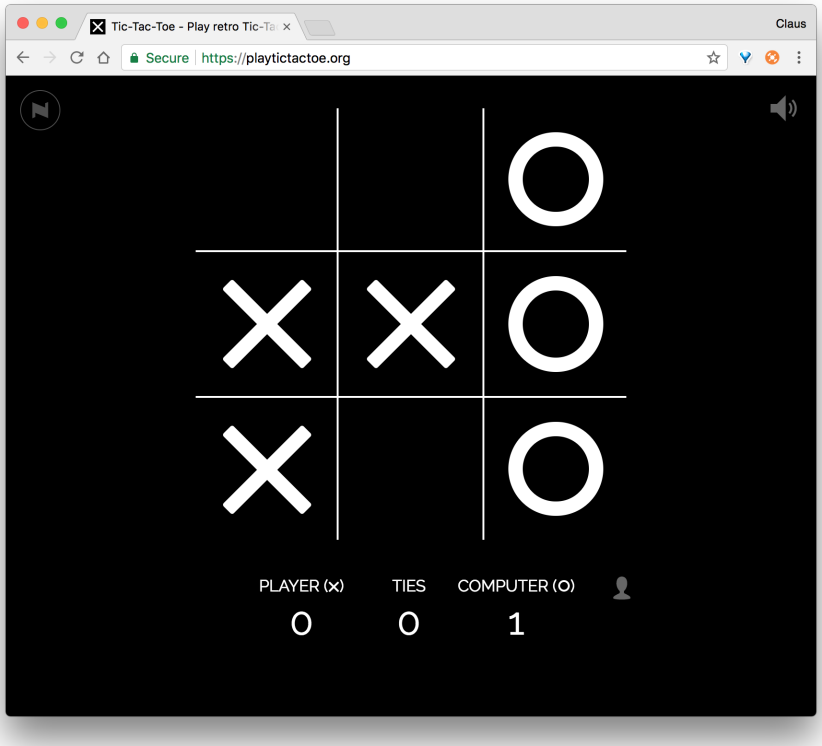
Mandatory Assignment SWCII dat17i

Start date: 08-03-2018
Handin date: 14-03-2018 (12 PM)
Presentation date: 15-03-2018

Your job in this madatory assignment is to create a game of *Tic, Tac, Toe*



You do not have to make your game look or behave exactly like this, but you can use this as inspiration.

Further requirements to your application are:

1. The player should be able to play the game against the computer.
   - Optionally, but not required, you could create a to player version of the game.
2. The player should be able create a user profile with containig a nickname and a password.
3. The user should login to play the game.
4. The results of the users played games should be stored in a database (How many wins, ties and losses the user did have)

The project should further more be a

- Spring boot project

and it should contain:

- model
- View
- controller
- repostory using interface
- database

The project should be deployed to AWS and a link for the website should be handed in.

This assignment can be done by using the topics we covered in class. You do not have to dicover new techniques. What you know is enough. On the other hand you are also allowed to use stuff we did not cover in class if you feel like it.

Documentation

At your 1st year exam at the end of this semester one requirement is that you should demonstrate that there is a cohesion between your analysis and design and code in your application. So this you should practice now.

You application should be documented and this documentation should also be handed in.

- You should identify the **Actors and Use Cases** for this system and write a **Use Case Diagram**.
- Next you should write **Use Cases** for the system in *brief* or *casual* formats.
- You should then write a **Domain Model**
- And end up with a **Class Diagram**

At the presentation you should be able to talk about the relation between all these diagrams and the code in your project.

If you need inspiration for this part of the assignment you could find information about this in you SW Design book (Larman) or you could have a look at these videos at lynda.com:

- Programming Foundations: Object-Oriented Design
  - Understanding use cases
  - Identifying the actors
  - Identifying the scenarios
  - Creating a conceptual model
  - Identifying the classes
  - Identifying class relationships
  - Class Diagram
  - Converting class diagrams to code

– Exploring object lifetime

Groups Document

You should do the assignment in groups.

Today (Thusday 8 of march) you should write your names of your group members in this Document

Handin

You should hand in your project on Fronter latest Wednesday 14 at 12pm and you should deploy you application to AWS. Link to this should be provided in the handin folder on Fronter.

Presentation

Thursday 15 from 9:15 - 11:45 you and your group should present for the class and Claus what you did. You will all get approximately 10-15 minutes and after that we talk about what was good and what was exelent.