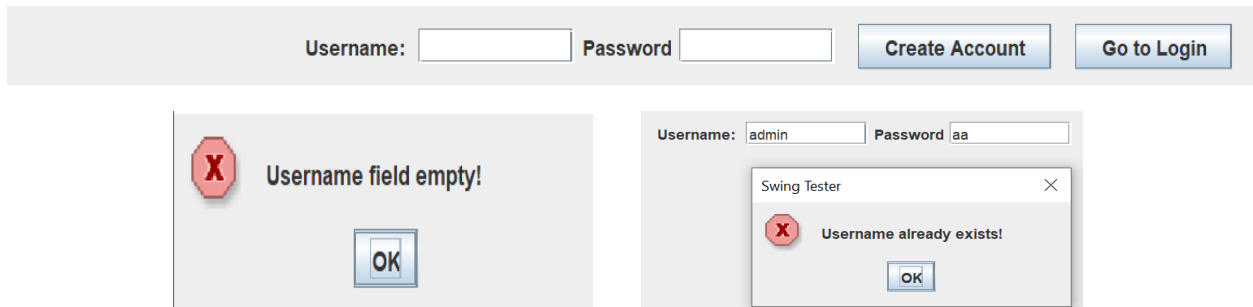# Lego Store App

1.Starting the app:

The user is greeted by the SignUp window where they can create a new account or go to the LogIn window to log into their account. The application gives warnings to the user if they don't fill the username/password or they are warned if the username they choose is already in use.
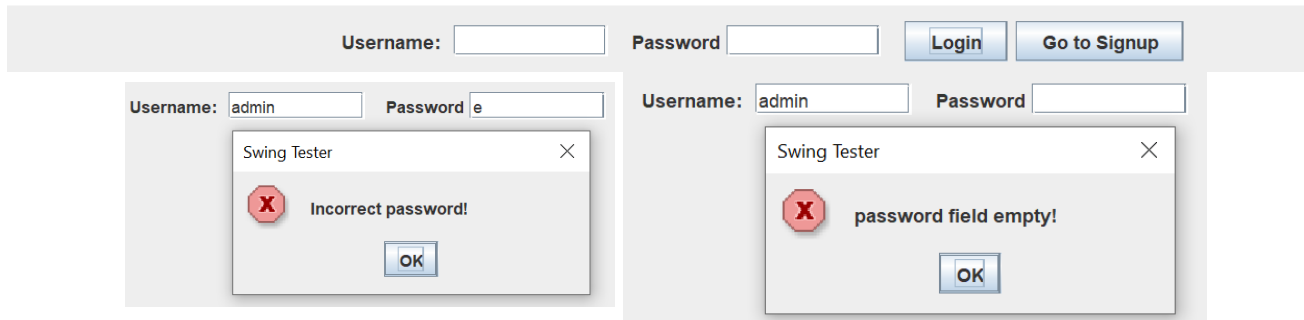

After creating the account, the user is taken to the LogIn widow to enter their credentials again to access the app. The app warns the user if they didn't fill the information or if their password is incorrect or if the username they entered is not registered.

Also, the user can move between the two windows using the last button.

There are two account types: manager and user. They both can access products and buy them, but the manager can also access the main console where they can manage the store's data.

2. The store page:

   When logging in, the user is greeted by the main page of the store, where all products are shown on a scrollable panel.
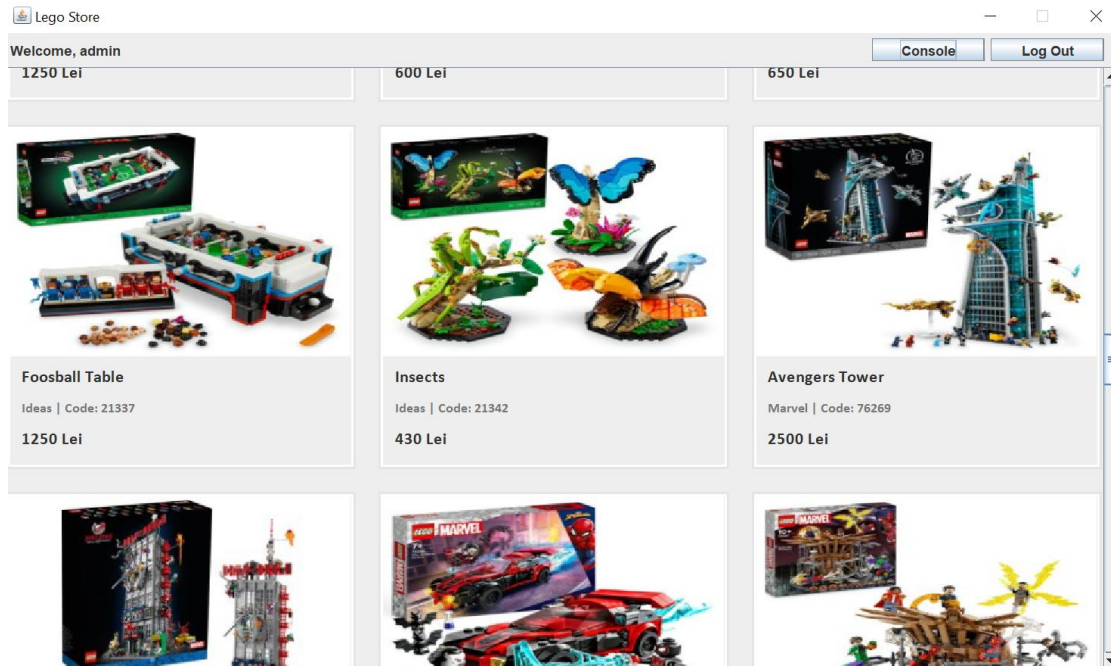
For each product, its image and some information are displayed, such as the price, name, code and category of the product. If the user is interested in one product, they can click on the product, which takes them to the product's page.

For the accounts with the manager role, there is an additional button which takes them to the main console where they can see and edit the products and the users, and see the sales made.

3. Product page:
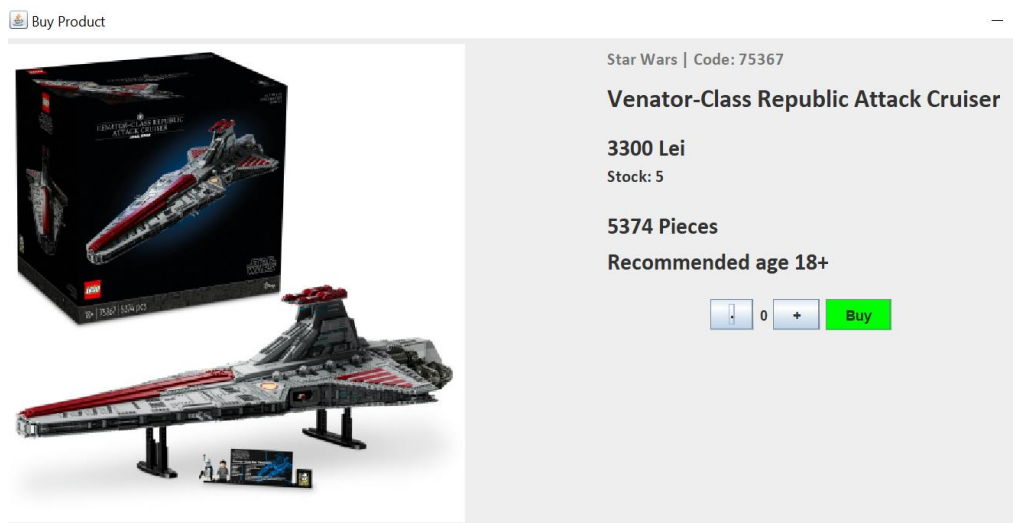
When entering a product's page, there is displayed all of the information regarding the product: category, product code, name, price, stock, no. of pieces and recommended age.

For buying a product, the user chooses the number of products they want to buy using the -/+ buttons, but can't buy more products than there are in stock. When buying the product, a new sale is registered, which contains information such as the user id, the product id, the amount of products the user bought and the total cost of the sale.

4. Admin Console:

When pressing the 'Console' button on a manager account, you access the main console which has the following options:

- Access the list of users
- Access the list of products
- Access the list of sales
- Log out of the account (in the bottom right corner there is also a back button which takes you back to the store page)
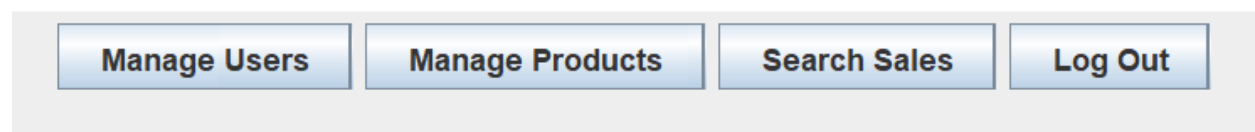
5. Manage Users:

The manager can see all the currently registered accounts, which they can edit.

The manager can create new accounts, they can edit registered accounts by clicking on the desired account from the list and changing their credentials with the help of the inputs on the left. They can also delete accounts by clicking on the account or just changing the 'ID' field and then press the 'Delete User' button. There is also the option to clear the fields. Because there must be at least one manager, the manager can't delete or edit the status of their own account, only those of others.

Also, when editing accounts, they can't give the same username to multiple accounts.

6. Manage Products:

The manager can create new products or edit/delete current products. The list of all the products is displayed on a scrollable panel on the right. The same functionalities as with the users are available. By clicking on the product in the list, its details are displayed on the left and can be edited.

There are some restrictions when editing: there can't be two products with the same name, there can't be a negative price, stock, minimum age or no. of pieces.

The images are stored separately and are named using the product's code. If a product doesn't have an image, there's displayed a 'Lego' logo image as placeholder until the manager adds the product's image to the mentioned folder.

7. Sales:

At the moment, the manager can only see past sales. Other functionalities such as filtering the sales or calculating the earnings will be implemented in the future.

Sale Id	User Id	Product Id	Product Count	Total Cost
1	0	21054	2	1000
2	0	21056	3	1800
3	0	21056	1	600
4	0	21056	2	1200
5	0	60324	10	2200
6	0	21054	2	1000
7	0	21054	1	500
8	0	21044	2	540
9	6	60320	2	600
10	6	31058	2	160
11	6	60324	2	440
12	6	10315	2	1160
13	2	21342	2	860
14	2	21337	1	1250
15	5	75367	2	6600
16	5	42115	2	3600
17	5	21054	1	500
18	4	21342	1	430
19	0	75371	1	1080
20	0	21184	1	130

8. The Database:

The database consists of 4 tables: the user_cred table containing the credentials of each user, the product table containing the products information, the sales table containing the sales and the category table with the different categories products can be grouped by.
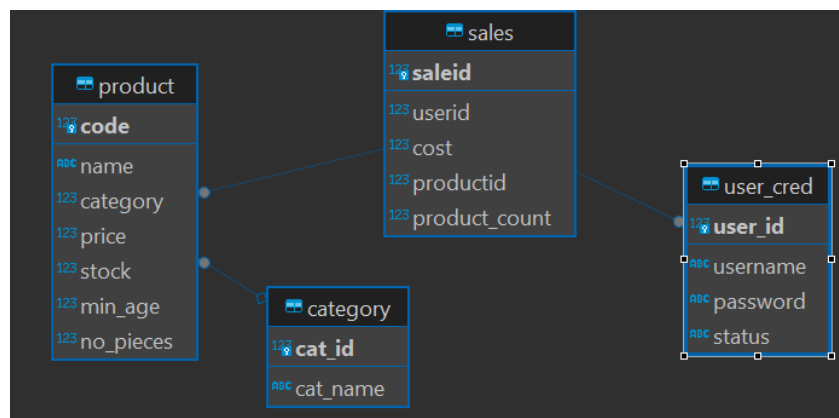
9. Future Improvements:

- there are features that don't work as intended and should be fixed (eg. When buying a product, it's stock doesn't update in the database)

- improved UI for a better user experience

- implement functionalities for the 'Manage Sales' window to give useful information to the managers

- improving the database, by creating more tables to store useful information, such as implementing a 'Cart' option for the user, a wish list of products and a better representation for the sales.