

Sojabohne -The Requirements

or “What we think, you want to have”

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1. Introduction



Goal: web service / web application for Weka



4 main pillars:

- Rest Interface
- Tomcat
- RDF Database
- User-administration



2. How shall Sojabohne work

2.1 For registered user



What you told us about:

There shall be the possibility for any anonymous user to register himself on Sojabohne, which entails the following benefits:

- the user data is private (based on UR0601.1)
- it's possible to create user groups, with interaction possibilities between group members (based on UR0601.2, UR0601.3)
- higher priority in the request queue (based on UR0601.4)
- no constraints





What we've made from it:

Every user can register himself on Sojabohne under specification of his full name, his e-mail and a password. After receiving his information, the user can login onto Sojabohne and now has the following benefits with his account through an assigned unique user ID: (FR005, FR006, FR008)

- the basic functionalities (FR009)
 - create a new model
 - upload an existing model
 - test an existing model
 - share models with other users





What we've made from it:

- set profile settings like password, email and username (FR009)
- all data packages from this user are private and the user has the possibility to set the package access rights (FR011)
- access to the package manager with an overview with all relevant data packages (FR009)
- possibility to upload self-written algorithms as .jar file, which have to be approved by an admin (FR009.4)
- now, the user can upload data with any size; can run any number of algorithms simultaneously and his algorithms may run endlessly (FR020)
- more options to choose the presentation of the result

2.2 For anonymous user



What you told us about:

Unregistered users have all the same basic features as the registered users
(UR0602.1)

BUT they have the following constraints:

- After 30 days their saved data is deleted (UR0602.2.1.1)
- Timeout for anonymous users, regarding the runtime of their algorithms
(UR0503.0, UR0602.2.1.2)
- Their requests are put in a request-queue, if the number of requests exceed the maximum number of algorithms running at the same time (UR0507.0)
- A maximum upload filesize (UR0602.2.2.1)



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→ We used the previous requirements for some efficiency aspects and called the admin to account for setting these time and space limits (NFR008.0, NFR009.0, NFR010.0)



What we've made from it:

- In contrast to the registered user people may also use Sojabohne as an anonymous user without registering (FR014, based on UR0602.1)
- Automatically they give everyone reading and writing rights to their saved data package (FR014)
- In the workflow- or request-queue the registered users are prioritized over anonymous users (FR021, based on UR0601.4)



The normal work process for Unregistered Users

1.) The anonymous user enters the homepage and choose the tap “create new model”

2.) Then he uploads his input data. If this is bigger than the admin-set limitation...

3.) Choose split between training and test data

4.) Choose algorithm and start it. If the user tries to start multiple algorithms or the algorithm runs longer than the admin-set limitation...

User gets an error message and will be redirected to the previous page

5.) Saving the solutions and data in packages to the database with read and write permission for all users (cannot change it). This package can be found by its package-ID

On the main page he will be referred after an error there is a button for registration
→ “it is always better to be registered”

There are no possibilities to create a group.

The packages will be deleted after 30 days.

2.3 For administrators



What you told us about:

There shall be a group of administrators for the organization of the user (based on UR0603.1) with the following conditions:

- administrators shall have the possibility to ban user from Sojabohne (based on UR0603.1)
- administrators set the constraints for anonymous user (based on UR0602.2.1.2, UR0602.2.2.1, UR0603.3)
- administrators set the number of overall running algorithms (based on UR0603.2)
- administrators have to unlock uploaded user algorithms (based on UR0501.1)



What we've made from it:

There shall be a group of administrators for the organisation of the user (based on 5.2 of the FR) with the following conditions:

- administrators can do everything, a normal user can (and also have to be logged in), but have extra features for the following things (FR019):
 - set constraints for anonymous users, especially the time, their algorithms may run in total (based on UR0602.2.1.2); the number of algorithms they can run simultaneously (based on UR0606.3) and the maximum upload file size (based on UR0602.2.2)



What we've made from it:

- set the maximum number of simultaneously running algorithms for the whole application (based on UR0603.2)
- see and manipulate the algorithm queue (based on UR0507.0)
- see the user activities with the possibility to ban the user from Sojabohne (based on UR0603.1)
- see and check all uploaded user algorithms with the possibility to approve or delete them (based on UR0501.1)
 - in addition there's the possibility to deactivate and reactivate approved user algorithms

Thank you for listening!

Any questions?



Image sources:

http://www.denns-biomarkt.at/file/9560_Sojabohnen.jpg

<http://www.shutterstock.com/de/pic-277229177/stock-vector-sprout-icons-mono-vector-symbols.html?src=AxxCAJk9LApX6KqPJ80PA-1-12>

<https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcQd-QZB5uLxmIINo8bCKKmvjFjxyU36xQ5-cFQN73xhySuEWvb5QA>