

Introduction to Web-Based Java Applications (PRJ321)

Prerequisites

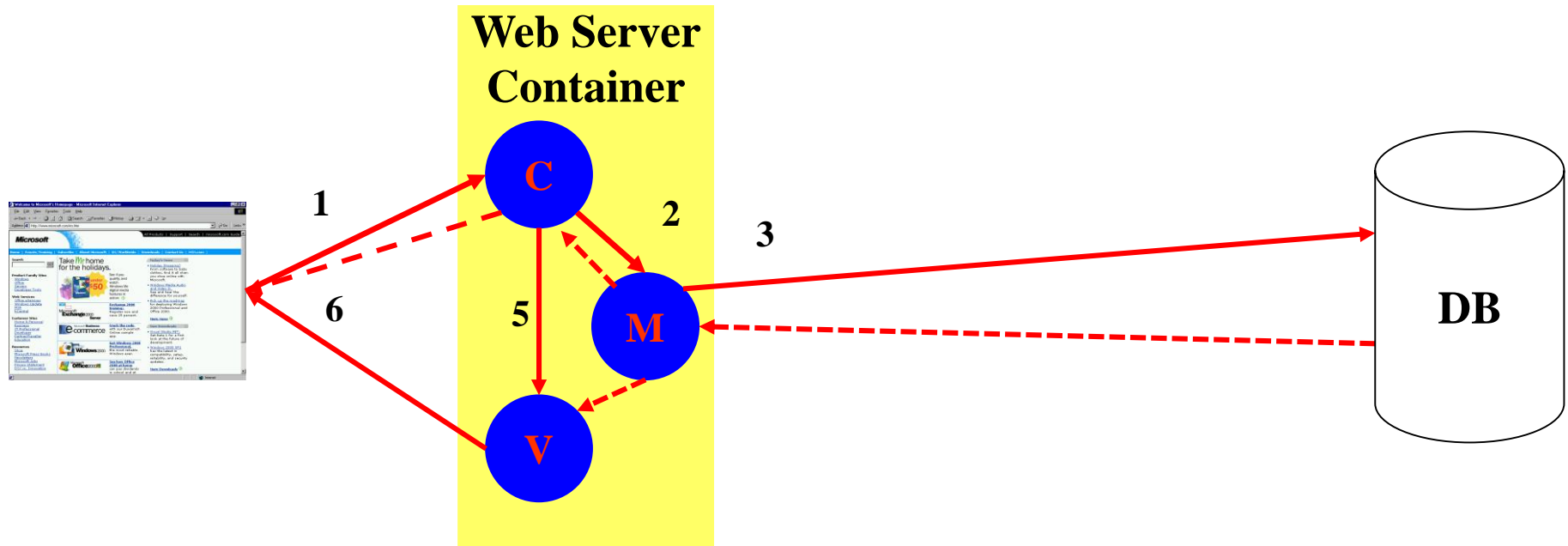
- **Completed:**
 - PRJ311 (Desktop Java Applications)
 - DBI202 (Database Systems)

Course Objectives

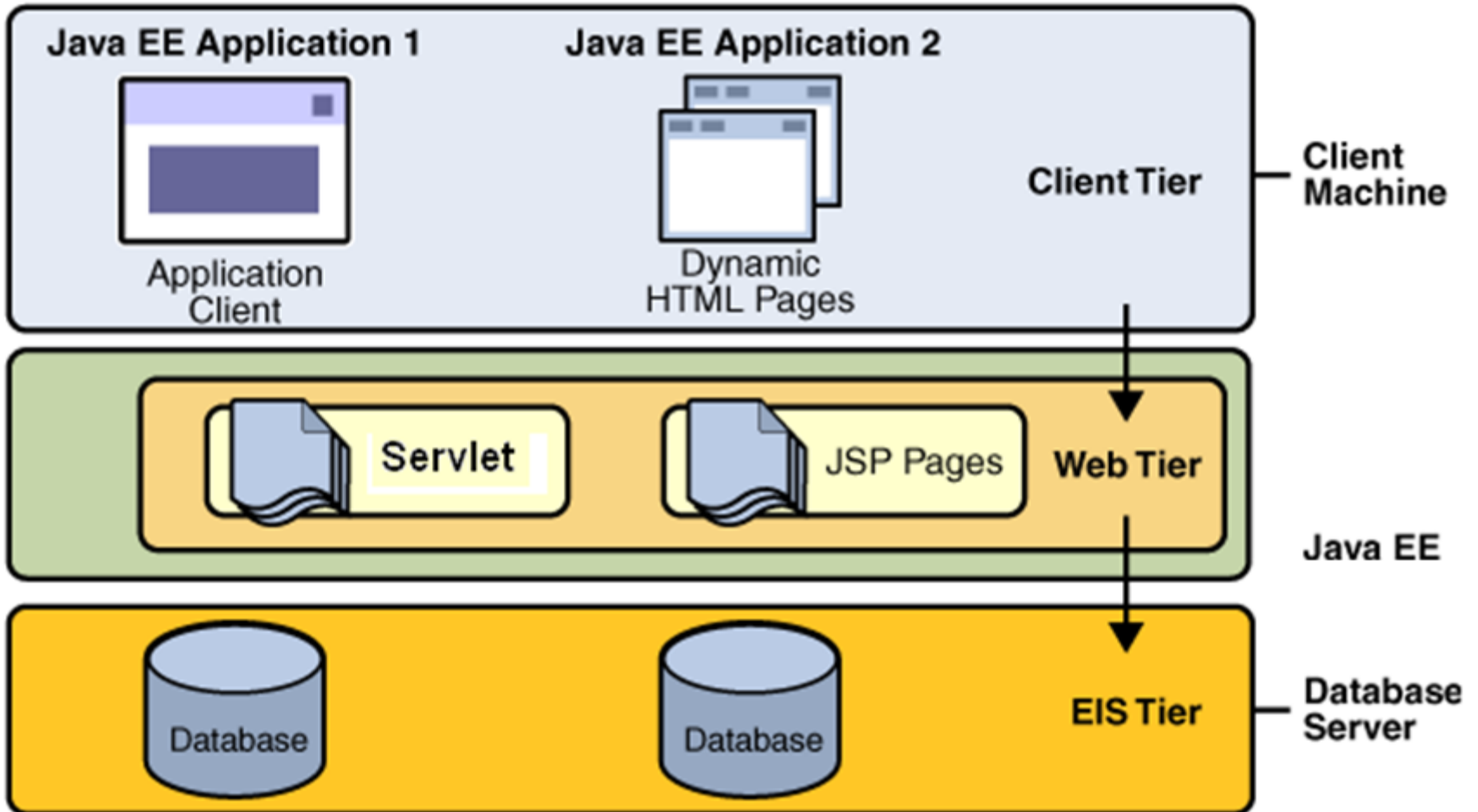
- This course **explores the features** of JavaEE (J2EE)
 - Understand the **core technologies** of **Java web** programming (Servlets, JSP, JavaBeans, Custom Tags, Filtering)
 - Understand and be able to **apply MVC architecture** for the web **combining with framework** (Struts 2)
 - Develop a **Web Application** (Servlets, JSP)

Course Objectives

- The MVC architecture is applied in web application

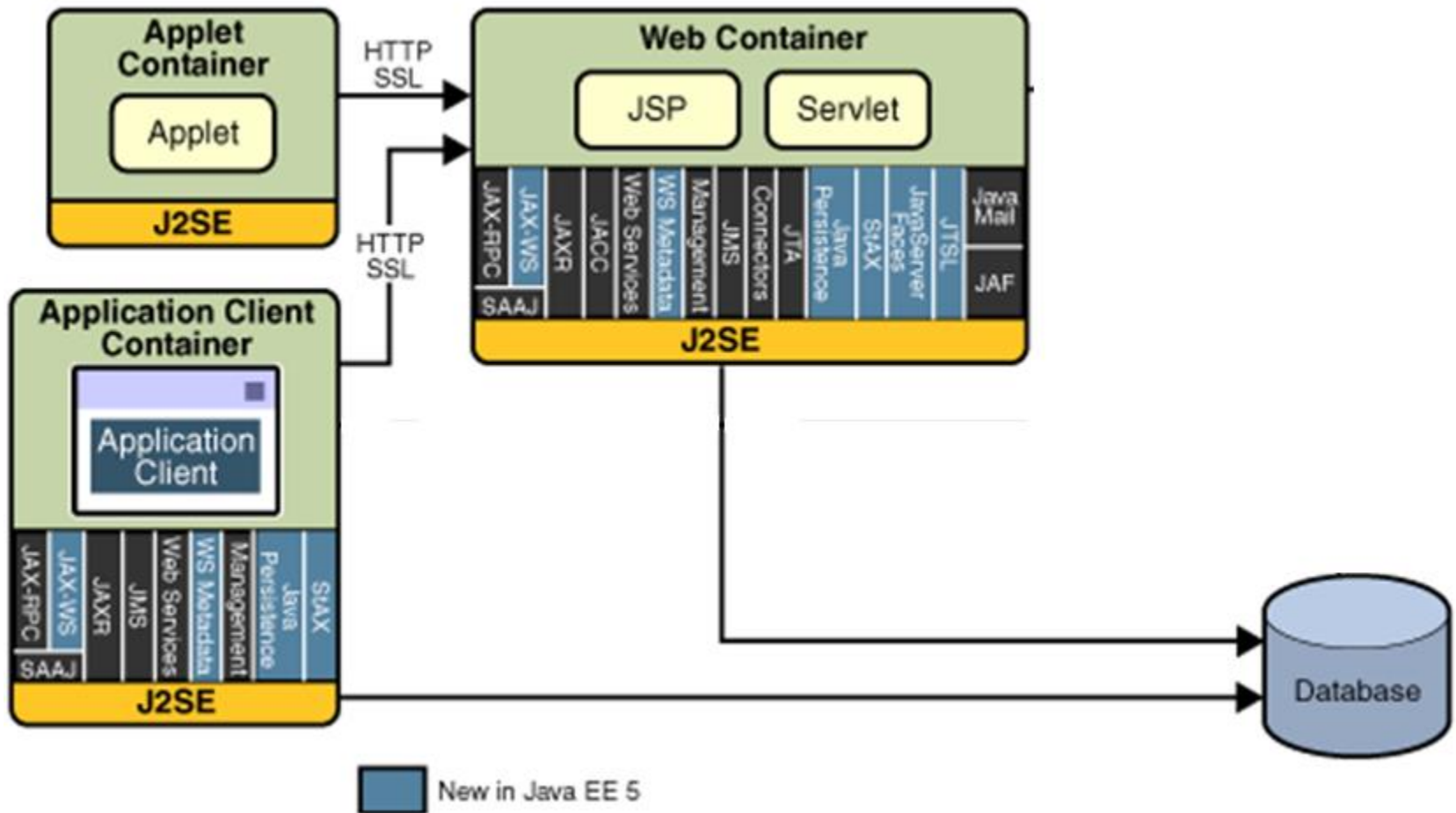


Course Objectives



Course Objectives

- **J2EE 1.4/ JavaEE5/ JavaEE6 Platform API**



Course Objectives

- J2EE/JavaEE Technologies

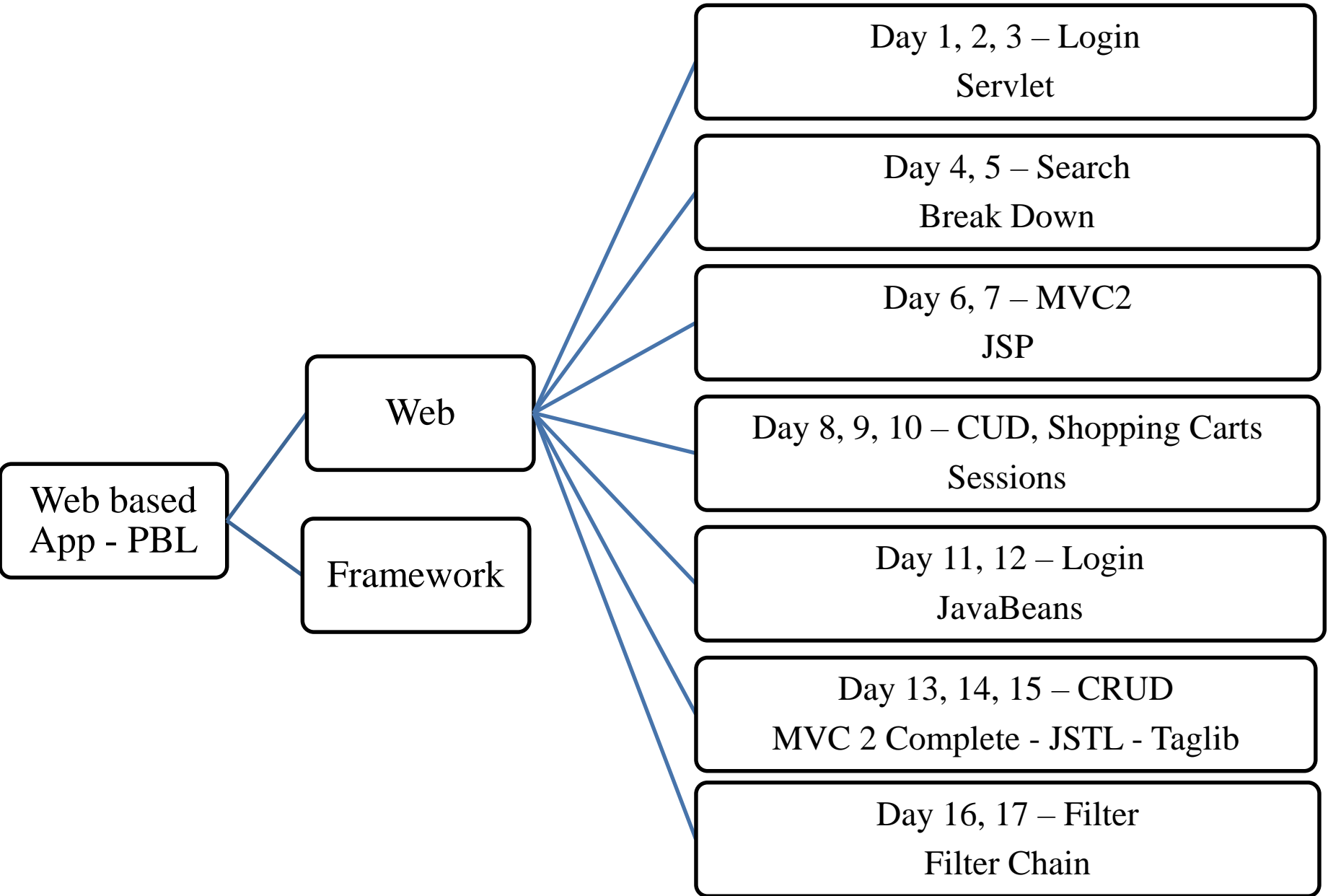


Course Description

- 1. Servlets Model**
- 2. Web Application & Web Container**
- 3. Java Server Pages (JSP)**
- 4. Session Management**
- 5. JavaBeans**
- 6. JSP Tag Libraries – Custom Tags**
- 7. Filters**
- 8. Introduction to Struts**
- 9. Struts 2 Basics**
- 10. Struts 2 Advanced**

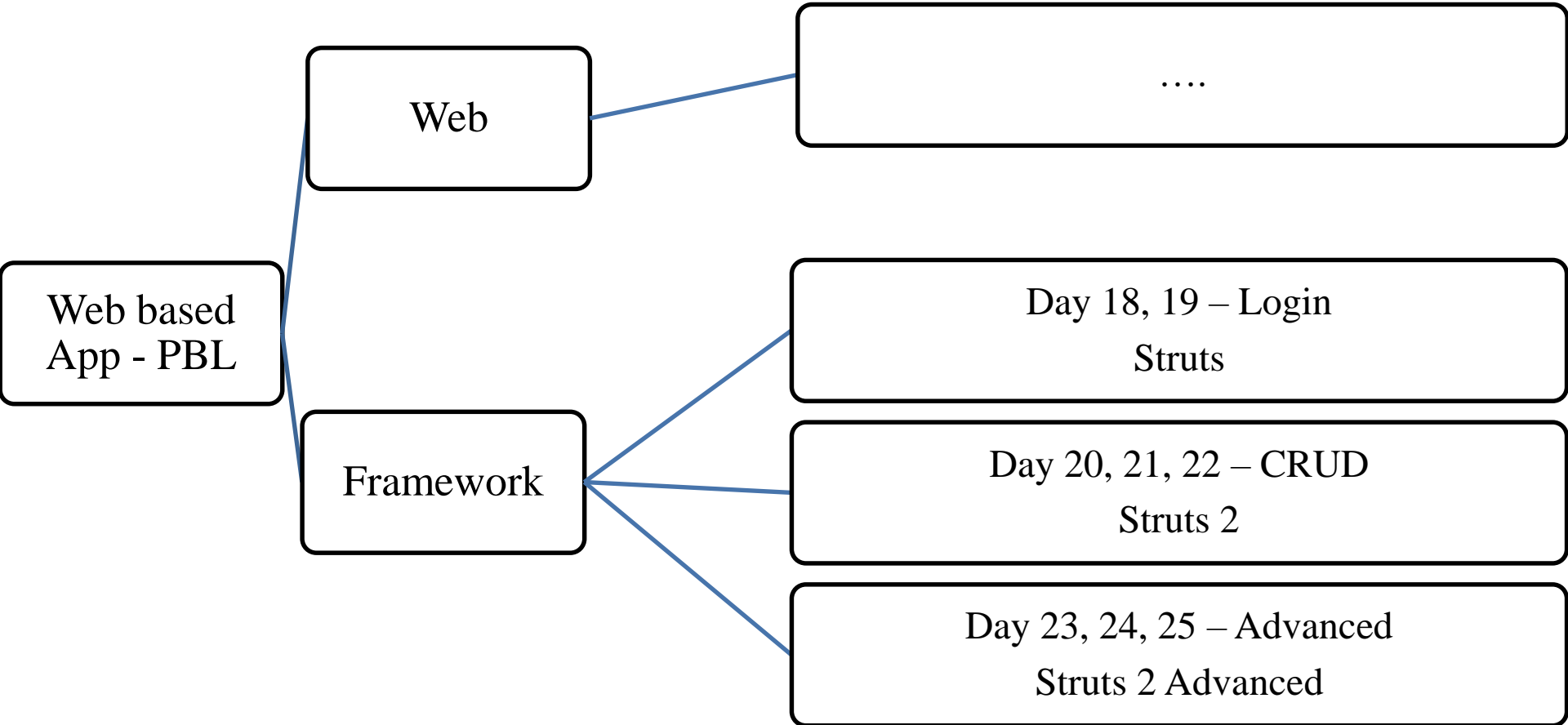
Course Plan

- See course plan on LMS



Course Plan

- See course plan on CMS



Course Plan

- See course plan on LMS
- Agenda
 1. The Servlet Model
 2. Web Application & Web Container
 3. Java Server Pages (JSP)
 4. Session Management, Session & Listener (self-study)
 5. JavaBeans
 6. JSP Tag Libraries – Custom Tags
 7. Filters
 8. Introduction to Struts
 9. Struts 2
 10. Strut2 Advanced
 11. *Practical test*
 12. *Project Presentation*

Materials/ References

- **Required Textbook**

- Online Text book: Nicholas S. Williams, 2014, Professional Java® for Web Applications, Wrox Press
- <http://library.books24x7.com/toc.aspx?bookid=62587>

- **Required References**

- <http://java.sun.com/docs/books/tutorial/jdbc/>
- <http://struts.apache.org/>

- **References**

- <http://java.sun.com/>
- Fan Page: <https://www.facebook.com/TrongKhanh.Kieu/>

Learning Environments

- JDK 7 (<http://www.oracle.com/technetwork/java/index.html>)
 - **Recommend:** JDK 7 Update 51, JDK 8 Update 66
- JDK 7 Documentation
- J2EE 1.4/JavaEE5 Core Patterns
- **NetBeans IDE 7.4/8.0.2/8.1/8.2 with supporting JavaEE** (<http://www.netbeans.org>)
- **Bundle Tomcat 8.0.x/7.0.x** (<http://tomcat.apache.org/>)
- **DBMS: MS. SQL Server 2005/2008/2014** (<http://www.microsoft.com/sqlserver/2008/en/us/default.aspx>)
- Browser: **Internet Explorer \geq 8.x**
- Driver Type 4 for MS. SQL Server: **sqlserver4.jar** (<http://lms-undergrad.fpt.edu.vn/mod/resource/view.php?id=4566>)
- **Team Viewer 11/12 for supporting**

Course Rules

- **How to conduct**
 - Prepare contents of the next session/ topic at home
 - Following lessons in classrooms
 - Completing chapter assessments in time and Quizzes (via LMS)
- **Communication**
 - Class
 - Interchange by FU-HCM CMS, Forum
 - Discussing actively in your teams and in classrooms
 - Free to question and answer
- **Others**
 - Off phone
 - Use laptops under teacher's instruction
 - No game, no chat in class

Evaluation Strategy

- Must attend more than 80% of contact hours (if not, not allow to take exam).
- **Evaluating**
 - **02 Progress Test (Q)** 10 %
 - **02 Workshop (Lab)** 10 %
 - **01 Assignment (Prj)** 30 %
 - **01 Practical Exam (P)** 20 %
 - **Final Exam (FE)** 30 %
- **Total score**
 - 10% (Q) + 15% (Lab) + 15% (Prj) + 30% (P) + 30% (FE)
- **Pass**
 - Total score ≥ 5 and Final Examination ≥ 4 (of 10)
 - **Every components > 0**
- **Retake** only the Final Exam when not passed

How to study

- This course is **complex knowledge** (however, it's **attractive and exciting**), so you need to keep tight grip on it
 - **Read**
 - On the books to get the general concept
 - Reference, study, collection from anywhere else (internet, your classmates, forum ...)
 - **Attend lectures**
 - Listens, understand, then make your own notes
 - Give your explanation about some topic in lectures
 - Ask questions
 - Give some examples that are not existed in your book
 - Practice all the exercises, demo to make your sense
 - **After classes**
 - Discuss your classmate in directly, on forum
 - Do the lab, assignments to submit via CMS, and do more exercises
 - Build your teams in yourselves to support together in studying

How to exam/test

- This course is **required** following rules, so you **need to focus and practice** your exercises and homework in try your best everyday
 - **Progress Tests**
 - No books
 - No conversations
 - **Practical Exam**
 - No internets, No emails, No chats, No conversation
 - **Not copy or paste** from available/previous code.
 - All are try it yourselves **manually**
 - ... Nothing else
 - You do only work with **Netbeans IDE** tools and **DBMS**.
(without configuring svn)
 - **Workshop/Assignment**
 - **Not copy** (copy code, contents, style)
 - Submission of all source code **does not delete anything**

Academic policy

- Cheating, plagiarism and breach of copyright are serious offenses under this Policy.
 - Cheating
 - Cheating during a test or exam is construed as talking, peeking at another student's paper or any other clandestine method of transmitting information.
 - Cheating during in making lab and assignment as copy source code, copy style, same meaning in progress, ...
 - Plagiarism
 - Plagiarism is using the work of others without citing it; that is, holding the work of others out as your own work.
 - Breach of Copyright
 - If you photocopy a textbook without the copyright holder's permission, you violate copyright law.

Enjoy the Course

- Be enthusiastic about the material because it is interesting, useful and an important part of your training as a software engineer.
- Our job is to help you learn and enjoy the experience.
- We will do our best but we need your help.
- So, let's all have fun together with Web-Based Java Applications!!!

Q & A