

FULL STACK DEVELOPER(.NET) SYLLABUS

CONTENT:

- **HTML**
- **CSS**
- **JAVA SCRIPT**
- **SQL**
- **ASP.NET**
- **C#.NET**
- **TESTING**
- **AUTOMATION TESTING**
- **PROJECT**



.NET

HTML

1. What is HTML?
 2. HTML Tags
 3. HTML Basic
 4. HTML Elements
 5. HTML Attributes
 6. HTML Text Formatting
 7. HTML Fonts
 8. HTML Styles - CSS
 9. HTML Links
 10. HTML Images
 11. HTML Forms and Input
 12. HTML Iframes
 13. HTML 4.01 Quick List
 14. HTML Advanced
 - HTML Layouts
 - HTML Doctypes
 - HTML 4.01 Strict
 - HTML 4.01 Transitional
 - HTML 4.01 Frameset
 - HTML Styles
 - HTML head Elements
 - HTML Meta
 - HTML Scripts
 - HTML Uniform Resource Locators-URL
 - HTML URL Encoding
 15. HTML Media
 - HTML Multimedia
 - HTML Audio Sounds
 - The HTML Object Element
 - HTML Videos
 - HTML - YouTube Videos
 - HTML 4.01 / XHTML 1.0 Reference
- HTML / XHTML Standard Event Attributes

CSS

- 1. What is CSS?**
- 2. CSS Syntax**
- 3. CSS Comments**
- 4. CSS Id and Class**
- 5. Three Ways to Insert CSS**
- 6. CSS Styling**
 - Background Color**
 - HSL Colors**
 - Background Image**
 - Background Image - Repeat Horizontally or Vertically**
 - Background Image - Set position and no-repeat**
 - Background Image - Set position and no-repeat**
 - Background - Shorthand property**
 - All CSS Background Properties**
- 7. CSS Text**
- 8. All CSS Text Properties**
- 9. CSS Font**
- 10. All CSS Font Properties**
- 11. CSS font Property**
- 12. CSS Links**
- 13. CSS Lists**
- 14. All CSS List Properties**
- 15. CSS Tables**
- 16. CSS Box Model**
- 17. CSS Border**
- 18. All CSS Border Properties**
- 19. CSS Outlines**

- 20. All CSS Outline Properties**
- 21. CSS Margin**
- 22. CSS Padding**
- 23. All CSS Padding Properties**
- 24. CSS Advanced**
 - CSS Dimension**
 - All CSS Dimension Properties**
 - CSS Display and Visibility**
 - CSS Positioning**
 - All CSS Positioning Properties**
 - All CSS Float Properties**
 - CSS Horizontal Align**
- 25. CSS Pseudo-classes**
- 26. All CSS Pseudo Classes/Elements**
- 27. CSS Pseudo-elements**
- 28. All CSS Pseudo Classes/Elements**
- 29. Demo: Navigation Bar**
- 30. CSS Image Opacity / Transparency**
- 31. CSS Image Sprites**
- 32. CSS Media Types**
- 33. CSS Attribute Selectors**

JAVA SCRIPT

1. **What is JavaScript?**
2. **What Can JavaScript do?**
3. **JavaScript How To**
4. **JavaScript Where To**
5. **JavaScript Statements**
6. **JavaScript Variables**
7. **JavaScript Comparison and Logical Operators**
8. **JavaScript If...Else Statements**
9. **JavaScript Popup Boxes**
10. **JavaScript Functions**
11. **JavaScript For Loop**
12. **JavaScript Events**
13. **JavaScript Throw Statement**
14. **JavaScript Special Characters**
15. **JavaScript Guidelines**
16. **JS Objects**
 - JavaScript Objects Introduction
 - JavaScript String Object
 - JavaScript Date Object
 - JavaScript Array Object
 - JavaScript Boolean Object
 - JavaScript Math Object
 - JavaScript RegExp Object
17. **JS Advanced**
 - JavaScript Browser Detection
 - JavaScript Cookies
 - JavaScript Timing Events

1. jQuery

- What is jQuery?
- Adding the jQuery Library to Your Pages
- Basic jQuery Example
- Alternatives to Downloading
- jQuery Syntax Examples
- jQuery Syntax
- The Document Ready Function
- jQuery Element Selectors
- jQuery Attribute Selectors
- jQuery CSS Selectors
- Some More Examples

2. jQuery Events

- Functions In a Separate File
- jQuery Name Conflicts
- jQuery Events

3. jQuery Effects

- jQuery Hide and Show
- jQuery Toggle
- jQuery Slide - slideDown, slideUp, slideToggle
- jQuery Fade - fadeIn, fadeOut, fadeTo
- jQuery Custom Animations
- jQuery Effects

4. jQuery Callback Functions

5. jQuery HTML Manipulation

6. jQuery AJAX

-- What is AJAX?

-AJAX and jQuery

-Let AJAX change this text

-Write Less, Do More

-Low Level AJAX

-jQuery AJAX Methods From This Page

7. jQuery Event Methods

8. jQuery Effect Methods

9. jQuery HTML Methods

10. jQuery CSS Methods

11. jQuery AJAX Methods

12. jQuery Miscellaneous Methods

-jQuery Misc Methods

SQL

1. SQL Basic
2. SQL SELECT Statement
3. SQL SELECT DISTINCT Statement
4. The WHERE Clause
 - SQL BETWEEN Operator
 - The LIKE Operator
 - SQL Wildcards
 - The IN Operator
5. SQL AND & OR Operators
6. The ORDER BY Keyword
7. SQL INSERT INTO Statement
8. The UPDATE Statement
9. The DELETE Statement
10. SQL Advanced
 - The TOP Clause
 - SQL Alias
 - SQL Joins
 - The SQL UNION Operator
 - The SQL SELECT INTO Statement
 - The CREATE DATABASE Statement
 - The CREATE TABLE Statement
 - SQL Constraints
 - SQL FOREIGN KEY Constraint
 - SQL CHECK Constraint
 - SQL DEFAULT Constraint
 - SQL CREATE INDEX Statement
 - SQL DROP Statement
 - SQL ALTER TABLE Statement
 - SQL AUTO INCREMENT Field
 - SQL Views
 - SQL Date Functions
 - SQL Server Date Functions
 - SQL Date Data Types
 - SQL NULL Values
 - SQL Functions
 - SQL Scalar functions
 - SQL GROUP BY Statement
 - SQL HAVING Clause

ASP.NET

1. **.Net Framework Overview**
2. **Developing Web Applications**
3. **ASP.net Architecture**
4. **Asp.net Controls**
5. **ASP.net State Management & Caching**
6. **Asp.net User Controls & Custom Controls**
7. **Asp.net Look and feel using Master Pages and themes**
8. **Asp.net Data Access-I**
9. **Asp.net Data Access –II**
10. **Asp.net Data Access – LINQ**
11. **Asp.net Security using Membership & Roles Management**
12. **Personalization profile and Localization**
13. **Asp.net Provider Model**
14. **Asp.net Web Administration & Instrumentation**
15. **Web Parts Personalization**
16. **ASP.net AJAX I**
17. **Asp.net AJAX II**
18. **Web services**
19. **Deployment**
20. **Lab Manual**

C#.NET

1. Overview of Microsoft .net Platform
2. Language Basics
3. Object-Oriented Programming
4. Inheritance and Polymorphism
5. Collection Framework
6. Delegated and Events
7. Garbage Collection
8. Reflection and Custom Attributes
9. Windows Applications using WinForms
10. File I/O and Serialization
11. XML in .net
12. ADO.net – I(Connected)
13. ADO.net –II(Disconnected)
14. ADO.net – III
15. COM Interoperability
16. Multithreading
17. Creating Web applications using ASP.Net
18. Web Services
19. Deploying .net Applications
20. Windows Presentation Foundation(WPF)
21. Windows Communication Foundation(WCF)
22. Windows Workflow Foundation(WF)
23. Lab Manual

TESTING

A) Manual Testing Syllabus

1. SOFTWARE TESTING – OVERVIEW

- What is Testing?
- Who does Testing?
- When to Start Testing?
- When to Stop Testing?
- Verification & Validation

2. SOFTWARE TESTING – MYTHS

3. SOFTWARE TESTING – QA, QC, AND TESTING

- Testing, Quality Assurance, and Quality Control
- Audit and Inspection
- Testing and Debugging

4. SOFTWARE TESTING – ISO STANDARDS

- ISO/IEC 9126
- ISO/IEC 9241-11
- ISO/IEC 25000:2005
- ISO/IEC 12119
- Miscellaneous

5. SOFTWARE TESTING – TYPES OF TESTING

- Manual Testing
- Software Testing
- Automation Testing
- What to Automate?
- When to Automate?
- How to Automate?
- Software Testing Tools

6. SOFTWARE TESTING – TESTING METHODS

- Black-Box Testing
- White-Box Testing
- Grey-Box Testing
- A Comparison of Testing Methods

7. SOFTWARE TESTING – TESTING LEVELS

- Functional Testing
- Unit Testing.
- Integration Testing.
- System Testing.
- Regression Testing
- Acceptance Testing
- Non-Functional Testing
- Usability Testing
- Security Testing
- Portability Testing

8. SOFTWARE TESTING – DOCUMENTATION

- Test Plan
- Test Scenario
- Test Case
- Traceability Matrix.

9. SOFTWARE TESTING – Test Cases writing and Execution

- How to write Test Cases – Standards
- Test Execution (Test Proofs Creation)

9. SOFTWARE TESTING – ESTIMATION TECHNIQUES.

- Functional Point Analysis
- Test Point Analysis

A)Automation Testing

Selenium Syllabus

1. OVERVIEW

- Introduction
- Advantages of selenium
- Disadvantages of Selenium

2. Selenium IDE

- Creating Selenium IDE Tests
- Script Debugging
- Inserting Verification Points
- Pattern Matching
- Selenium User Extensions
- Different Browser Execution

3. ENVIRONMENT SETUP

- Download and Install visual studio
- Download and Configure visual studio for selenium
- Configure FireBug and FirePath
- Configure Selenium RC
- Configure Selenium WebDriver

4. SELENIUM RC

- What is Selenium RC?
- Selenium RC Architecture
- RC – Scripting

5. SELENESE COMMANDS

- Actions
- Accessors
- Assertions

6. WEBDRIVER

- Architecture
- Selenium RC Vs WebDriver
- Scripting using WebDriver
- Most Used Commands

1. LOCATORS

- Locators Usage

2. INTERACTIONS

- User Interactions
- Text Box Interaction
- Radio Button Interaction
- Check Box Interaction
- Dropdown Interaction
- Synchronization
- Drag & Drop
- Keyboard Actions
- Mouse Actions
- Multi Select Action
- Find All Links

3. TEST DESIGN TECHNIQUES

- Page Object Model
- POM Flow Diagram
- Driven using Excel
- Parameterization
- Log4j Logging
- Exception Handling
- Multi Browser Testing
- Capture Screenshots
- Capturing Videos

4. TESTNG

- What is TestNG?
- Installing TestNG for Eclipse
- Annotations in TestNG
- TestNG-Eclipse Setup
- First Test in TestNG

5. SELENIUM GRID

- Architecture
- Working with Grid
- Configuring the Hub
- Configuring the Nodes
- Develop the Script and Prepare the XML File
- Test Execution
- Result Analysis

PROJECT

1. Project Creations (Website creation) - Practical

- Test cases creation**
- Project design with BDD framework**
- Deployment on local server (Or Cloud server)**
- Any Support activity**
- Review as per SDLC and STLC**

2. Other knowledge and activity

- Provide Special Hand written notes and question papers**
- Overall Support and Maintenance of application knowledge**
- Knowledge about industrial/Project standards and Guideline**