

## Week End Programme - Detailed Programme Content

### JavaServer Faces (JSF)

#### Developing Web Applications using JSF with Rich Faces and Facelets

##### Overview

- Java EE and Web Applications
- The Model/View/Controller Pattern
- JSF Configuration
- Facelets Configuration

##### Lifecycle and Page Navigation

- The JSF Request/Response Cycle
- Lifecycle Phases
- Navigation Rules

##### User Interface Components

- The UIComponent Class
- The Core and HTML Tag Libraries

##### Managed Beans

- JavaBeans and JSF
- Backing Beans
- Managed Beans
- The Unified Expression Language
- Value Expressions
- Dependency Injection
- Bean Scopes

##### Events and Controllers

- JSF Event Model
- Event Queueing
- ActionEvent and ActionListener
- Action Methods
- ValueChangeEvent and ValueChangeListener

## Converters, Validators

- Standard Converters and Validators
- Custom Converters and Validators
- Configuring Converters and Validators
- Producing Error Messages
- Presenting Error Messages

## Ajax and JSF controls

- Configuring RichFaces
- Ajax functionality in RichFaces
- Re-rendering
- Error handling
- Buttons, links and forms with Ajax
- Adding Ajax support to existing JSF components

## JSF Components (rich)

- General components
- Column components
- Datatable and datalist components
- Drag and drop support
- Tree components
- Menus
- Panels and toolbars

## Integration with backend technologies

- JSF with JDBC
- JSF with Hibernate/JPA
- JSF with Spring

## ASP.Net using Ajax

### Developing rich Web Applications using ASP.NetAjax

#### Overview

- ASP.NET and web applications
- Ajax Architecture
- Ajax Control tool kit and Ajax Library

#### Core functions

- Ajax Extensions
- Ajax Library

#### Ajax Components

- Ajax extensions controls
- Ajax tool kit controls
- Managing config file

#### Implement Ajax functionality

- ScriptManager Control
- UpdatePanel Controls
- UpdateProgress Controls

#### Using Ajax Library

- Adding JavaScript to a web page
- Global utility functions
- JavaScript Debugging
- Making Asynchronous Web Method Calls