Exercise 5

Kai Schultz

March 18 2024

Task 1: Take part to a decentralised social network

Task 1.1: Update your FOAF Profile

The Url to my Card: /kai/card#me
I added my Name and my mail address additionally to adding you and Jonas as people that I know.

```
@prefix foaf: <http://xmlns.com/foaf/0.1/>.
@prefix solid: <http://www.w3.org/ns/solid/terms#>.

<>
    a foaf:PersonalProfileDocument;
    foaf:maker <https://wiser-solid-xi.interactions.ics.unisg.ch/kai/
       profile/card#me>;
    foaf:primaryTopic <https://wiser-solid-xi.interactions.ics.unisg.ch/kai
       /profile/card#me>.

<https://wiser-solid-xi.interactions.ics.unisg.ch/kai/profile/card#me>

    solid:oidcIssuer <https://wiser-solid-xi.interactions.ics.unisg.ch/>;
    a foaf:Person;
    foaf:name "Kai Schultz";
    foaf:mbox "kai.schultz@student.unisg.ch" ;
    foaf:knows <https://wiser-solid-xi.interactions.ics.unisg.ch/danaivach/
       profile/card#me> ;
    foaf:knows <https://wiser-solid-xi.interactions.ics.unisg.ch/Jonas/
       profile/card#me> .
```

Task 1.2: Query the distributed social graph

Both queries can be copy pasted into the terminal and executed as is if you have the necessary command line tools.

1. Query the people you know based on your FOAF profile

```
comunica-sparql https://wiser-solid-xi.interactions.ics.unisg.ch/kai/
   profile/card#me \
    "PREFIX foaf: <http://xmlns.com/foaf/0.1/>
     SELECT DISTINCT ?person
     WHERE {
       <https://wiser-solid-xi.interactions.ics.unisg.ch/kai/profile/card#
          me> foaf:knows ?person.
     }"
```

1. Query the names of all people interconnected in the distributed social graph

```
comunica-sparql-link-traversal-solid --idp https://wiser-solid-xi.
   interactions.ics.unisg.ch/\
  "PREFIX foaf: <http://xmlns.com/foaf/0.1/>
SELECT DISTINCT ?person
WHERE {
  <https://wiser-solid-xi.interactions.ics.unisg.ch/kai/profile/card#me> (
     foaf:knows|^foaf:knows)+ ?person.
}" --lenient
```

Task 2: Build an application for your Solid pod

All the code for the task can be found on Github: /src/env/solid/Pod.java
Code should be executed as described in the Exercise description.