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**Lab 7**

**Github Link:** <https://github.com/aminrashid/Software-Construction>

**Introduction:** In this lab, the task was to solve a real world problem where the data is collected using 3 novel graphical password authentication schemes that are:

1. CO-CHC
2. CHC
3. Rogue CHC

So a CSV file has to be read and hibernate based data storage has to be built in JAVA.

**Approach:** So HQL and HCQL statements have to be used to help get the columns and rows from the csv file and also calculate the mean percentage of the time taken.

**Design:** I created a persistent class and connected it to the database which contained all the columns of the csv file and also made changes to the cfg file to make it match with the persistent class. Then calculated the mean percentage of time taken.

**How to Run and Analysis: :** It is very easy to run as you just have to open NETbeans and open the file and run the application and it will read the csv file for you and calculate the time that you want.