Aimsio

1. What is VAADIN?
   1. Vaadin is a Java web application framework. It is designed for creating rich and interactive applications that run in the browser, without any plugins. A server-driven architecture together with reusable component model is used to simplify programming of applications and for better web application security. No HTML, XML or JavaScript necessary and all Java libraries and tools are at your disposal.
2. Query result csv
   1. 3 properties
      1. AssetUN
      2. status
      3. entry\_date

Todo

1. Go over Vaadin tutorial
2. Setup Vaadin
3. Setup GWT???
4. Import csv data to mysql database and host it on Amazon RDS
5. Use maven to create a Vaadin application
6. Create an AWS account to host application within Amazon Elasticbeanstalk
7. Create the UI for application
8. Use bootstrap for responsiveness
9. Do not load all data into memory. Load data as needed using a query.
10. Create test scripts
11. Need something to display the data in chart format

**Aimsio Programming Test**

**Requirements**

The provided CVS dataset contains the time-stamped list of signals received from

equipment in the field. Each signal is from a certain piece of equipment in time of a

status change.

Import the dataset in a MySQL database. Implement a responsive VAADIN

application that visualizes the # of signals over time. Upload your WAR file on the

Amazon Elasticbeanstalk and send the URL.

Here’s a more in-depth requirement:

~~1. Create an account on aws.amazon.com. Use their free tier to host your~~

~~application.~~

~~2. Import data to a MySQL database and host it on Amazon RDS.~~

~~- install mysql locally 5.7~~

~~- root/admin~~

- ~~load csv to mysql~~

~~- mysqlimport~~

~~-~~ [~~http://stackoverflow.com/questions/3635166/how-to-import-csv-file-to-~~](http://stackoverflow.com/questions/3635166/how-to-import-csv-file-to-)~~mysql-table~~

- create indexes? create view to add the number of signals

~~3. Use maven to create your VAADIN application.~~

4. Your application must have the following components:

a. A Vaadin Chart component: horizontal axis shows the time, vertical

axis shows the # of different signals, e.g. Engaged, Active, etc.

* + - * install Vaadin Chart

b. Have a ComboBox to allow the user to select a specific AssetUN or all

of them.

c. Provide an easy-to-use UI for the user to interact with your chart, e.g.

i. Show data in the x-axis based on a resolution (daily, monthly,

annually) and allow the user to change resolution. For

example, on a monthly resolution, the x-axis must show

months and the y-axis must have aggregated signal counts for

each month.

* + - * use line chart or timeline chart

ii. Your application should be responsive

d. Your program should construct a query and load data as needed.

~~5. Bonus:~~

~~a. How would you test this application?~~

~~- Vaadin TestBench~~

~~- Junit tests to test the services~~