

## DESIGN

**Renske Talsma 10896503**

### General steps I followed:

- determine the kind of data I want to show in my visualisation
- sketch out how it should look and where the data should go
- determine which endpoints from the api I want to use/have to use
- write code to retrieve data from the api
- optimize for api retrieval

### Colors:

- the visualization is meant for people who already kinda know what they are looking at, because it's a visualization of their game account, which they probably interact with pretty regularly.
- because of this the color coding of professions and items should be familiar because it's exactly the same as the one in the game.

### Bar chart:

- for the bar chart i wanted to show all the agony resist on a character, i knew i needed to go pretty deep into the api for that so it took quite some work to get the data
- at first i wanted to do a stacked bar chart but it didn't really add anything information wise so i kept it sober with a regular normal one
- the bar chart has a max of 150 because that's the maximum useful agony resist
- the bars have colors of the professions so you can see at one glance which profession your character is (in case you forgot)
- the maximum amount of characters is 65 or something, which can still be rendered accurately in the bar chart, the width is based on this
- I calculated the total AR and made a dataset with the name of the character and just this value to use for the barchart

### Sunburst:

- my first idea was some kind of weird stacked pie chart thing, but a sunburst would be much cooler so i went with that (also because the pie chart was not an option)
- this part would be linked to the bar chart in the sense that there would be a sunburst per character showing the gear of that character
- I wanted it to be fairly big since it's a cool visualisation and the space would help make things clear

- the colors are matching the colors used in game to show certain rarities of items
- at first i had just the sunburst but I decided to add some information above showing information about the character being viewed
- the data is made into a structure fitting for the sunburst with parent/child nodes after all is retrieved. this data is also stored when someone clicks on another character to avoid reloading this
- the names of the items can be rather long, so I trim them but added a tooltip so that the full name can be read if the user wishes to do so
- I tried to make the text on the left flip around, but I could not get it to work

#### Achievements:

- this is not very interesting data, just a list of trues and falses, but I wanted to divide them into 4 blocks because there are 4 tiers in game as well.
- I ended up going with 4 rows of rectangles, horizontally because this aligned better with the size/orientation of the webpage
- the colors for complete and incomplete are not red and green because those are badly distinguishable by color blind folks