

PhD Course on MAS

JaCaMo Lab

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Scenario

- This exercise is about an election using the Borda count voting system (you can read about it at Wikipedia)
- The election process is run by an `election` organisation, which has an `officer` agent that opens the voting and determines the winner; `person` agents vote and `candidate` agents have a belief about how much the taxes will be if they win
- The voting takes place in the `city_hall` workspace, where there is one particular `BallotBox` artefact with ID `bb1`
- After a candidate is elected, it takes up the role of `president` in the `government` organisation
- The president tells `citizen` agents how much they (including the president) should pay in taxes; the citizens then pay the taxes

Exercise

- Download the sources provided for the exercise and import as a JaCaMo project into Eclipse
- Read carefully all the provided code; there are some missing parts that you should write
- There are comments in the files to say where your code should go

Writing Some Code

- You will need to write the following code to make the system run:
 - Edit agent file `person.as1` and write plans for voting and paying taxes
 - Edit agent file `candidate.as1` and write plans for the candidate agent, if elected, charging and paying taxes
 - Edit the artefact file `BallotBox.java` and write the `vote` operation
 - Edit the organisation file `government_org.xml` and write a functional specification with a scheme for taxes to be charged by the president and payed by citizens (in this order, clearly)