

IT8002 WEB DEVELOPMENT FRAMEWORKS

DETAILED SYLLABUS

OBJECTIVES:

The student should be made to:

- Understand the fundamentals of web framework
- Know the concept of Java web framework
- Learn the technologies of Python web framework
- Be exposed to the concepts of Web framework
- Be familiar with Web framework

UNIT I FUNDAMENTALS OF WEB FRAMEWORK

Web framework-History-Types of framework architectures-Model-view-controller (MVC)-Three-tier organization-Introduction to frameworks-Framework applications -General-purpose website frameworks-Server-side-Client-side-Features

UNIT II JAVA WEB FRAMEWORK

Java Web Frameworks-Struts-The Struts Framework- The Struts Tag Libraries- - Struts Configuration Files- Applying Struts-

UNIT III STRUTS 2

Struts and Agile Development -Basic Configuration -Actions and Action Support -Results and Result Types -OGNL, the Value Stack, and Custom Tags-Form Tags -Form Validation and Type Conversion-Exceptions and Logging-Getting Started with JavaScript-Advanced JavaScript, the DOM, and CSS-Themes and Templates-Rich Internet Applications.

UNIT IV PYTHON WEB FRAMEWORKS

Introduction to Python Frameworks-Web 2.0, Python, and Frameworks-The Role of AJAX in Web 2.0-Web 2.0 with Traditional Python-Introducing the Frameworks-Web Application Frameworks-MVC in Web Application Frameworks-Common Web Application Framework Capabilities

UNIT V TURBOGEARS WEB FRAMEWORK

Introduction to TurboGears -Turbo Gears History-Main Turbo Gears Components-Alternate Components-MVC Architecture in TurboGears-Creating an Example Application-The Controller and View-Introduction to Django-Django History-Django Components-Alternate Components-MVC Architecture in Django-Creating an Example Application

TEXT BOOKS:

1. James Holmes, II Struts the Complete Referencell, 2nd Edition, Mc. Graw Hill Professional 2006
2. Donald Brown, Chad Michael Davis, Scott Stanlick, II Struts 2 In ActionII Dreamtech press 2008

3. Dana Moore, Raymond Budd, William Wright, —Professional Python Frameworks Web 2.0 John wiley & sons, 2008
4. Programming with Django and TurboGearsII, Wiley Publishing
5. Carlos De La Guardia, IIPython Web FrameworksII, O'Reilly

REFERENCES:

1. Sue Spielman, IIThe Struts Framework 1: A Practical guide for Java ProgrammersII, 1st Edition. Elsevier 2002
2. Adrian Holovaty, Jacob Kaplan-Moss, —The Definitive Guide to Django: Web Development Done RightII, Apress, 2009
3. Mark Ramm, IIRapid Web applications with TurboGearsII, Prentice Hall.2009