1. .Net platform training topics

- Existing development scenario
- Challenges faced by developers
- Where does .NET fits in
- .NET platform layers
- Structure of .NET application
- Flavors of .NET
- Features of .NET
- Different types of applications supported by .NET platform
- Code management - JIT (Just In time compiling) and debugging
- Managed versus un-managed methods and transactions
- Object oriented programming concepts
- Error and exceptions handling
- Assemblies and application domains

2. C# Training Topics:

- Introduction
- Visual studio.net
  - Introduction to Integrated Development Environment (IDE)
  - Visual studio installation process
  - Restarting your computer
  - Launching visual studio enterprise 2015
  - Activating visual studio
  - Visual studio web development environment
  - Get ready to visual studio
  - Solution explorer
  - Tool box
  - Editors and designers
  - Properties window
  - Build and debug tools
  - Run and compile the program
  - Creating and using ASP.NET master pages in visual web developer
- Dot NET
  - Machine dependency
  - Features of .Net
  - .Net framework
  - Development of.net framework
  - .Net framework versions
  - .Net framework architecture
  - Concerns and criticisms related to .Net

- C# programming language
  - History of language
  - Design goals of C#
  - Versions of c# language
  - Features of c# 2.0
  - Features of c# 3.0
  - Features of c# 4.0
  - Features of c# 5.0
  - Features of c# 6.0
  - Features of c# 7.0
  - Features of c# 7.1
  - Features of c# 7.2
  - Programming approaches
  - What is a class?
  - How to consume a datatype?
  - OOPS in Java and C#
  - Writing programs in c# languages
  - System Requirements
  - Syntax to define a class in c#
  - Syntax to define main method in the class
  - System.Console.Writeline
  - Importing a namespace
  - Importing a class
  - Data types in c#
  - String Formatting
  - Data types
  - Nullable Types
  - Implicitly typed variable using 'var' keyword
  - Dynamic type
  - Boxing and unboxing
  - Operators
  - Conditional statements in c#
  - Jump statements
  - Arrays
  - Command line parameters
- Object Oriented Programming in c#
  - Encapsulation
  - Abstraction
  - Inheritance
  - Polymorphism
  - Class
  - Method
  - Defining Methods
  - Consuming class

- Parameters
- Killing the instance of a class
- Creating multiple instances to a class
- Reference of a class
- Constructors
- Inheritance
- Rules and regulations for inheritance
- Types of Inheritance
- Encapsulation
- Abstraction
- Polymorphism
- Overloading
- Difference between method overloading and overriding
- Interfaces
- Sealed class
- Sealed method
- Extension methods
- Rules for defining extension methods
- Working with multiple projects and solutions
- Access Specifiers
  - Private
  - Internal
  - Protected
  - Protected Internal
  - Public
- Language Interoperability
  - Consuming VB.Net code in C#
- Destructor
  - Destructor and inheritance
  - Conclusion about destructors
- Properties
  - Syntax to define a property
  - Enumerated property
  - Auto implemented properties
- Object Initialization
- Indexers
- Exceptions and exception handling
  - Exception
  - Exception hierarchy
  - Exception handling
  - How to handle exception
  - Application exception
- Multi Threading
  - Thread

- o Multithreading
- o Thread life cycle
- o Why we should not use threads in our application?
- o Why should we use threads?
- o Using threads with C# applications
- Collections
  - o Auto re-sizing of collections
  - o Array list
  - o Hash tables
  - o Generics
- Delegates
  - o Define a delegate
  - o Instantiate the delegate
  - o Using the delegate and calling a method
  - o Types of delegates
  - o Anonymous methods
  - o Lambda expressions
  - o Partial classes
  - o Partial methods
- Windows programming
  - o Developing graphical user interface
  - o How to develop a desktop application (GUI)
  - o Developing windows application using notepad
  - o Developing windows application using Visual Studio
  - o Adding new forms in project
  - o Event
  - o How to define an event procedure manually
  - o Defining event procedures in notepad
  - o Placing controls on a form
  - o How does form gets created
  - o Default events
  - o working with Events and event procedures
  - o Binding event procedure with multiple events of control
- Working with controls
  - o Radio button
  - o Check box control
  - o Button
  - o Label
  - o Text box
  - o Message box
  - o Combo box
  - o Checked list box
  - o Picture box
  - o Dialog controls

- - Dock property
  - Timer control
  - Form control
  - Masked text box
- User Controls
  - Component Developers
  - Application Developers
  - Creating a stop clock control
  - Developing an inherited or extended control
- .NET Data Access framework providers
  - Ado.Net
  - Ado.Net Architecture
  - Ado.Net Namespaces
  - Performing operations on Data Source
  - Establishing Connection with Data Source
  - Constructors of the class
  - Members of Connection Class
  - Methods of Command Class
  - Access data from a data reader
  - Working with SQL Server
  - Data Reader
  - Dataset
  - Data Adapter
  - Configuration Files
  - Data Grid View
  - Data View
  - Data Relation
  - Communication with data sources using odbc drivers
  - Accessing MS Excel data from .net applications
  - Stored Procedures
  - Introduction to LinQ
  - LinQ to SQL
  - Ado.Net Entity Framework
  - Entity Data Model
  - Developing an EDM (Entity Data Model) project, Configuring with SQL SERVER
  - Code under first form
  - Code under second form
  - Retrieving data from tables
- Assemblies
  - Private Assemblies
  - Shared Assemblies
  - Creating a Shared Assembly
  - Versioning of assemblies
  - Assemblies and side by side execution

- o Assembly manifest
- o Type Metadata
- o MSIL Code or CIL Code
- o Compilation and Execution process of C# Project
- o Process of designing data logic layers
- Setup and Deployment
- Remoting
  - o Application Architecture's
  - o Remoting
  - o Developing Remoting application
  - o Application Server or Remote server
  - o Remote interface
  - o Developing an interface
  - o Developing a Remote class
  - o Process to develop a Remote server
  - o Installing the service on your machine
  - o Process to develop Remote server
  - o Developing the client
  - o Execution of the application
  - o Singleton VS SingleCall

3. ASP.NET Training Topics:

- Introduction to web Application

  - o Web Application and Web SERVER

- Markup Language

  - o HTML
  - o Java SCRIPT

- ASP

  - o Introduction to ASP
  - o What is an ASP file?
  - o How does it work?
  - o ASP Page Deployment
  - o ASP Forms
  - o ASP Objects
  - o Database Connection using ADO
  - o Working with Global.asa

- ASP.NET

  - Introduction to ASP.NET
  - ASP.NET Overview
  - Creating ASP.NET Application
  - Designing web forms, HTML
  - Installing IIS SERVER
  - ASP.NET Project folder structure
  - ASP.NET Life cycle
  - Understanding the rendering nature of Controls developing

- Web Forms Architecture

  - Parts of Web form
  - Page Class
  - Web Forms Lifecycle
  - Web Forms Event Model

- ASP.NET and HTTP

  - Request/Response programming
  - HTTP Request Class
  - HTTP Collections
  - HTTP Response Class
  - Redirection

- Working with controls

  - Introduction to web controls
  - Simple input controls
  - List Controls
  - Controlling Focus

- Using Rich Server Controls

  - Introduction to Rich Controls
  - Calendar Control
  - Ad Rotator Control
  - XML Control
  - File Upload
  - MultiView control

- Working with validation controls

- Overview of validation controls
- Required field validator
- Range Validator
- Compare Validator
- Regular Expression Validator
- Custom Validator
- Validation Summary

- User Control

  - Creating user control

- State Management

- Client side state management

  - View State
  - Control State
  - Hidden Fields
  - Cookies
  - Query Strings

- Server Side state Management Techniques

  - Application state
  - Session State

- ADO.Net

  - Introduction to ADO.Net
  - Data Providers
  - DataSet
  - Advantages of ADO.Net over ADO
  - Connected and Disconnected data access architecture

- DataAccess in ASP.NET4.0

  - Data Source Controls
  - Repeater Control
  - Data Grid control
  - GridView Control
  - Details View Control
  - Form View
  - Object Data Sources

- List View control
- Entity Data Model

- Personalization and Security

  - Configuration overview
  - Themes, Skins
  - Master Pages

- ASP.NET and AJAX

  - Introduction to Microsoft Ajax (Codename: ATLAS)
  - XML HTTP Object
  - Advantages and disadvantages of using Ajax
  - Script Manager
  - Update Panel
  - Triggers
  - Ajax Control Toolkit

- ASP.NET Error Handling and Configuration

  - Error Handling and .Net runtime
  - Page Level Error Handling
  - Application Level Error Handling
  - Code Level Error Handling
  - Configuration overview
  - Authentication and Authorization
  - Forms Authentication
  - Windows Authentication and IIS
  - Passport Authentication
  - Anonymous Authentication
  - Open Authentication
  - Security and ASP.NET
  - Memberships

- Cache Services

  - Cache Overview
  - Why caching?
  - The Process
  - Multiple sorts of pages
  - What a cache does?
  - Page-Level Caching
  - Application Caching

- o Caching a page
- o Data Caching

- Navigation Controls

  - o Sitemap Navigation control
  - o Menu Control
  - o Tree View Control

- Deployment

  - o Deploying ASP.NET Application
  - o Creating Setup for ASP.NET application

- ASP.NET and Web Services

  - o Introducing Web SERVICES
  - o Writing a simple web service
  - o SOAP, WSDL, UDDI
  - o Web service Type Martialling
  - o Using Data in webservice
  - o Web Service Security
  - o Web Service with data set
  - o Using Objects and intrensic
  - o Overview of WCF
  - o Sample of WCF application

- WebParts

  - o Overview on Web Parts
  - o Webparts page display modes

- Crystal Reports in ASP.NET

  - o Introduction to crystal reports, Advantages
  - o Strongly typed and Untyped reports
  - o Creating Crystal Report
  - o Working with Crystal Report Viewer
  - o Accessing Filtered Data through crystal reports
  - o Exporting Crystal Report

- ASP.NET4.0 Features

  - o Extensible Output Caching

- Permanently redirecting a page
- Routing in ASP.NET4
- Shrinking Session State
- Setting Meta Tags
- Setting Client IDs
- Chart Control

- How Web pages are Processing
- Difference between Response.Redirect and Server.transfer
- Tracing

  - Page level
  - Application Level
  - Custom message in Trace

- Changing Language Settings in IE
- Culture info
- Resource files

  - Types of Resource files

- Storing Images in Database
- LINQ

  - Linq to Object
  - Linq to DataSource
  - Linq to XML
  - Linq to Database
  - Advantages of Linq
  - Calling SP by using Linq

4. SQL Training Topics :

- Introduction

  - What is Data
  - Storing Data in Books and Files
  - Disadvantages
  - Flat files or Text files in computer
  - Drawbacks
  - Database
  - Data Store or Data Source
  - Data Retrieval
  - Sequel

- Security
- Data Redundancy and Data inconsistency
- Data Integrity
- Indexing
- OLTP
- OLAP

- **DBMS**

  - HDBMS
  - NDBMS
  - RDBMS
  - ORDBMS
  - OORDBMS

- **CODD rules**

  - Rule1 : Information Rule:
  - Rule2 : Guaranteed Access Rule
  - Rule 3: Systematic Treatment of Null Values
  - Rule 4: Dynamic On-line Catalog Based on the Relational Model
  - Rule5 : Comprehensive Data Sub-language Rule
  - Rule6 : View-updating Rule
  - Rule7 : High-level Insert, Update and Delete
  - Rule8 : Physical Data Independence
  - Rule9 : Logical Data Independence
  - Rule 10: Integrity Independence
  - Rule 11: Distribution Independence
  - Rule 12: Non-subversion Rule

- **Normalization**

  - Anomalies DBMS
  - First Normal Form
  - Second Normal Form
  - Third Normal Form
  - Boyce Codd normal form (BCNF)
  - NF (Fourth Normal Form) Rules
  - NF (Fifth Normal Form) Rules
  - NF (Sixth Normal Form) Proposed

- **SQL Commands types**

  - DDL

- o DML
- o DQL
- o DCL
- o TCL

- SQL Server

  - o Other Popular Databases
  - o SQL Versions
  - o Database Types
  - o Server Types
  - o Authentication
  - o Working with SQL Server
  - o Express Edition
  - o SQL Database Components

- Data Types in SQL Server

  - o Numeric data type
  - o Date and Time
  - o Character Strings
  - o Binary data types
  - o Other Data Types

- Table

  - o Creating a Table
  - o Inserting Values into a Table
  - o Inserting Values into selected columns
  - o Retrieving all records of the data
  - o Retrieving selected columns
  - o Update Command
  - o Delete Command
  - o Dropping a Table

- Data Integrity

  - o Entity Integrity
  - o Domain Integrity
  - o Referential Integrity

- Constraints

  - o Primary Key

- Not Null
- Null
- Unique
- Unique + not null or Candidate key
- Composite primary key
- Checked
- Default
- Foreign key
- Delete Rules
- Update Rules
- Providing default value for a column
- Self Referential Integrity

- **Alter Table Command**

  - Adding a new column under a table
  - Add a new Constraint
  - Adding a primary key on existing column
  - Drop an existing constraint in a table
  - Disable or Re enable check constraint of a table
  - Drop a Table Command
  - Truncate Table Command
  - Select Command

- **Clauses**

  - Where Clause
  - Group by Clause
  - Having Clause
  - Order by Clause
  - Clarifications

- **Builtin Functions**

  - Mathematical Functions
  - String Functions
  - DataTypes Functions

- **DateAndTime Functions**

  - GetDate()
  - GetUTCDate()
  - SystemDateTime()
  - SysDateTimeOffset()

- SysUTCDateTime()
- DateName()
- DatePart(DatePart,Date)
- Day(Date)
- Month(Date)
- Year(Date)
- DateDiff
- DateAdd
- DateFromParts
- TimeFromParts
- IsDate(expression)
- SetDateFormat(Format)

- **Conversion Functions**

  - Cast (Expression AS Data Type(Length))
  - Convert()

- **SystemFunctions**

  - Host_ID()
  - Host_Name()
  - IsNumeric(Expression)
  - IsNull()
  - Coalesce(expression)
  - NullIf(expression, expression)

- **Case**

  - Simple Case Expression
  - Searched Case Expression

- **MetaData Functions**

  - App_Name()
  - Col_Length ()
  - DB_ID ()
  - DB_Name ()
  - Object_ID ()
  - Object Name ()
  - Call Name ()

- **Ranking Functions**

- Top Clause
- Rank() over()
- Dense Rank() over()
- Row Number() over()
- NTILE() over()

- Aggregate Functions

  - Distinct keyword
  - Count()
  - Count big()
  - Sum(Distinct)
  - AVG(Distinct)
  - Min(Distinct)
  - Max(Distinct)
  - STDEV(Distinct)
  - Var(Distinct)

- Operators

  - Arithmetic Operators (+, , *, /, %)
  - Assignment Operators (=)
  - Comparisons Operators (=, >, <, >=, <=, <>, !=, !<, !>)
  - Compound Operators(+=, =, *=, /=, %=)
  - Logical Operators
  - Set Operators
  - String Concatenation operators

- Giving Alias Names to Columns
- Offset and Fetch Options

  - Fetch
  - Sub-Queries
  - Co-related Sub Queries

- Joins

  - Inner join
  - Outer join
  - Self Join
  - Equijoin
  - NonEquijoin
  - Cross join or Cartesian join

- Sequence

  - Cache

- View

  - Create View:
  - Force View Creation
  - Update a View
  - NonUpdatable OR Read-Only View
  - Check option in view
  - Deleting Rows into a View
  - Dropping Views
  - View Classification
  - Benefits of View
  - View with Encryption
  - View With Schema Binding

- Meta Data Tables

  - SysObjects
  - SysColumns
  - SysComments
  - How Data is stored under a database
  - How Database engine retrieves data information from database

- Index

  - Why do you need to index your tables?
  - Clustered index
  - Non Clustered Index
  - Difference between clustered and non clustered index
  - Unique Index
  - How many indexes a table can have?
  - When SQL Server uses indexes
  - When should we create indexes on a table
  - Indexed Views

- PL/SQL or TSQL

  - Drawbacks of SQL
  - Anonymous Blocks
  - PL/SQL Program structure
  - Conditional statements

- Cursor

  - Types of Cursors
  - Components of Cursors
  - Cursor Scope
  - Data Fetch Option in Cursors
  - Types of cursors
  - Types of Locks
  - Example with Cursors

- SubPrograms
- Stored Procedures

  - Types of stored procedure
  - Create stored procedure
  - Calling a stored Procedures
  - Procedure with parameters
  - Calling a procedure with parameters
  - Stored Procedure with default values
  - Stored Procedure with output parameters
  - Stored Procedure Help Text
  - Procedure attributes

- Error Handling

  - Handling Errors in SQL Server
  - Pre-Defined Errors
  - Raising Errors explicitly in a programming
  - Deleting Our Error Messages from SysMessages

- Functions

  - Difference between Function and Procedure
  - Different Types of functions

- Triggers

  - DML Triggers
  - DDL Triggers
  - Syntax
  - Types of Triggers
  - DDL Triggers and Logon Triggers
  - Logon Triggers

- Temporary Tables
- Copying database from one machine to another

  - Backup and Restore
  - Copying mdf and ldf files with database
  - Generating a script file to the complete database and its objects

- SQL Server Reporting Services

  - Creating a simple report
  - Creating a new Report
  - Shared Data Resources
  - Drilldown reports
  - Matrix Reports
  - Parameterized Reports
  - Designing Reports Manually
  - Displaying Images into Reports

5. MVC Training Topics :

- MVC

  - What is MVC

- Modules in MVC

  - Model
  - View
  - Controller

- Technologies Supporting MVC
- ASP.NET MVC

  - What is ASP.NET MVC
  - Version History of ASP.NET MVC
  - ASP.NET MVC features

- Developing ASP.NET MVC Application

  - ASP.NET framework provides templates

- Folder Structure of ASP.NET application

  - APP_Start
  - Content

- Controller
- Models
- Scripts
- Views
- MVC Application Example

- **Controllers in ASP.NET MVC**

  - Responsibilities of Controller
  - Developing Controllers
  - Rules for Creating Controller
  - Controller class hierarchy
  - Library Information
  - Action Methods
  - Developing action Methods
  - Details about action Method
  - Rules to create action Method
  - Controller class hierarchy

- **Action Methods**

  - Types of Action Methods

- **Views in ASP.NET MVC**

  - View Engine
  - Roger Programming
  - Developing Data Entry Forms in ASP.NET MVCApplication
  - Identifying Request Type in Views
  - HTML helpers in MVC View development

- **Action Method Parameters**

  - Request Type Attribute
  - Action Method Parameters

- **Model Class Objects**

  - Get Action Method Parameters
  - Data Sharing between Control to View
  - Benefits
  - Steps to work with strongly typed view
  - Models in ASP.NET MVC
  - Classes in model

- Entity Framework

    - What is ORM
    - ORM tools
    - ORM tools Classes
    - Entity Framework Methods
    - Scaffolding templates in MVC
    - Lambda Expressions
    - Applications of Lambda Expression

- LinQ

    - What is LinQ
    - LinQ Programming Implementation
    - Relationship in Entity Framework
    - Entity Framework Implementation Approaches

- Data Annotations and Validations

    - What is Data Annotations
    - Library Info
    - Validation Attributes
    - Additional Attributes

- Layout Views in MVC Application

    - What is Layout View
    - Advantages
    - Files that are involved in View processing
    - Important Statements in Layout View
    - Steps for creating Layout Views

- Filters in ASP.NET MVC

    - Pre Defined Filters
    - What is custom filters
    - Types of Filters in MVC
    - How to develop custom filters
    - Method Arguments
    - Security in ASP.NET MVC Application
    - Steps to implement security

- Ajax programming in ASP.NET MVC using JQuery
- How to implement Ajax Programming

- o What is JQuery

- Routing in ASP.NET MVC

  - o What is customizing Routes
  - o What are the advantages of Routing

- Web API

  - o What is Web API
  - o HTTP Client class Methods

- BootStrap in MVC

  - o What is Bootstrap
  - o How to Apply BootStrap CSS classes to HTML Tags
  - o What is minification
  - o Advantages
  - o What is bundling
  - o What is view model? Why do we use this concept
  - o How to use output cache attribute in ASP.NET MVC
  - o What is partial view in MVC
  - o How to create Partial View

- Glossary

Advanced Technologies

1. JQuery Training Topics :

- What is Jquery
- Supported Browsers
- Jquery Library

  - o How to integrate Jquery in web pages
  - o Import Jquery library in your web pages

- Jquery Features

  - o DOM Traversing
  - o DOM manipulation
  - o Effects in Jquery

- o Ajax Supporting in Jquery
- o Light-weight
- o CSS complaint
- o Cross browser

- JavaScript programming Basics

o Programming Rules in JavaScript

  - o Include JavaScript in web pages
  - o Accessing reference of html elements
  - o Creating variables
  - o Numeric Conversion
  - o Creating functions in JavaScript
  - o Event Handling in JavaScript

- Appling Styles in Web pages

  - o Defining Styles
  - o Implementation of CSS
  - o Advantages
  - o Style Properties

- Developing Web pages using JQuery

  - o Required Software
  - o Steps to implement

- Programming Items of Jquery

  - o $(Document)
  - o Ready()
  - o Function()

- Selectors in JQuery

  - o Tag based
  - o Id based
  - o Class based
  - o Select All Elements
  - o Select Multiple Elements
  - o Select Document
  - o Current Item Selection

- Jquery Methods to get and set the content of html elements

  - Val()
  - Text()
  - Html()
  - Attr()

- Styles in JQuery

  - CSS (Prop, Value)
  - Multiple Properties
  - Add()
  - Remove class()
  - Toggle Class()

- DOM Traversing in JQuery

  - Traversing individual items
  - Traversing alternative items
  - DOM Tree based Traversing
  - Traveling filtered items
  - Traversing not filtered elements

- DOM Manipulations

  - Content Based
  - Structure Based

- Effects in JQuery

  - Functions used to apply effects in Jquery

- Data Handling using Jquery

  - Scalar Data
  - Array
  - Object
  - Array of Objects

- Ajax Programming in Jquery

  - Advantages of Ajax
  - Disadvantages of Ajax
  - Implement Ajax Programming

- JSON

  - Advantages of JSON over XML
  - Example of JSON objects

- Jquery UI

  - Implementation
  - Jquery-UI interaction

- Jquery-UI widgets

  - Button()
  - Accordian Panel
  - Tooltip
  - Tabs
  - Auto Complete
  - Date Picker
  - Dialog
  - Menu()

- Jquery-UI Themes

  - The Jquery UI themes folder structure

- Jquery-UI effects

  - Add Class
  - Color Animation
  - Easing
  - Effect
  - Hide
  - Remove Class
  - Show
  - Switch Class
  - Toggle
  - Toggle Class

- JQuery-Utilities

  - Position
  - Widget Factory

- Jquery Plug-ins

o   How to Install Jquery Plug-in
o   Types off JQuery Plug-in's

2. AJAX Training Topics:

- Introduction to Ajax
- What is Ajax?
- Advantages of AJAX
- Disadvantages of AJAX
- What is Asp.Net AJAX?
- Ajax in ASP.Net
- Programming Techniques of Ajax
- Basic Controls of ASP.NET AJAX

    o   Script Manager
    o   Script manager Proxy
    o   Timer
    o   Update Panel
    o   Update Progress

- How to Download Add Ajax Toolkit to Visual Studio 2015 IDE
- Extender Controls

    o   Confirm Button Extender
    o   Calendar Extender
    o   Filtered Textbox Control
    o   NumericUpDown Extender
    o   Paging Bulleted List Control
    o   Password Strength Control
    o   Drag Panel Extender Control
    o   Drop Down Extender Control
    o   Collapsible Panel Extender Control
    o   Slider Extender Control
    o   Resizable Control Extender
    o   Mutually Exclusive Checkbox Extender
    o   Popup Control Extender
    o   Validator Callout Extender
    o   Model Popup Extender
    o   List search extender control
    o   Drop Shadow Extender control
    o   Hover menu Extender control
    o   Masked edit Extender and Masked edit Validator
    o   Rounded corner control

- Always visible Extender control
- Textbox water mark extender control
- Cascading dropdown extender control
- Auto complete extender control
- Slide show extender control
- Toggle Button Extender control

- Non-Extender Controls

  - Accordian and Accordian Pane
  - Tab container
  - Rating
  - Nobot Control

3. Angular JS Trining Topics

- Introduction to Angular JS
- Single Page Application

  - Challenges for SPA(Simple Page Application) using JS and HTML

- Challenges in Modern web application development
- Java Script VS JQuery VS Angular JS
- Java Script Request Flow
- JQuery Library and Execution Flow
- Angular Framework

  - MVC Framework
  - Angular MVC Pattern
  - Angular JS Execution Flow
  - Features of Angular JS
  - Create End to End Application
  - Angular JS architecture

- JavaScript language basics

  - Variables
  - Shadowing
  - JavaScript Data types
  - Primitive Type
  - Non Primitive Type

- Creating a new Angular application in Web Storm

- Components of Angular
- Commonly use Directives in Angular
- Modules in Angular
- Controllers
- Directives

  - ng- src Directive
  - nested ng-repeat
  - ng-repeat directive
  - ng-init directive
  - ng-include directive
  - ng-bind-html directive
  - ng-bind template
  - ng-blur directive
  - ng-checked
  - ng-copy
  - ng-cut
  - ng-paste
  - ng-class
  - ng-class-even, ng-class-odd
  - ng-class-with CSS Animation
  - ng-pattern
  - ng-href
  - ng-maxlength
  - ng-minlength
  - ng-if
  - ng-required
  - ng-open
  - ng-required(copy)
  - ng-selected
  - ng-style
  - ng-animate

- Qualifiers
- Angular directives to handle key-events
- Attributes
- Mouse Events

  - Member of Mouse Events

- Filters

  - Validate date formats in date filters
  - Applying filters on product table

- Displaying Numbers
- Displaying Currency
- Sorting on any field
- Filtering records based on specified static values
- Enabling Strict search
- Sorting Data

- **Angular Functions**

  - Bootstrap method
  - Element method
  - Copy method
  - Equals method

- **Services**

  - Angular Services
  - $HTTP Services
  - $Timeout Service
  - $Interval
  - $Log Service
  - $Window Service
  - $filter Service
  - $Location Service
  - Location Hash Service
  - Accessing the recent location

- **Validations**

  - Validations using patterns
  - Validations using functions

- Angular form states for validation
- Input field states for validation
- Angular styles for form validation
- Form validations with bootstrap
- Form validations in angular

  - Form validations using angular messages

- **Distributed Computing**

  - CORBA
  - DCOM

- o RMI
- o EJB
- o Remoting

- Web services

  - o SOAP
  - o REST
  - o JSON

- Java Script Ajax Request to handle JSON
- JQuery Ajax Request to handle JSON
- Angular Ajax Request to handle JSON
- Ajax options for Angular
- Tracking the status of Ajax Requests
- Routing in Angular

Node JS Training Topics

- Working with Node JS
- Installation of Node JS
- Configuring Node JS with Angular Project
- Features of Node JS
- Components of Node JS
- Working with Node Terminal
- REPL Commands
- Connecting with MySQL database using Node JS
- Code for production to communicate with Database
- Connection Pool
- Executing queries to manipulate data using Node JS
- Creating a Rest API in Node JS
- Requirements to create a rest API
- Web application framework in Node JS
- Creating a server in Node JS to integrate with client and access files from web server

Express JS Training Topics

- Install the packages
- Create a middleware to access the root folder using node server
- Routing in Express

- Accessing data from MySQLDatabase using Node JS and Express
- Routing in CRUD - Project to access the product details, create edit and delete views
- Details controller
- Edit controller
- Delete Controller
- Mango DB
- Features of Mango DB
- Connecting with Mango DB and accessing Data
- Connecting from angular application
- Custom Directive
- Create a custom directive
- Restricting an element and accessing parallel view
- Custom Filter
- Custom Services
- Servlet with Angular Integration
- Shopping Cart

4. XML Training Topics:

- XML introduction

  - Xml
  - Markup
  - XML Purpose
  - Elements
  - XML Elements Naming Rules

- Attributes

  - Entity References
  - Comments in XML

- Examples on XML document

  - Similarities between HTML and XML
  - Differences between HTML and XML
  - What is well-formed XML document

- DTD (Data Type Definition)

- Element Declaration
- Attribute Declaration
- Entities Declaration
- PCDATA Section
- CDATA Section
- Internal DTD
- External DTD

- DTD Types of Elements

  - Text-Only Elements
  - Child Only Elements
  - Mixed Elements
  - Empty Elements
  - ANY Elements

- Declaring Attributes

  - A Default Attribute Value
  - #Required Attributes
  - Enumerated type Attributes
  - ID type Attribute
  - IDREF type Attribute
  - NMTOKEN type Attribute
  - NOTATION type
  - Entity type Attribute
  - Entities type Attribute

- XSD (XML Schema Definition)

  - What is XSD
  - Difference between DTD and XSD
  - XSD Data Types
  - XSD Namespace
  - XSD Restrictions
  - Non-Atomic Data Types
  - Complex Type Data Types

- JAX-P

  - Overview of JAX-P
  - Responsibilities of Parsers
  - DOM parser
  - SAX Parser

- STAX Parser

- JAXB-Notes

  - Features of JAXB
  - JAX-B Annotations