

## Group Project

The group is required to develop a web app solution using the Java EE Framework.

The Java EE Framework provides flexibility on how the solution can be distributed across different tiers and architectures. In this project you are required to incorporate **JavaServer Pages (JSP)/JavaServer Faces (JSF) Web Application Framework with PrimeFaces UI Framework, EnterpriseJavaBean (EJB) component technologies, publishing stateless session beans as Web Services and persistence object models/Java Persistence API (JPA) entities**. The web solution is going to be deployed into an application server (for example GlassFish) and data is stored in a database server (for example MySQL).

**Design pattern/Architectural pattern, API and third party component(s) should be used appropriately to construct a better design solution for the application.**

Refers Figure 1 and 2 that illustrate the possible architectures in different views of the web app solution.

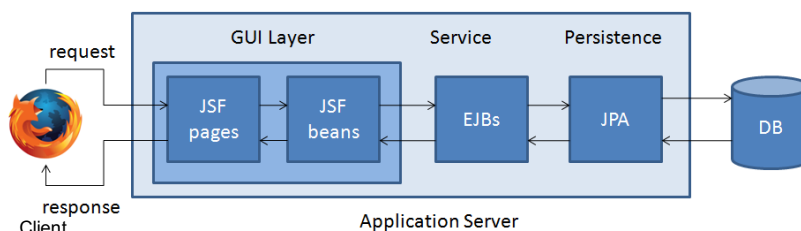


Figure 1. Physical view of Application Architecture using Three-Tier Architecture Style

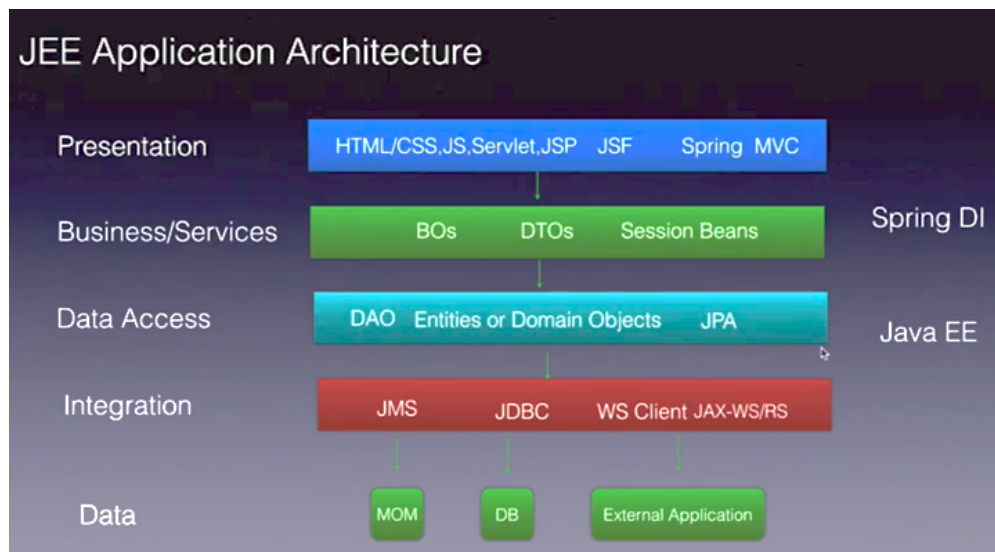


Figure 2. Development View of Application Architecture using Layer Architecture Style

## ***Project Delivery:***

Project report, which includes:

- a) Team member
- b) Project background – refine from previous project
- c) System analysis – refine from previous project
- d) UI Design
- e) System detailed design & system architecture, UML models (shows design pattern/architectural in the model),
- f) Component descriptions
- g) Descriptions of API and third-party components
- h) System prototype

## ***Milestones:***

<b>Week</b>	<b>Milestones</b>
1	Web-solution use-cases (at least 5 main use-cases/features)
2	UI Design & ERD
3	Construct JSP page & SQL database (install IDE Enterprise edition e.g. Netbeans, Eclipse) and SQL Community Server (SQL GUI Console e.g. Workbench, phpMyAdmin)
4	Manage connectivity JSP & SQL
5	Continue and refine construction
6	<b>Demo; submit parts (a) – (d)</b>
7	Identify third party-components and pattern(s)
8	Design EJB models, JPA & application server (e.g. GlassFish, WildFly etc.)
9	Construct EJB components
10	Integration of EJB with front and backend layer
11	Adoption of third-party component & pattern(s)
12	Construct web service & integration
13	Fine-tuning system
14	<b>Demo; submit (a), (b), (c), (e), (f) &amp; (g)</b>