**JEE**

Course Plan

2015 - 16

**Technical Learning Services**

**Table of Contents**

**Course Objectives ................................................................................................................ 3**

**Course Contents ................................................................................................................... 4**

**Version Info ........................................................................................................................... 6**

**Thank You ...................................................................................................................……… 8**

**Course Objectives**

|  |  |  |  |
| --- | --- | --- | --- |
| **Course** | JEE | **Code** |  |
| **Phase** | Advanced | **Duration (Days @ Hrs)** | 11 d \* 8 hrs. = 88 hrs. |
| **Prerequisites** | | | |
| Participants need to have prior knowledge/skill of | | | |
|          Basic Programming constructs of Core Java | | | |
|          Basic knowledge of XML. | | | |
| **Course Objectives** | | | |
| On completion of the course the learner will be able to : | | | |
|          Design and develop programs using best coding practices. | | | |
|          Design and develop web application for given problem statement using  Application Server. | | | |
|          Apply modularity, code re-usability concepts using Java for web application. | | | |
|          Understand the basic terminology used in web application development | | | |
|          Integrate Servlet, JSP, JDBC and XML for web applications.           Configure and deploy web applications on Application Server.           Implement MVC design pattern in web application. | | | |
| **Mode of Facilitation and S/W Required:** | | | |
|          ILT, Code Walkthrough and Hands – On. | | | |
|          JDK 1.6 , Eclipse Luna, Weblogic Server 11g, Oracle db | | | |

**Course Contents**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S.No** | **Main Course Title** | **Sub Topics** | **Concept Types** | **Day** |
| **1** | **JDBC** | * JDBC Architecture * JDBC Driver types * Establishing DB Connection * Statement Interface * PreparedStatement Interface | C2, C3 | **Day 1** |
| * CallableStatement Interface * ResultSet and ResultSetMetaData * Transactions in JDBC * DatabaseMetadata * Rowset * Connection Pooling and DataSource * **Multiple Choice Quiz** |  | **Day 2** |
| **3** | **Introduction to JEE and Servlets basics** | * Introduction to JEE * Web Application Structure * Terms of Web Application – URL, URI, Types of Paths | C1 | **Day 3 & 4** |
| * Servlet Basics * Servlet Life Cycle * ServletConfig and ServletContext * JNDI * Application Server introduction | C2, C3 |
|  |  |  |  |  |
| **4** | **Servlets** | * Inter Servlet Communication * Scopes in servlet for data sharing * Servlet Configuration using annotations | C2, C3 | **Day 5** |
| * Filters and Listeners * Session Management with various ways * Logging * Best coding practices * **Mid Term Assessment (Web Programming + JDBC+ Servlet) based on MVC concept** * **Multiple Choice Quiz** | **Day 6 & Day 7** |
|  |  |  |  |  |
| **5** | **JSP Basics** | * Introduction to Java Server Pages (JSP) * JSP Life Cycle phases and methods * JSP Scripting Elements | C2, C3 | **Day 8** |
| **6** | **JSP Directives and Action tags** | * JSP Directives * Implicit Objects in JSP * Scopes in JSP * Action Tags – (useBean, setProperty, getProperty) * Custom tags (Only demo) * MVC design Pattern * **Multiple Choice Quiz** | C2, C3 | **Day 9 & Day 10** |
| **7** | **JSTL and Maven** | * Expression Language * JSTL core tag library * Maven and SVN | C2, C3 | **Day 11** |
| **8** | **Objective Assessment** | * XML * JDBC * Servlet * Filters & Listeners * JSP * JSTL   \*Assessment can be conducted on next day (Case Study Day 1.) No practice day is allocated for same. |  |  |

**\*Concept Type**

*C1 - Factual knowledge*: The basic elements that associates must know and understand.

*C2 - Conceptual knowledge*: The interrelationships among the basic elements within a large structure that enable them to function together.

*C3 - Procedural Knowledge*: How to do something; methods of inquiry and criteria for using skills, algorithms, techniques and methods.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Collaterals Details | | | | | |
| Collaterals Deployed | | | | Collateral Available Path | |
| Course presentations | | | |  | |
| Exercises | | | |  | |
| Resources Required | | | | | |
| * Windows 7 and above * Eclipse Luna and above * Weblogic Server 11g | | | | | |
| **References** | | | | | |
| * *J2EE Complete Reference-* * *Head First Servlets & JSP* –By Bert Bates, Kathy Sierra, Bryan Basham | | | | | |
| Version History | | | | | |
| # | Date | Created/Changed by | Changes made | | Reviewed by |
| 1.0 | 16-Nov-2015 | Pankaj Patil | Created | |  |
| 1.1 | 16-Dec-2015 | Shweta Gandhi | Changed catalogue template | | Aparna Vedpathak |
| 1.2 | 31-May-2016 | Shweta Gandhi | Modified Scope according to inputs received in post ELITE workshop | | Natraj Marthi |
| 1.3 | 16-Sept-2016 | Shweta Gandhi | Updated for Weblogic 11g Server. | |  |
| 1.4 | 28-Dec-2016 | Shweta Gandhi | Added Maven and Mid -term assessment | |  |

**Version Info**

Disclaimer

Tech Mahindra herein referred to as TechM provide a wide array of presentations and reports, with the contributions of various professionals. These presentations and reports are for informational purposes and private circulation only and do not constitute an offer to buy or sell any securities mentioned therein. They do not purport to be a complete description of the markets conditions or developments referred to in the material. While utmost care has been taken in preparing the above, we claim no responsibility for their accuracy. We shall not be liable for any direct or indirect losses arising from the use thereof and the viewers are requested to use the information contained herein at their own risk. These presentations and reports should not be reproduced, re-circulated, published in any media, website or otherwise, in any form or manner, in part or as a whole, without the express consent in writing of TechM or its subsidiaries. Any unauthorized use, disclosure or public dissemination of information contained herein is prohibited. Unless specifically noted, TechM is not responsible for the content of these presentations and/or the opinions of the presenters. Individual situations and local practices and standards may vary, so viewers and others utilizing information contained within a presentation are free to adopt differing standards and approaches as they see fit. You may not repackage or sell the presentation. Products and names mentioned in materials or presentations are the property of their respective owners and the mention of them does not constitute an endorsement by TechM. Information contained in a presentation hosted or promoted by TechM is provided “as is” without warranty of any kind, either expressed or implied, including any warranty of merchantability or fitness for a particular purpose. TechM assumes no liability or responsibility for the contents of a presentation or the opinions expressed by the presenters. All expressions of opinion are subject to change without notice.

.

# 

Thank You

Visit us at techmahindra.com