## DAT076 Project - Recipebok



## Description of application

RecipeBok is an online recipe sharing and browsing platform. Users can create accounts and sign into the platform where they can upload recipes of their own and browse among all the recipes that have been uploaded.

A user can create "Cookbooks", which are user-created collections of recipes. They can be thought of as a kind of favourite system, where a user can save and organise lists of recipes. For example, users may have a "Favourite recipes" cookbook where they add only those that they like the best, or a "Fancy vegetarian recipes" cookbook where they can save recipes they think fit in there. In this version of the application, the user is currently not able to add recipes to cookbooks.

When a user logs in, they are brought to a Home-page which shows a datatable of all the recipes in the database. The user can browse these recipes and search for recipes with specific names, ingredients or date. The user can also sort the table by name or date.

Each user has a personal page where all their cookbooks and created recipes are collected. Here they can view them, as well as create new cookbooks.

Group 5 - Raha Dadgar, August Lennar, Sabrina Samuelsson, Mickaela Södergren Supervisor: Daniel Hausknecht

To create a new recipe, a user can go to the "Add Recipe" page in the navigation. There they are able to create a recipe with name, instructions and ingredients.

## **Use Cases**

The use cases we have focused on in this application are:

- 1. Register a user
- 2. Sign in with a user
- 3. Browse existing recipes
- 4. Search recipes by ingredients
- 5. Sort by name or date
- 6. View owned recipes
- 7. View owned cookbooks
- 8. Add recipe
- 9. Add Cookbook
- 10. Sign out

## General technologies used

Server: Glassfish 5.0

Database: PostgreSQL 10.2

**UI:** JSF, Bootsfaces

Programming languages: Java, XHTML, CSS, javascript

Authentication service: Firebase

## **Packages**

#### Sources

The source packages largely correspond to Workshop 3.

Control - Bean classes

Core - Contains the entity classes

Dao - Catalogue classes to be able to add the entity classes in the persistence layer

**Service** - Contains a helper-class used to populate the database in the developing stages

Util - Contains a class that handles exceptions

### Web Pages

The thought behind the packages was to have a more structured layout, and thus be able to have a good navigation structure to the site.

Recipe - Contains all xhtml classes related to recipes.

Group 5 - Raha Dadgar, August Lennar, Sabrina Samuelsson, Mickaela Södergren Supervisor: Daniel Hausknecht

**User** - Contains the profile xhtml class, where all the user's recipes and cookbooks are displayed.

Resources - Contains css files and images.

Cookbook - Contains all xhtml classes related to cookbooks.

## JavaServer Faces

The UI of the project was built with JSF, where we used the framework Bootsfaces to get reusable UI components.

## **Authentication**

The Authentication process was implemented using Firebase. Firebase is a mobile and web application development platform. Firebase provides a variety of different services such as real time database, media storage, authentication, hosting etc. In this project firebase was used to register users and let them sign in.

When the user creates an account, a Firebase user account is created and stored. A userperson (we used this entity name because "user" is reserved in SQL) is then created in the application's own database with the parameters name and email. The user can then sign in to the application with the firebase account. This way the application ensures that if there is no firebase user, there is no database user and thus relies on firebase for security.

Firebase provides the method to get the current user that is signed in. With this, the application can identify the userperson by requesting the email of the current user in firebase. With the help of beans and metadata, the application can identify the current user.

## **Database**

The major entities in the database are Recipe, Ingredient, User and Cookbook. There are also two linking classes: CookbookRecipe and RecipeIngredient, which keep track of the relations between cookbooks, recipes and ingredients.

## -interaction: Enterprise JavaBeans

The database is accessed using JavaBeans, which is used to dynamically display content on the pages, and lets the user perform CRUD operations on database entities.

# Group picture!

