**Crossover Online Testing Platform by Raydelto Hernandez**

We’re using **maven** for handling our builds. The Online Testing System uses the following Spring dependencies:

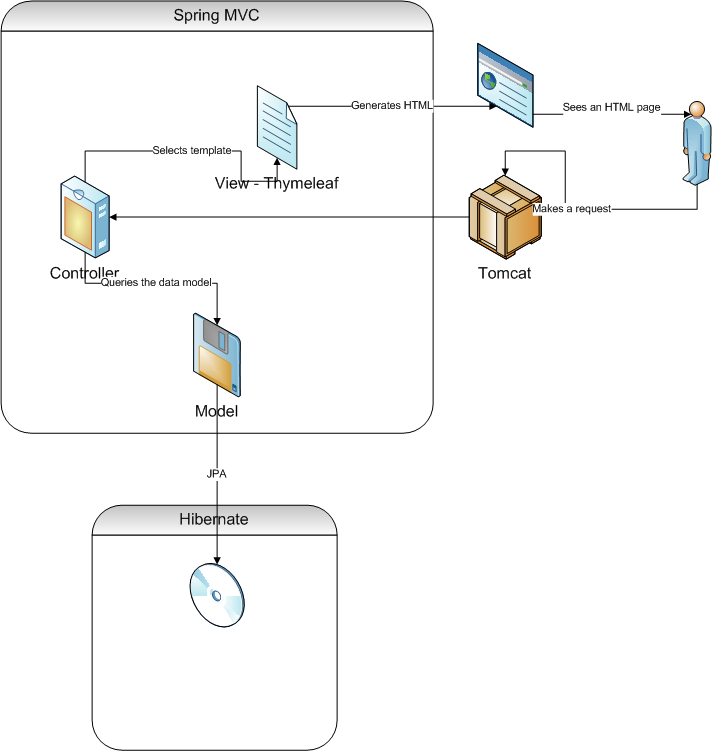
1. Thymeleaf for handling the view using templates.
2. Hibernate Entity Manager for handling persistence.
3. MySQL Connector for accessing to the MySQL JDBC Driver.

The MVC capabilities of this web application are being handled by Spring MVC.

For accomplishing a non-functional requirement, the code is optimized to work with JDK 1.7.

The **ExamController** is the only controller contained in the web application, this class contains all the mappings used. For making the code simpler some helpers have been created such as the ExamHelper, UserHelper and PersistenceHelper. We have also created a password util class for hashing passwords using the MD5 encryption algorithm. We haven’t use the **MD5** encryption function so our code is database platform independent.

The following diagram shows the Web Application architecture, and shows step by step what happens from the moment the user makes a request until the user receives a response.

The persistence is being done using the Hibernate persistence API, enriched JPA annotations.****