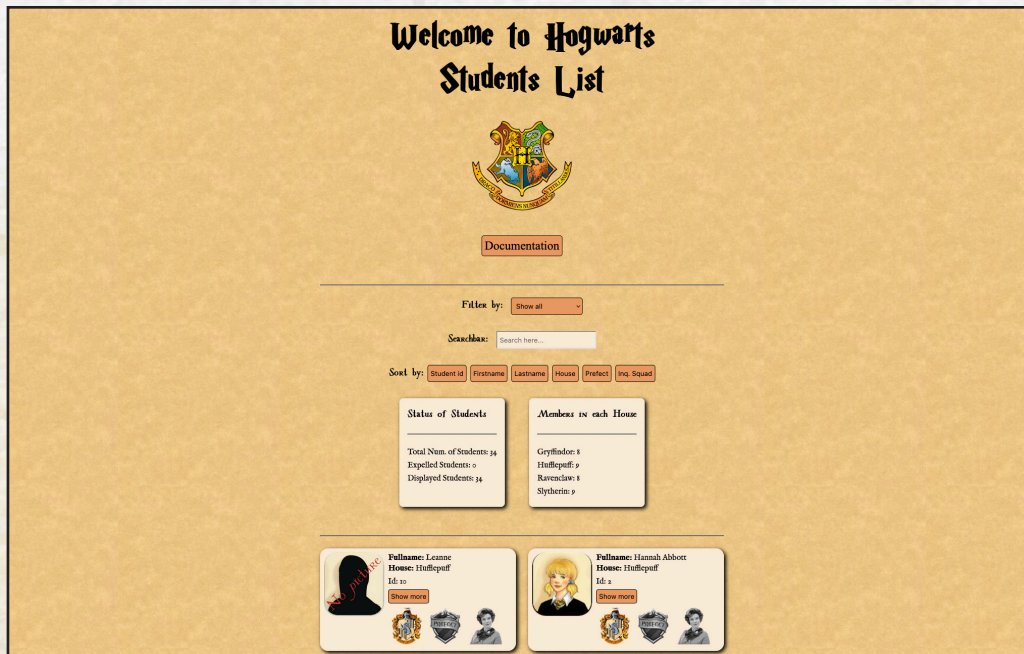# 11C.04.04
Hacked Hogwarts Student List

Frontend Design S2022
Hand in 04-03-22

Githhub:

https://github.com/magn902m/hacked_hogwarts

Web:

https://designbymagnus.dk/kea/3_sem/theme11c_just_js/assigments/hacked_hogwarts/

By Magnus Nielsen

INTRODUTION

This assignment is about I have been hired by the Hogwarts School of Witchcraft and Wizardry, as a frontender, to help build a system so the administrator can handle the student lists.

But gradually, they wanted more functionality, so I got tired of the desired new things all the time. Therefore, I decided to hack the system.

VISUAL DESIGN

Before i started build the new systemt, i had to make a design. I used XD and made a prototype.

This is for the mobile version.

VISUAL DESIGN

This is the desktop version 1 and 2. the lists design is build, so you can see the students, navn, house and epxelled them.

There is diffent filter and sort options, and last a counter of all students ect.
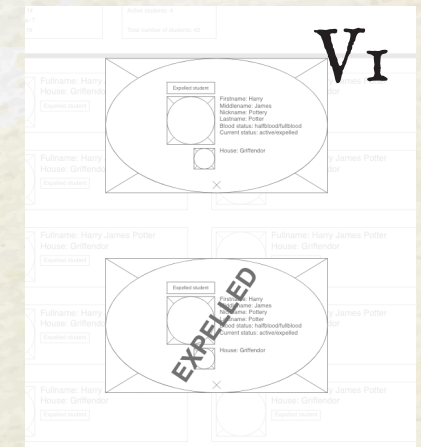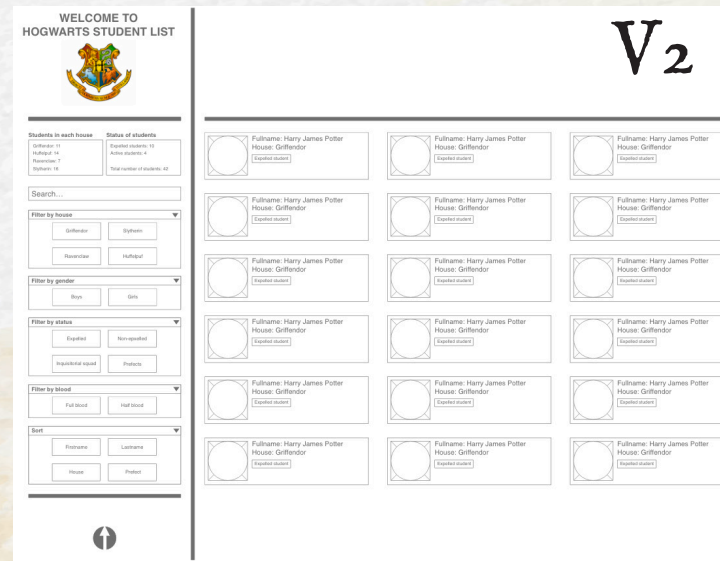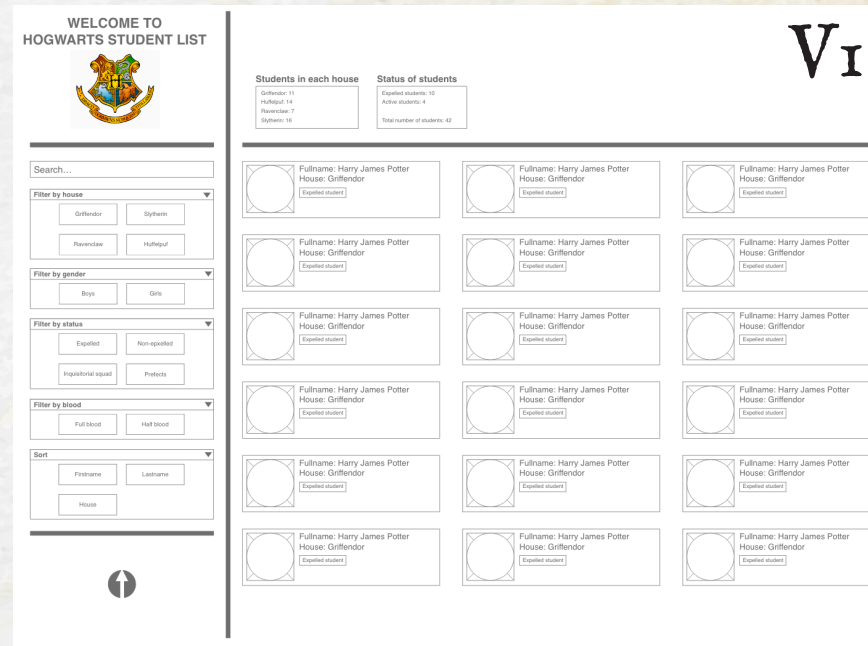
CODE DESIGN
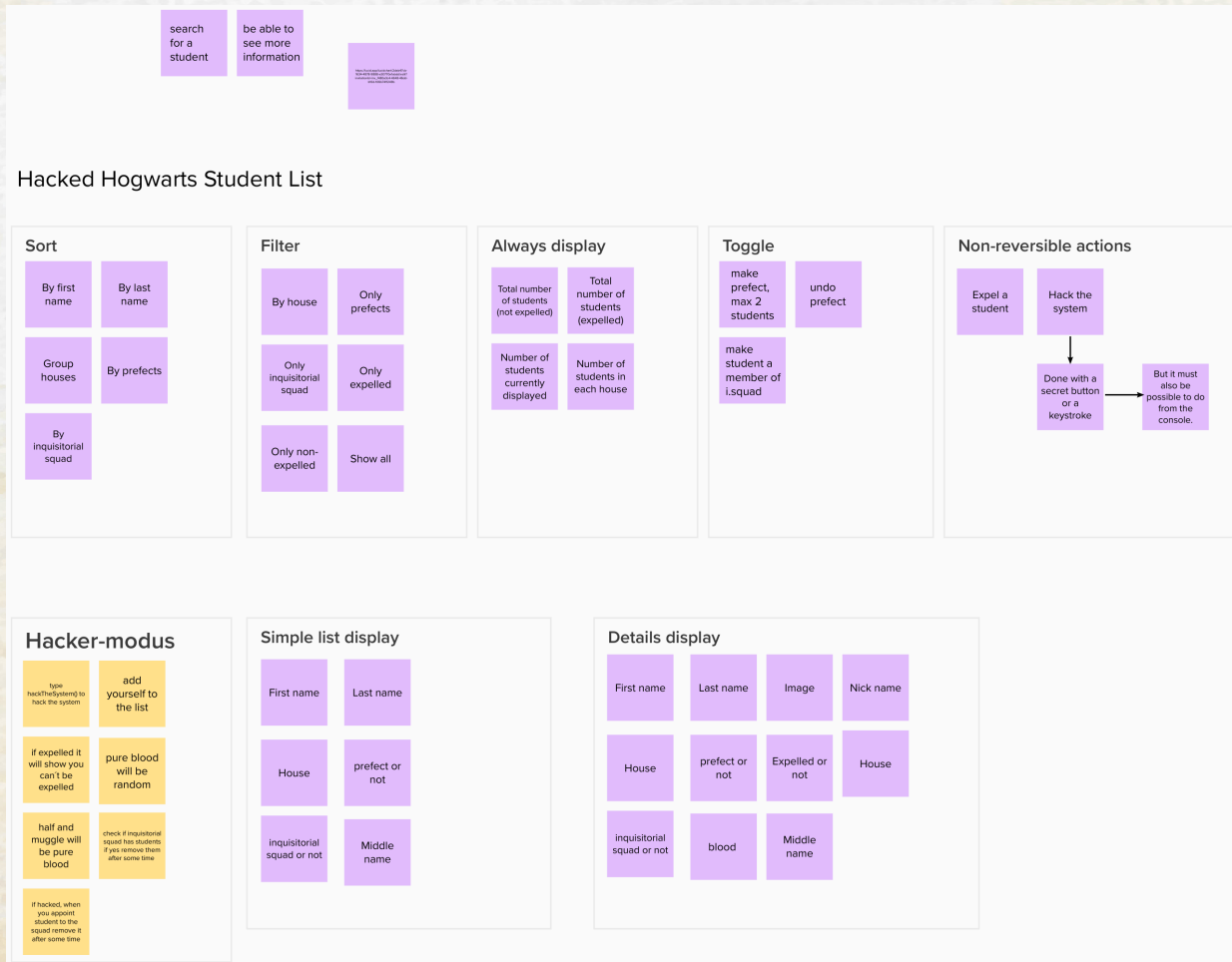
After the visual design, i started designing my code. hogwarts had a lot of wishes, therefore i took some "post-it", and maded a plan, for the components.

With the plan, i tried to make a activity diagram see the next page

Hacked Hogwarts Student List

Sort
- By first name
- By last name
- Group houses
- By prefects
- By inquisitorial squad

Filter
- By house
- Only prefects
- Only inquisitorial squad
- Only expelled
- Only non-expelled
- Show all

Always display
- Total number of students (not expelled)
- Total number of students (expelled)
- Number of students currently displayed
- Number of students in each house

Toggle
- make prefect, max 2 students
- undo prefect
- make student a member of i.squad

Non-reversible actions
- Expel a student
- Hack the system
- Done with a secret button or a keystroke → But it must also be possible to do from the console.

Hacker-modus
- type hackTheSystem() to hack the system
- add yourself to the list
- if expelled it will show you can't be expelled
- pure blood will be random
- half and muggle will be pure blood
- check if inquisitorial squad has students if yes remove them after some time
- if hacked, when you appoint student to the squad remove it after some time

Simple list display
- First name
- Last name
- House
- prefect or not
- inquisitorial squad or not
- Middle name

Details display
- First name
- Last name
- Image
- Nick name
- House
- prefect or not
- Expelled or not
- House
- inquisitorial squad or not
- blood
- Middle name

- search for a student
- be able to see more information

I made the user stories with some of the other students form the class.

The digram show what function we guess there is need to build the system.

Then i made a can/can´t list, so i had knowledge about what i could do, and what i couldn´t.
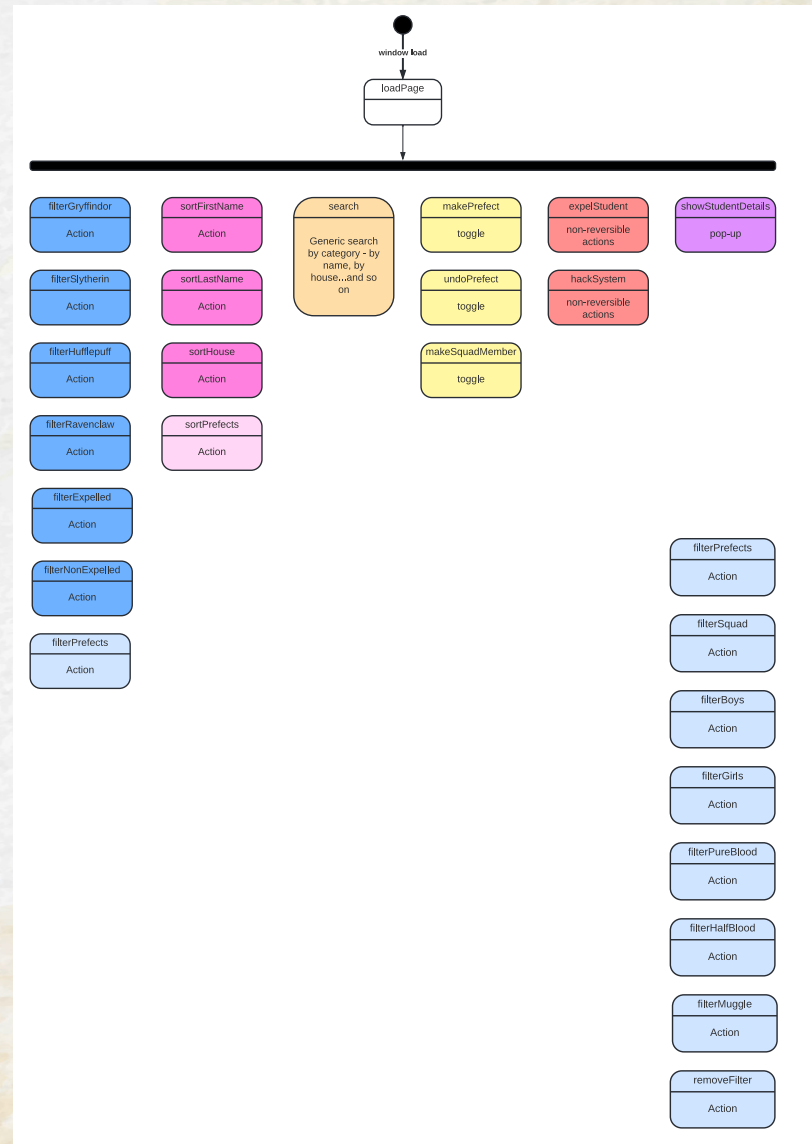
| Can/can´t do list	
Sort	
Sort by firstname and lastname	✓
Sort by house	✓
Sort by prefects and inq. Squad	✓
Filter	
Filter by house	✓
Show all	✓
Only inq. Squad, expelled and prefects	÷
Only non-expelled	✓
Always display	
Total number og students (not expelled)	~
Total number og students (expelled)	~
Number of currently displayed	÷
Number of students in each house	÷
Toggle	
Make prefect, max 2 students per house	~
Undo prefect	~
Make a student inq. Squad member	~
Non-reversible actions	
Expel a student	÷?
Hack the system	~
Active the hack with a keystroke	÷
Active the hack form console	✓
Simple list display	
Display firstname, lastname, middlename.	✓
Display house	✓
Display prefect and inq. Squad or not	~
Details display	
Firstname, lastname, middlename, nickname, image and house	✓
Prefect or not	~
Inq. squad or not	~
Blood	÷
Hacker-modus	
Type hackTheSystem to hack	✓
Add yourself to the list	~
Show you can´t be expelled, if tried	?
Pure blood will be random	~
Half and muggle will be pure blood	~
If inq. Squad is true, then remove after some time	~

DIAGRAM OF THE ALGORITHMS
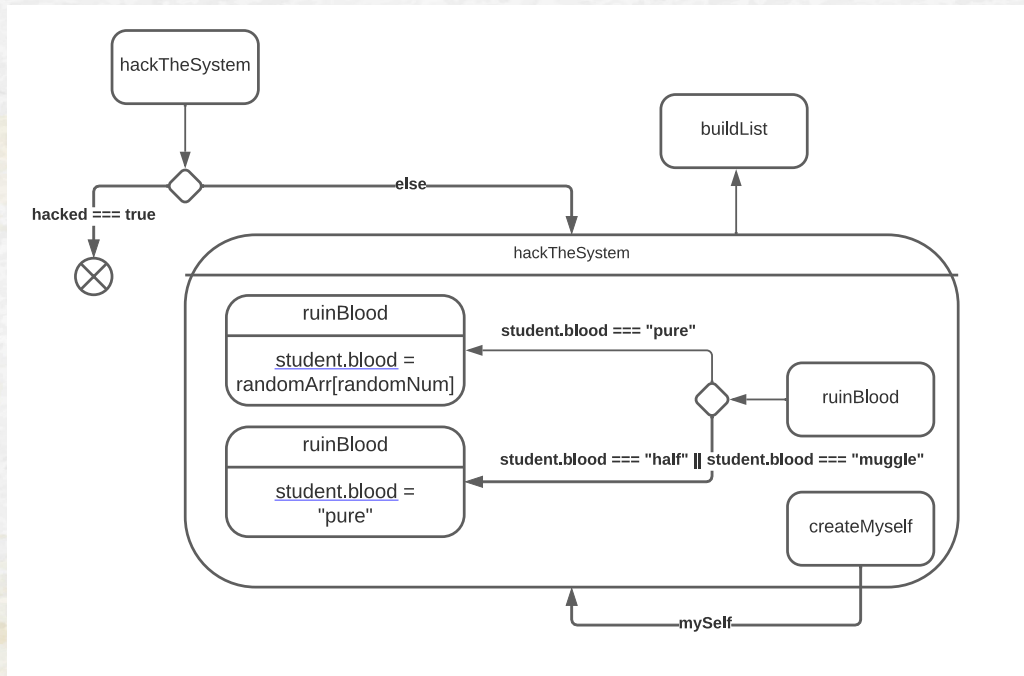
This is diagrams of the algorithms. i did them after my code was almost finish.

More on next page
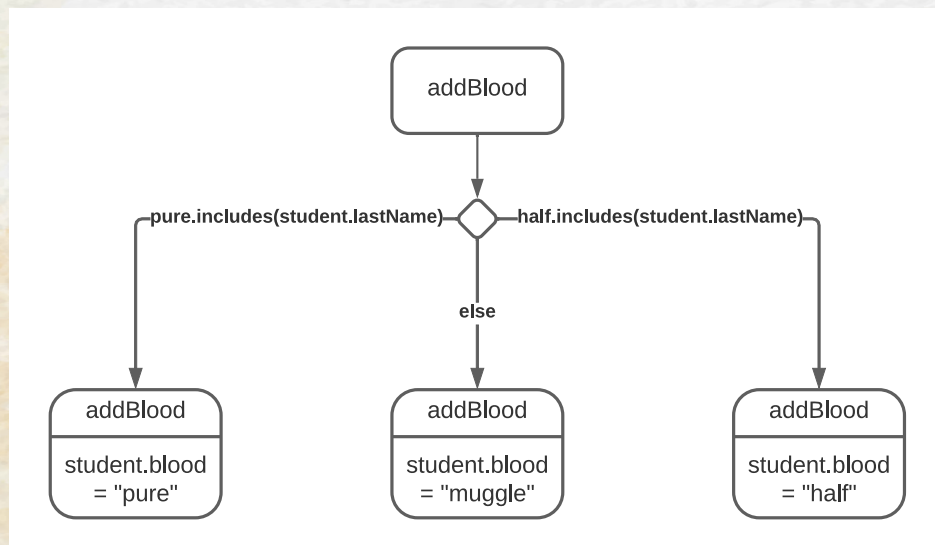
CODE DESIGN

I didn´t use them in the project, but next time, i would like to make the diagrams before start codning. it´s a good way to see what you need to do
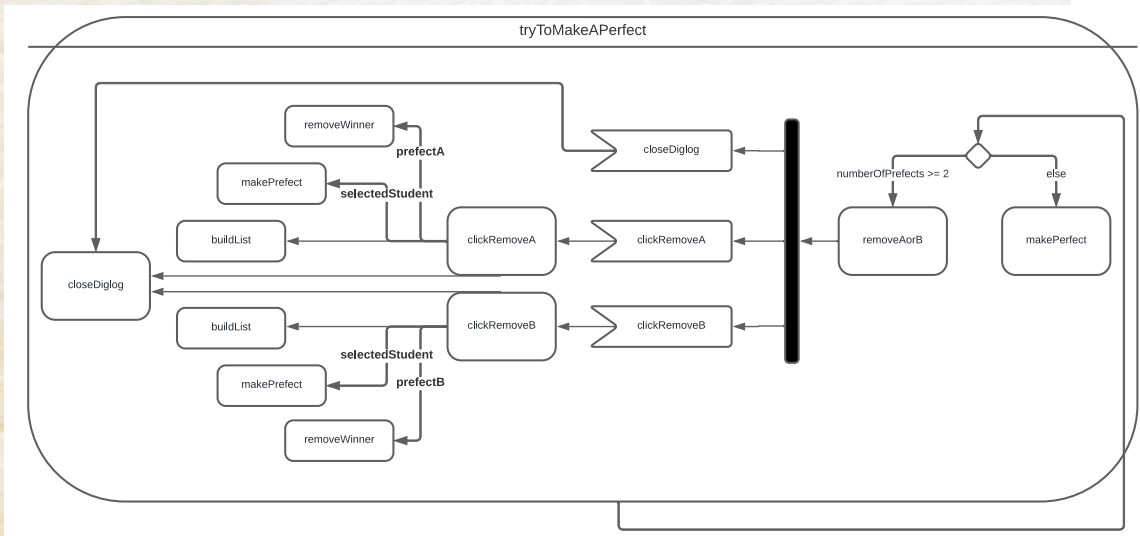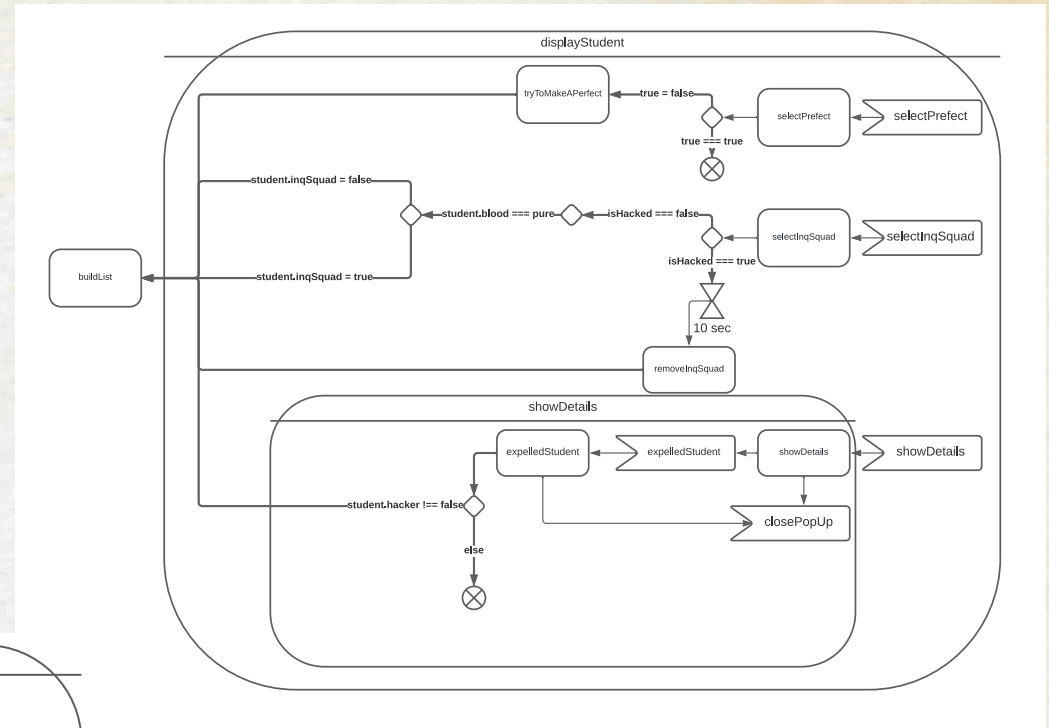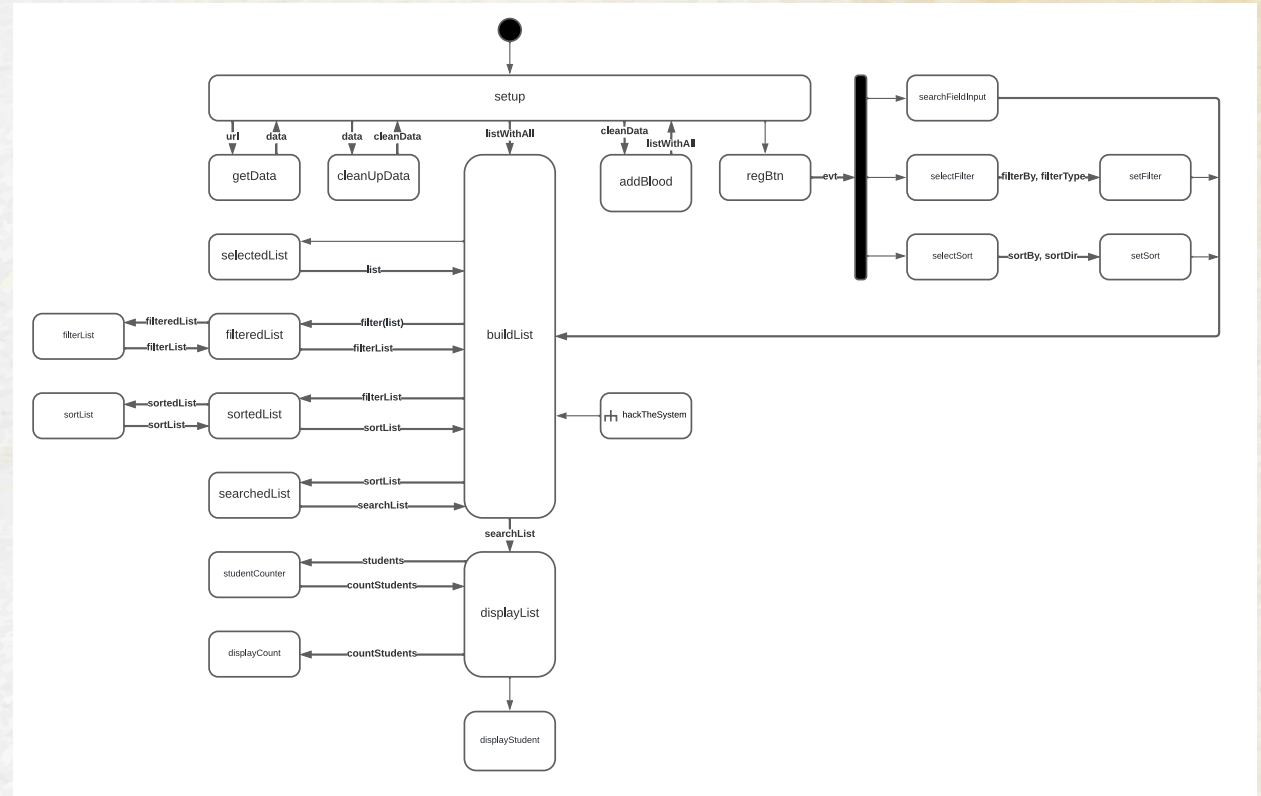
This is general diagram for the system, all function there is marked with a fork, is show some where else in the project.

What we see on the diagarm, is all the function values and what they retrun ect.

The hole system is build around the student object, and i´ts property.
It´s the way we can determine and chance the value.

To hack the system you can type hackTheSystem() or just type "hack" on your keyboard, but you must not type wrong!

Good luck!

```javascript
56    // --------- Control if password is true ---------
57    function getHackPassword(event) {
58      const password = "hack";
59      const key = event.key;
60      const currentIndex = keySaved.length;
61      const keyToMatch = password.charAt(currentIndex);
62
63      if (key === keyToMatch) {
64        keySaved += key;
65      } else {
66        keySaved = "";
67      }
68      if (keySaved === password) {
69        hackTheSystem();
70      }
71    }
```

```javascript
83    // Student object
84    const Student = {
85      firstName: "",
86      lastName: "",
87      middleName: "",
88      nickName: "",
89      gender: "",
90      imgSrc: "",
91      house: "",
92      blood: "",
93      prefect: false,
94      expelled: false,
95      inqSquad: false,
96      hacker: null,
97    };
```

SOURCE

This is a page is full with all the external source i haft used in the assignment.

Inparation: https://www.wizardingworld.com/

Fonts:
Harry P: https://www.picturethemagic.com/harry-potter-font/
IM Fell English: https://fonts.google.com/specimen/IM+Fell+English#standard-styles
4 Privet Drive and DearMrPotter: https://www.robinspringett.com/resources

Pictures:
Prefect badge: https://harrypotter.fandom.com/wiki/Become_a_Prefect
Paper 1: https://www.freepik.com/free-vector/watercolour-background-with-leaves_15206849.htm#query=old%20paper&position=0&from_view=keyword
Paper 2: https://www.christinaabeyparris.com/en/close-up-kraft-brown-paper-texture-and-background-2/
Hogwarts and crests logos: https://dlpng.com/png/6365074
Inq. squad badge: https://harrypotter.fandom.com/wiki/Dolores_Umbridge