

Full Stack Microsoft.Net TOC

Daywise Schedule	Topics	Sub Topics	Hourly Schedule
Day 1,2,3	Cloud and Azure Fundamentals	Virtualization Basics, RDB Cloud Fundamentals (SaaS, Paas, IaaS)	4
		Storing (S3 Buckets, RDS), Azure CDN Deployment	4
		Storing (S3 Buckets, RDS), Azure CDN Deployment	4
		Authentication, IAM, Simple Azure Notification Hubs	4
		Azure Queue Service, and Azure App Service, Implement CI/CD	4
		Networking and Elasticity using Azure DNS	4
		Auto Scaling Inbound Flows, and Load Balancing	
		Cloud Formation, and the Azure Command Line Interface (CLI)	
Day 4,5	SQL Server Development	Where Clause, Joins	4
		Aggregate Functions, User Defined Functions, stored procedures	4
		Index, Data Definition Language	4
		Data Manipulation language, Constraints	2
		Reference integrity, ACID	2
Day 6,7,8	Building Responsive and Interactive Web Pages	HTML5, CSS3	4
		Bootstrap, Building Responsive	4
		JavaScript fundamentals; Paper Based Layouts using Flexbox;	4
		Modern JavaScript (ES6)	4
		DOM Manipulation	4
		JSON and Restful APIs (Async& Await)	4
		Unit Testing using Mocha and Chai, SCM using Gitlab	
Day 9,10,11	Fundamentals of Programming Language .NET	Basic Programming Concepts C#	4
		Variables, Conditions, Functions, Strings, File Handling, loops, Arrays,	4
		Classes, Abstraction, Inheritance	4
		Polymorphism, Array list	4
		MS Visual Studio, Errors and Exception handling	4
		Agile Methodology	4

Day 12,13,14	Advanced C# & OO Programming	SDLC, Design and Prototyping	4
		Software Testing Concepts	
		Junit, Integration Testing,	4
		Best Practices with Git and Engineering Discipline Version Control, Git	4
		Design Patterns	8
		RDBMS fundamentals	4
Day 15,16,17,18,19	Data Structures and Algorithms	Algorithms Analysis	8
		Searching, Sorting,	8
		Graphs, Trees	8
		Stacks, Queues	8
		Hashtable, Collections	8
Day 20,21,22,23,24,25	Building RESTful Microservices using ASP.NET Core	Introduction to NoSQL – MongoDB;	8
		Building Web APIs using ASP.NET Core Life Cycle;	8
		API Management and Microservices	4
		Messaging, Inter-process communication	4
		Swagger documentation	4
		Automated testing of ASP.NET Core Apps and API Testing	4
		Hand-On Project	16
	Angular Introduction	ü Introduction to Angular	4
		ü JavaScript Introduction	
		ü TypeScript Introduction	
		ü NPM Package Introduction	
		ü Difference between Angular 2.0 vs 7.0	
		ü Angular CLI and Troubleshooting	
		ü Setup Node Js with Angular	
		ü What is Bootstrap	
		ü Create Demo App Using (Visual Studio Code or VS)	
	Modules and Components	ü What is Component in Angular js	4
		ü What is Module in Angular js	
		ü Create and Start Component	
		ü Why Components are important.	
		ü How we create a component	
		ü Create Component using CLI	

Day 26,27		ü What is nesting Component	
		ü What is Component Template	
		ü Component Styles and Selectors	
	Data Binding in Angular	ü What is Data binding	4
		ü Splitting Application into Component	
		ü String Interpolation	
		ü What is Property Binding	
		ü Difference between Property Binding and String Interpolation	
		ü Binding with Custom Events.	2
		ü What are Binding Properties and Events	
		ü Two Way binding	
		ü Combine Forms with Data binding	
		ü Custom Properties	
		ü What is Encapsulation	2
		ü How to Use Local Reference in Templates	
		ü Template Access and DOM	
		ü Component Lifecycle	
		ü What is Hooks in Angular js	
		ü Access Template with Hooks	
	Directive in Angular JS	ü What is Directives	3
		ü Using Output Data Conditionally	
		ü What is ng if and else condition	
		ü Output List	
		ü Styling Element with ngStyle	3
		ü How to apply css class dynamically with angular js	
		ü How to Create Basic Attribute Directive	
		ü What is Renderer	
		ü What is HostBinding and HostListener	
		ü Directive Properties	
		ü ngSwitch	
		ü What is Dependency Injection	
		ü What is Services	
		ü Logging Service and Injection	

Day 28,29	Dependency Inject in Angular Js	<ul style="list-style-type: none"> ü Create Data Service ü Instance of Services ü Insert Service into Services ü How to use service in Cross Component What is Hierarchical Injector 	3
	Routing	<ul style="list-style-type: none"> ü What is Routing? ü Loading of Routes ü Navigation and it path ü Styling of Router Links ü Relative Path Navigation ü De ne parameter in Routing ü Fetch Routing Parameter ü Observables ü Passing & Retrieving Parameters & Fragments ü Nested RoutingCon g Query Parameters ü Redirection Routes ü Route con guration ü Route Guards ü Protect Routes with canActivate ü Navigation Controlling ü Static Data in Route ü Location Strategies 	2 3 2
	Forms	<ul style="list-style-type: none"> ü What is Forms Introduction ü Reactive Approach ü Template Driven ü Create Template Driven Forms ü What is Registering Control ü Use and Submit of Forms ü Access of Forms ü How to add validation in use input ü Build-In Validation ü HTML5 Validation ü Output Validation and Error Messages ü Two Way Binding 	4 2 4

Day 30,31		ü Grouping	2
		ü Radio Button Handling	
		ü Patch Forms Values	
		ü Resetting Templates form Forms	
	Reactive Forms	ü What is Reactive Forms	2
		ü Create Reactive form through code	
		ü Syncing of HTML and Form	
		ü Adding Validation	
		ü Sumit Forms	
		ü Grouping	
		ü Form Control Arrays	2
		ü Custom Validators	
		ü Relative Forms	
		ü Async validation	
		ü Value changes and Reacting to status	
		ü What is Pipes in Angular	
Day 32	Pipes	ü How we use pipes	2
		ü Chaining Multiple pipes in angular	
		ü parameterizing a pipe	
		ü Filter Pipe	
		ü Impure & Pure Pipe	
		ü async Pipes	
		ü What is HTTP Requests	2
	HTTP Requests	ü How it work	
		ü How to send requests	
		ü Adjusting Request Headers	
		ü How to handle Get and Put Request	
		ü Catching HTTP Error	
		ü async with HTTP Requests	
		ü What is Authentication	
		ü How Authentication Work	
		ü Introduction to JSON Web Tokens	
		ü Creating Page and Route	

	Authentication	ü Firebase SDK	4
		ü User Signing UP and In	
		ü Sending Token & Requiring	
		ü Authentication Status	
		ü How to add Logout button	
		ü Protection & Redirection of Route	
Day 33	Angular Modules	ü What is idea behind Modules	3
		ü What is feature Modules and how we create it	
		ü What is App Modules	
		ü Registering Routes in Feature Modules	
		ü What is Shared Module and how we create	
		ü Create the Auth Feature module	
		ü What is Lazy LoadingHow to Modules & Services works	2
		ü What is Core Module	
		ü How to Create Basic Core Module	
		ü AoT Compilation with CLI	
	HTTP Client	ü What is HttpClient and how we unlock it	3
		ü Request Configuration with Response	
		ü Request Events	
		ü Set up Headers	
		ü HTTP Parameters	
		ü Progress	
		ü What is Interceptors	
		ü Modify Request in Interceptors	
Day 34	Animations	Multiple Interceptors	4
		ü What is Angular Animations	
		ü Triggers and State	
		ü Switch between States	
		ü Basic and Advanced Transitions	4
		ü What is void state	
		ü Key frames in animation	
		ü Grouping	
		ü Animation Callback	

Day 35	Unit Testing	ü What is Unit Testing	4
		ü How to Analyze CLI Testing Setup	
		ü Running Test with CLI	
		ü Components and dependencies	
		ü Async Tasks	4
		ü Adding Component with tests	
		ü Difference between Isolated and Non-isolated Tests	
Day 36,37,38,39,40	PythonBasics	What is Python ? Python Syntax	4
		Installation of Python	4
		Print statement	4
		Database fundamental using MySQL	3
		Data types in Python	5
		String Operations	5
		Simple input and output program	5
		The if statement,for,whileloop,range statement,	5
		Break and Continue	5
Day 41,42,43	Functions and Modules	Function Parameters	2
		Variable arguments	2
		Modules:OS,SYS,TELNET,socket,Scapy,dpkt,pcapy,fabric,LDAP	2
		Scope,Lambda functions	2
		Map, Create a module Standard Modules	4
	Exception Handling, File handling	Errors, Exception handling with try	4
		handling multiple exceptions,	4
		customizing the exceptions.	4
Day 44,45,46,47,48,49	Class in Phyton	New Style classes	4
		Instance	4
		Methods	4
		Inheritance	4
		Creating classes	8
	Generators & Iterators	Polymorphism	4
		Exceptionclasses	4
		Iterators	4
		Generators	4

		Functions any and all,with statement	4
		Data Compression.	4
Day 50,51,52,53,54	Collections	Named tuple	4
		Deque	4
		Counter	4
		UserDict	4
		OrderedDict	4
		ChainMap	4
	GUI in Python	UserList	4
		UserString	
		Components and Events	4
		Root Component	4
		Buttons	4
		Widgets	
Day 55 - 60	HandsOn Project		48
			480