**How to Configure & Run the Application**

**1)** Install Tomcat server

**2)** Install Lamp server (apache, mysql)

**3)** Configure phpmyadmin

**4)** Download mysql-connector-java-5.0.8-bin.jar and add it to Tomcat Lib directory

**5)** Install Tomcat database by running the script "tomcat\_realm.sql" under "assets\db"

**6)** Install project database by running the script "SMB215.sql" under "assets\db"

**7)** Create database user "SMB215\_user" and grant all privileges to SMB215 database

**8)** Open context.xml file, web.xml file and change the database connection (db name, user and password)

**9)** Setup SSL on Tomcat by following the steps in the how-to guide that exists under wiki "How-do-I-set-up-SSL-on-Tomcat.pdf"

**10)** Next, we need to update the Tomcat server.xml file to connect to the MySQL realm database that we just created. we need to comment out the UserDatabase realm section. we will create a JDBC realm entry containing all of the correct information, as shown here:

<Realm className="org.apache.catalina.realm.LockOutRealm">

<!-- This Realm uses the UserDatabase configured in the global JNDI

resources under the key "UserDatabase". Any edits

that are performed against this UserDatabase are immediately

available for use by the Realm. -->

<!-- <Realm className="org.apache.catalina.realm.UserDatabaseRealm"

resourceName="UserDatabase"/> -->

</Realm>

<Realm className="org.apache.catalina.realm.JDBCRealm"

digest="MD5"

driverName="com.mysql.jdbc.Driver"

connectionURL="jdbc:mysql://localhost:3306/tomcat\_realm"

connectionName="realm\_access" connectionPassword="realmpass"

userTable="tomcat\_users" userNameCol="user\_name" userCredCol="password"

userRoleTable="tomcat\_users\_roles" roleNameCol="role\_name" />