

## TK-1 Distributed System and Algorithm

### 1<sup>st</sup> Programming Exercise – Shared Hunting Game via Java RMI

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### Information on development tools

<b>IDE</b>	: Eclipse Mars
<b>Java Version</b>	: Java version 8 Update 65 (build 1.8.0_65-b17)
<b>Deployment</b>	: .bat file (Windows only) and ANT script
<b>Test environment</b>	: Windows 7 and Ubuntu x86

### Directory structure

**Client** folder includes all client-related files (model, view, and controller) and a custom canvas extended from JPanel as the game area.

**Server** folder includes all server-related files (model, view, and controller)

**Util** folder includes the remote interface from both client and server, several helper classes and objects, and the server's stub. The client will use the path "../Util" to access the server's stub

**Policy** folder includes the policy file.

### How to run the program

If you have installed Ant, just type *ant* in the command prompt and it will automatically compile and execute 1 server and 2 clients

If not, if you're running in Windows, just double-click the *exec.bat* file

### Brief description on the MVC structure

Each server and client has their own model, view, and the controller.

The **Model (M\_)** implements the remote interface and provides additional functions that can be executed by the Controller

The **Controller (C\_)** extends **JFrame** so that it could show the View to the interface. It also serves as the bridge between receiving the data from other machine to applying it to the view

The **View (V\_)** extends **Jpanel** and consists of several Swing GUI components to simulate gameplay. A custom JPanel (**GameCanvas** class) is used by the client as the drawing board for the ant and the background. Server's View class shows several Swing GUI components for status and list of users.