**CauseCode Assignment Documentation**

**Assumptions:** I have understood the problem like I can perform the operations on database to archive the problem solution, as the problem statement is very vague. But there can be different meaning of find store with a given zipcode programmatically as well using some open source API or Google API but its time consuming so I went through previous approach.

**Technology Used:**

1. Jax-rs/Jersey API for RESTFull web service in java

2. Hibernate 3.0.1 and hibernate-annotations

3. MySql Database

4. Maven

5. Apache Tomact 7 server

6. Spring Core

7. Java/J2EE

8. Git (A new experience with new version control system) etc.

**Tools Used**: Eclipse, Xampp, Google Postman, Mysql database UI via Xampp, Git , Bitbucket etc

**Database Design:**

|  |
| --- |
| ***Store*** |
| storeId |
| Store\_name |
| store\_address |
| latitude |
| longitude |
| zipcode\_id |

|  |
| --- |
| ***Zipcode*** |
| zipcode\_id |
| state |
| country |
| latitude |
| longitude |

**Overall Experience with given Assignment:**

1. This was really good and challenging experience as I have developed whole application from scratch i.e. from installing new software’s and all.

2. Most of the time we work on readymade system base and start working but this was different kind of challenge, just like #**Startup’s** culture and work environment, independent development.

3. During application development I have learn how to debug our own application to solve issues which we got during development and got self motivated.

4. I was new to hibernate so faced the problems during development but since last 8 days I got good command on hibernate now☺

5. I am not much comfortable with Spring MVC so haven’t tried the approach but surely I can learn spring MVC and will discuss at the time of review and further process.

6. I really enjoyed my last 8 days while developing this application. **I am loving it☺**

**Below are the few list of issued that I remember which troubles me a lot during development:**

1. Installing Mysql, Xampp for accessing Mysql UI and tomcat server.

2. at org.codehaus.jackson.map.ser.std.CollectionSerializer.serializeContents🡪 serialize with Json response

Solution added these two annotation === @JsonBackReference in @ManyToOne and

=== @JsonManagedReference in @OneToMany

3. One-to-many relation mapping troubles me a lot while mapping.

4. Out of memory issue while starting server🡪 so added -XX:+CMSClassUnloadingEnabled -XX:+CMSPermGenSweepingEnabled in command line.

5. Caused by: java.sql.SQLException: Lock wait timeout exceeded; try restarting transaction: READ-COMMITTED 🡪 so set below two variables.

SELECT @@GLOBAL.tx\_isolation, @@tx\_isolation;

SET GLOBAL tx\_isolation=’READ-COMMITTED';

SET SESSION tx\_isolation='READ-COMMITTED';

6. org.hibernate.id.IdentifierGenerationException: ids for this class must be manually assigned before calling save() 🡪 I have forgot to set one field while inserting data in database

7. com.sun.jersey.spi.inject.Errors$ErrorMessagesException 🡪 I have given same path argument name for both the controller classes.

There are many different one which I don’t remember now☺