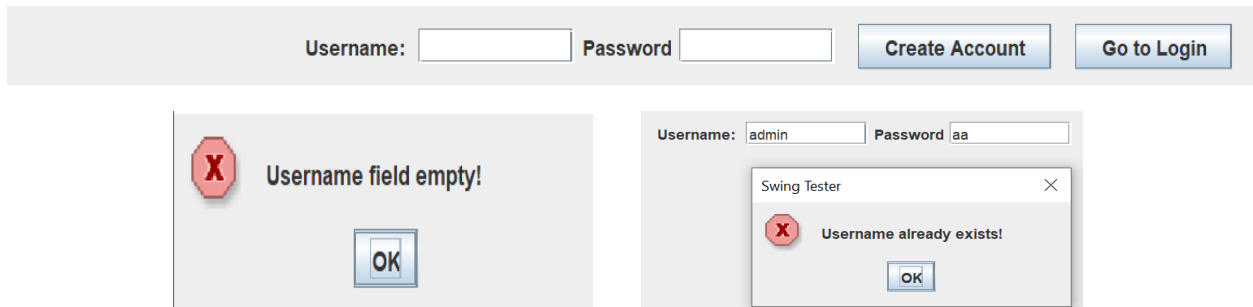


Lego Store App

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.

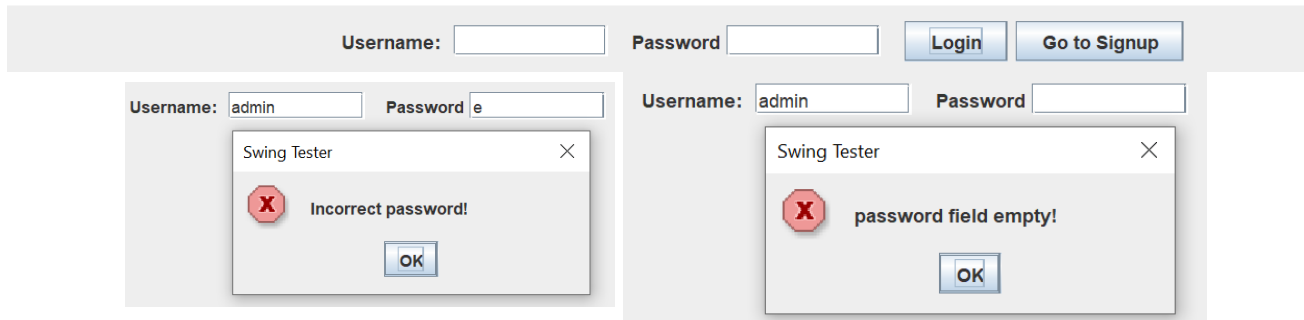
 SignUp



The SignUp window features two input fields: "Username:" and "Password:", each followed by a text box. To the right of these fields are two buttons: "Create Account" and "Go to Login". Below the main window, two error messages are shown. The first is a dialog box titled "Swing Tester" with a red 'X' icon and the text "Username field empty!", with an "OK" button. The second is a similar dialog box titled "Swing Tester" with a red 'X' icon and the text "Username already exists!", also with an "OK" button. This second message appears over a background window where the Username field contains "admin" and the Password field contains "aa".

After creating the account, the user is taken to the Login window 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.

 Login



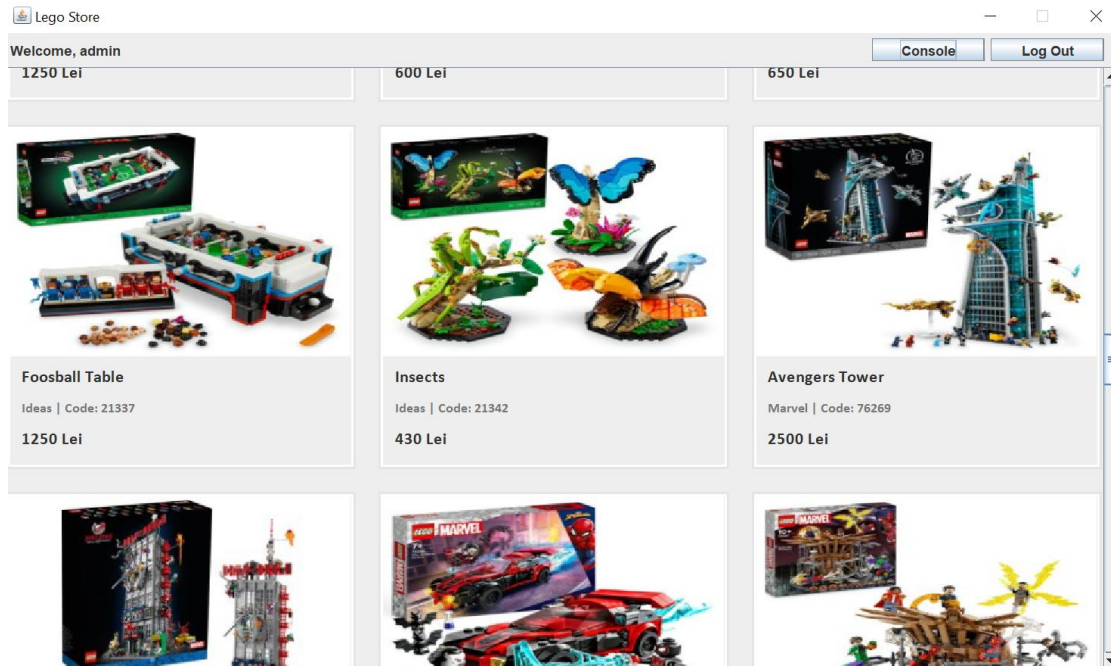
The Login window features two input fields: "Username:" and "Password:", each followed by a text box. To the right of these fields are two buttons: "Login" and "Go to Signup". Below the main window, two error messages are shown. The first is a dialog box titled "Swing Tester" with a red 'X' icon and the text "Incorrect password!", with an "OK" button. This message appears over a background window where the Username field contains "admin" and the Password field contains "e". The second is a similar dialog box titled "Swing Tester" with a red 'X' icon and the text "password field empty!", also with an "OK" button. This message appears over a background window where the Username field contains "admin" and the Password field is empty.

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:

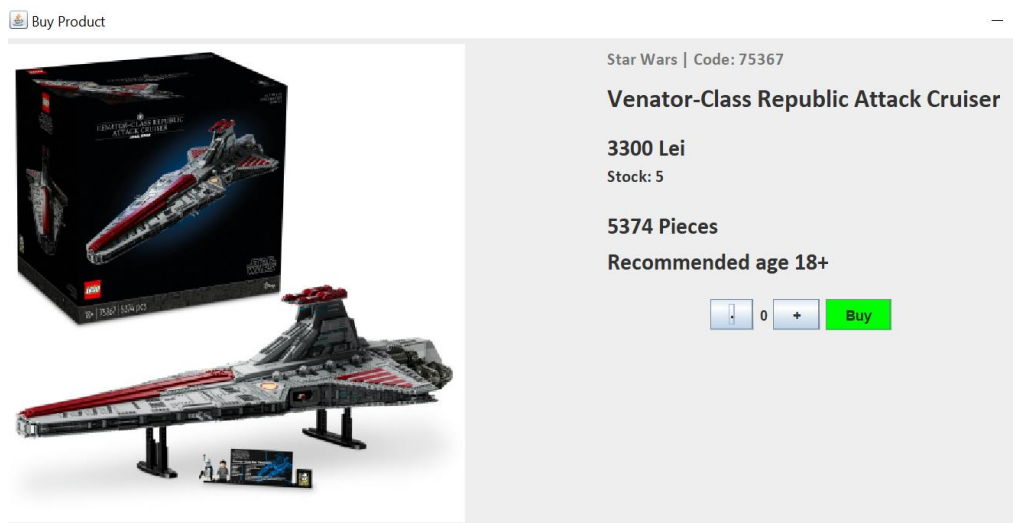
When logging in, the user is greeted by the main page of the store, where all products are shown on a scrollable panel.



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:



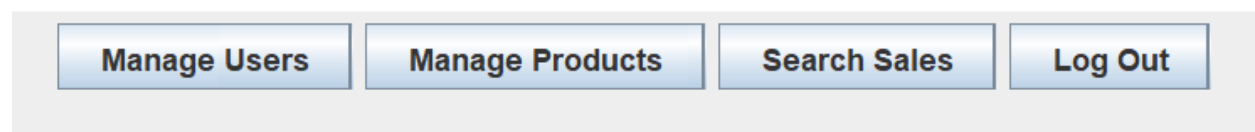
When entering a product's page, there is displayed all of the information regarding the product: category, product code, name, price, stock, no. of pieces and recommended age.

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:

Manage Users

ID

1

Username

tudor

Password

a

Status

User

Create user

Update User

Select from table to delete

Delete User

Clear Fields

ID	Username	Password	Status
5	andrei	aa	User
0	admin	ee	Manager
1	tudor	a	User
6	todor	a	User
7	debruyne	gg	User
2	gigel	aaa	User
3	gigel2	gigi	User
4	ana	mere	User

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.

ID

Username

Password

Status Manager

Select from table to delete

ID	Username
5	andrei
0	admin
1	tudor
6	todor
7	debruyne
2	gigel
3	gigel2
4	ana

Swing Tester
X Can't delete current active user

ID

Username

Password

Status User

Select from table to delete

ID	Username
5	andrei
0	admin
1	tudor
6	todor
7	debruyne
2	gigel
3	gigel2
4	ana

Swing Tester
X Username already exists!

6. Manage Products:

Manage Products

Product Code

Name

Price

Category Marvel

Stock

Min Age

No Pieces

Select from table to delete

Code	Name	Category	Price	Stock	Min. Age	No Pieces
21054	White House	Architecture	500	5	16	1483
21056	Taj Mahal	Architecture	600	5	18	2022
21044	Paris	Architecture	270	2	12	649
60324	Mobile Crane	City	220	10	7	340
60320	Firestation	City	300	6	6	540
60337	Express Train	City	800	4	7	764
60327	Horse Transport	City	150	15	5	196
40220	London Bus	Creator	50	20	7	118
31058	Dinosaur	Creator	80	20	7	174
40518	High Speed Train	Creator	100	15	7	284
31124	Super Robot	Creator	50	20	6	159
76252	Batcave - Shad...	DC	2000	5	18	3981
76240	Batmobile Tum...	DC	1350	0	18	2049
76181	Batmobile: Pen...	DC	150	1	8	392
76224	Batmobile: Jok...	DC	250	3	8	438
76265	Batwing: Batma...	DC	195	7	8	357
10326	Natural History ...	Icons	1550	10	18	4014
10315	Serena Garden	Icons	580	15	18	1363
10323	PAC-MAN Arcade	Icons	1370	6	18	2651
10304	Chevrolet Cam...	Icons	850	7	18	1456
10312	Jazz club	Icons	1150	6	18	2899
21327	Typewriter	Ideas	1250	5	18	2079
21329	Fender Stratoc...	Ideas	600	10	18	1074
21336	The Office	Ideas	650	10	18	1164
21337	Foosball Table	Ideas	1250	5	18	2339
21342	Insects	Ideas	430	12	18	1111
76269	Avengers Tower	Marvel	2500	4	18	5201
76178	Daily Bugle	Marvel	1750	3	18	3772
76244	Miles Morales v...	Marvel	130	10	7	220
76261	Spider-Man Fin...	Marvel	580	6	10	900

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.

Marvel

- Architecture
- City
- Creator
- DC
- Icons
- Ideas
- Marvel
- Minecraft

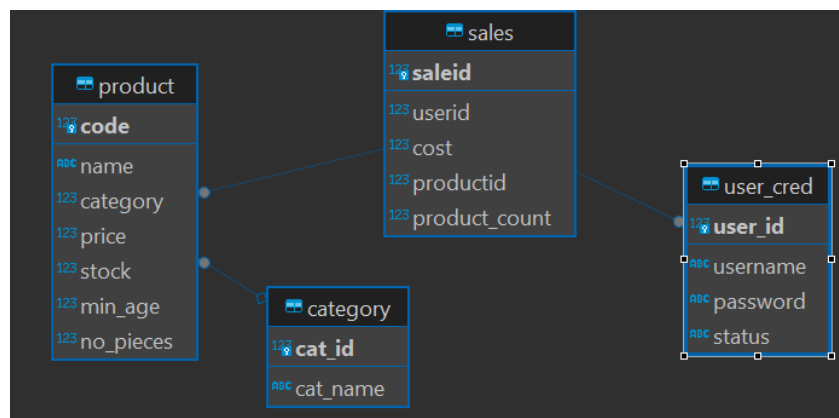
7. Sales:

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.