Project of Data Visualization (COM-480)
The Looney Tunes - Milestone 2

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Github directory

Introduction

After the validation of the data set during the milestone 1 we have set up a github website for our visualisation. The link to the website is here.

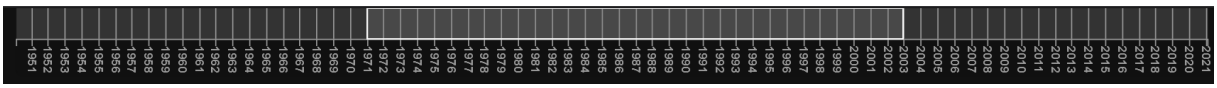
At their arrival, users are greeted with a map of the world with all the F1 races that took place since 1950 in the world. The user can select a time range with the upper bar that will narrow the number of races as the time span decreases. Then the user can see some basic details with a mouse hoover and clicking on a race (eg: Monza in Italy). It will give him the time per lap in the selected time range.

This shows the basic skeleton of our website that we will be upgrading in the upcoming weeks.

Features sorted by order of priority

1. The timeline (MVP)

The first element will be a timeline with a brush where you can select the years you are interested in. All the different visualizations will be linked to it so it's one of the most important elements.
The implementation will be used with a svg representation and d3.brush. The selected time range will be rounded to complete year and for a more interactive view the selection will happen during the "brush" event and not only on the "end" event.

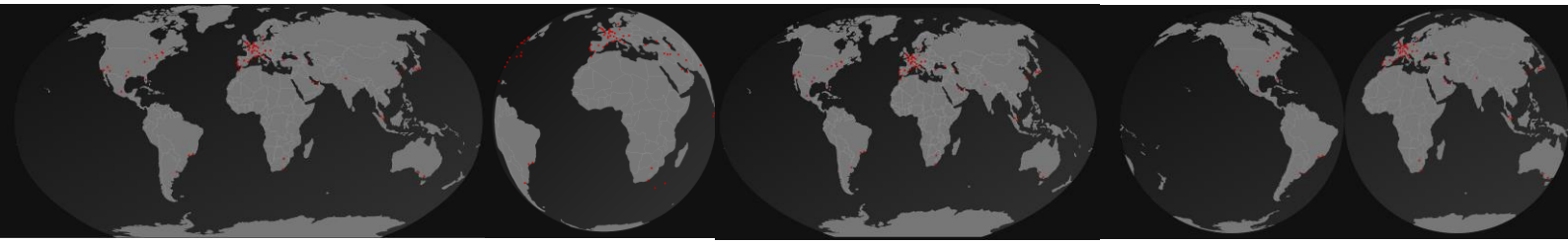


2. The Map (MVP)

The map will be implemented using d3.projection. The projection used is not decided yet.

- We could use the Robinson projection because it is a nice and wide representation perfect for 16/9 screens.
- The Winkel-tripel projection because less warp (check course on maps).
- A 3D globe rotating with the mouse. This will allow to have no deformation on the map and a nice-looking visualization. However, all the data will not be visible at the same moment.
- A Mollweide hemisphere. This projection project the world on 2 circle, and allow to easily represent the world as a 3D globe. As this projection is interrupted, it's bad for representing distance, but a good way to represent the world just for location visualization.

Interactions will be made using the d3 events, "mouseover" to get brief information about the track. "Click" to get all the information about laptime on this circuit.



Robinson | 3D globe | Winkel 3 | Mollweide

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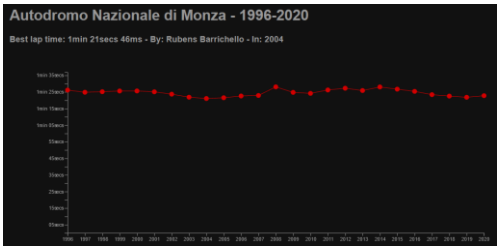
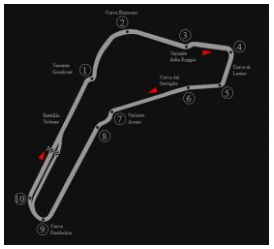
3. Pilot/Constructor standings (MVP)



By clicking on rows, it will show further information about the pilot/constructor.
The table will be implemented with d3.js

4. Lap-time evolution through years (MVP)

The x-axis will be linked to the timeline.
The laptime plot will be made in svg using d3.js with changing scales.
Brief information will be shown on mouse over.



5. Circuit info (MVP)

Brief information about the circuit will be shown. With best time, svg track, city and country altitude.

6. Pilot evolution through years (Extra)

This feature is not part of minimal viable product.
This will show brief information about the pilot (number of races won, won race ratio, date of birth, nationality) and will show a plot of how well he performed over years in the driver standing.

7. Constructor evolution through years (Extra)

This feature is not part of minimal viable product.
This will show a plot of how well constructors performed over years in the constructor standing.

8. Extra ideas

- The possibility to visualize each race with position or time deltas of the pilot for each lap. This will allow to visualize very deep formula 1 data.
- To have a 3D globe when website is loading, with a transition to a planar projection. In this kind of fashion: here.