SocialSim User Guide

Hello & Welcome to MyNiftyJavaRepo's Social Document Network simulation, SocialSim!

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The following User Guide will familiarize you with running the SocialSim simulation. This simulation models the behaviour of Consumers and Producers, who access and modify a network of documents over time. The simulation will run for a number of turns (specified by the user).

Consumers search the network for documents, liking documents that match their interests. In addition, Consumers will follow the document’s Producer as well as the users (Consumers or Producers) who like the same documents.

Producers and Consumers are both Users. They have their own methods for taking a turn in the simulation and they have their own methods for calculating a payoff.

**Running the Simulation**

* The simulation begins by generating a GUI, which requires user input for the number of:
  + - Turns
    - Tags
    - Producers
    - Consumers
    - Search Results
* Producers and Consumers are created with a Tag from a preset list of tags.
* To start the simulation, press the “Start” button
  + - The “Start” button changes to “Step”, which is used when taking subsequent turns
* The simulation will complete its first turn, randomly selecting either a Producer or Consumer to take a turn
* It searches for the k most popular documents (“k” specified by the user in the “Search Results” field at the top of the GUI and can be changed with each turn)
* The selected user will then take a turn
  + - Consumer: Looks at search result. Liking documents that match its tag, follow Consumers/Producers that like the same documents, and following the Producer of any newly liked document.
    - Producer: Creates and likes a new document. It then follows the same procedure as the Consumer.
* At the end of a turn, the simulation’s current status is displayed in the GUI:
  + - Documents, Producers, Consumers
    - Payoff is displayed in a bar graph at the bottom of the GUI
    - You can double click a producer or consumer to view their statistics. You can also change how this user acts (Producer or Consumer) and how they would like to search the documents.
* This repeats until the user quits or the number of turns is reached
* When the number of turns is reached, the user may start again by filling out the required input fields mentioned in the first step.