing  Routing  Routing  Routing  Routing  Router Hooks  AppModule as Root Module  Feature modules  Lazy Loading a Module  Feature modules  Lazy Loading a Module  Shared Module  Typescript concepts  JavaScript concepts  Lazy Loading a Module  Primitive Types  Reference & Value Types  Nullable Types  Constants & Fields  Properties, Methods, Events & Delegates.  Generics  Interfaces  Working with Chars, Strings & Text  Enums, Arrays.  Assembly Loading & Reflection  Serialization  Asynchronous programming  The Idea Behind Exception  Exceptions & Errors  Types of Exception  Control Flow in Exceptions  Use of try, catch, finally, throw, and throws Handling.  In-built and User Defined Exceptions  Collection Classes  List, Dictionary, Hashtable  Enumerable, IList, IQueryable  Thread Basics  Foreground, Background Threads	<ul> <li>Understanding Route Parameters</li> </ul>
		Router Hooks
		<ul> <li>AppModule as Root Module</li> </ul>
		<ul> <li>Feature modules</li> </ul>
Modulo 12	Angular Modulos	<ul> <li>Lazy Loading a Module</li> </ul>
Middule 13	Angular Modules	<ul> <li>Shared Module</li> </ul>
		<ul> <li>Typescript concepts</li> </ul>
		<ul> <li>JavaScript concepts</li> </ul>
		CLR Execution Model
		Primitive Types
		<ul> <li>Reference &amp; Value Types</li> </ul>
		Nullable Types
		<ul> <li>Constants &amp; Fields</li> </ul>
		<ul> <li>Properties, Methods, Events &amp; Delegates.</li> </ul>
<b>Module 14</b>	C# Language	<ul> <li>Generics</li> </ul>
		<ul> <li>Interfaces</li> </ul>
		<ul> <li>Working with Chars, Strings &amp; Text</li> </ul>
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		<ul> <li>Asynchronous programming</li> </ul>
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Module 15	1 <u>-</u> 1	71 1
		• Use of try, catch, finally, throw, and throws in Exception
		<u>e</u>
	Collections	
Module 16		
		··
		Thread Basics
Module 17	Threading	



Module 18	New features from Angular 17/18	<ul> <li>Zoneless Applications</li> <li>Route Redirects with Functions</li> <li>TypeScript 4.7 Support</li> <li>Latest ng-template API</li> <li>Upgraded Debugging Tools</li> <li>Hydration Support in CDK and Material</li> </ul>	
	Aliguiai 17/16	<ul> <li>Unified Control State Change Events</li> <li>Coalescing by Default</li> </ul>	

Note: As per TNA (Training need analysis), the curriculum will also be customized (If Required)