Adopt JSR Sample Web Application

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# Objective of the document

The objective of this document is to

* Outline the key features of the JSR 338 and JSR 107
* Document the key use cases for building sample web application confirming JSR 338 and JSR 107
* Define & document the key requirements that drive creation of the sample web application confirming to JSR 338 and JSR 107
* Act a source of reference to identify the activities involved in building of the sample web application and dependencies for the same

# New Features of JSR 338 (JPA 2.1 )

Following are few of the new features of JPA 2.1, which will be consumed in the sample web application created for the JSR 338

* New Query Interfaces
  + Named Stored Procedures queries
  + Criteria Update queries
  + Criteria delete queries
* New reserved keywords in JPQL viz. FUNCTION, ON, TREAT
* Entity listeners using CDI
* Un Synchronized of persistence contexts

# Features of JSR 107 (Caching)

Following are few of the features of Temporary Caching, which will be consumed in the sample web application created for the JSR 338 and JSR107

* Object Cache
  + By value
  + By reference
* New Caching Annotations
* Transactional support
* Distributed Caching

# Brief of the Sample Web Application

The sample web application is hypothetical application addressing the food court management in a software organization. The application will be web based, which will persist the information of the employee who are using the in campus food court for breakfast, lunch and dinner and their grievances against the quality of the food provided by the disparate vendors. The application will provide organization administrator to moderate the comments provided employees and also take appropriate action against the vendor against whom maximum grievances have to be submitted.

# Use Cases of the Food Court Management System

* Registration of the Food vendors
  + Create Food vendor
  + Update/Delete of Food Vendor
* Search /Listing of Food vendors
* Lunch Menu for the Day
* Nominate the food vendor and workflow approval of the vendor
* Audit report of the food vendors
* Upcoming Food festivals
* Registration of the employee ( LDAP integration if possible)
* Food Quality Grievance Form
* Workflow to moderate the comments entered by the employee
* Administrative workflow for the action on the food vendor
* Food Quality Grievance dashboard depicting the highest defaulter
* The menu provided by the vendors for the current week and with the respective cost details of the items in the menu