

R Project GOT Visualization

ELABORATED BY:

Arfaoui Fairouz

Ayachi Hosni

Fenni Hassen

Marnissi Skander

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Overview :

First of all, for this project, we decided to work on the Game Of Thrones set of data and exploit it for Data Visualization purposes using R to create a Shiny App using dplyr, ggplot, cartography and sf.

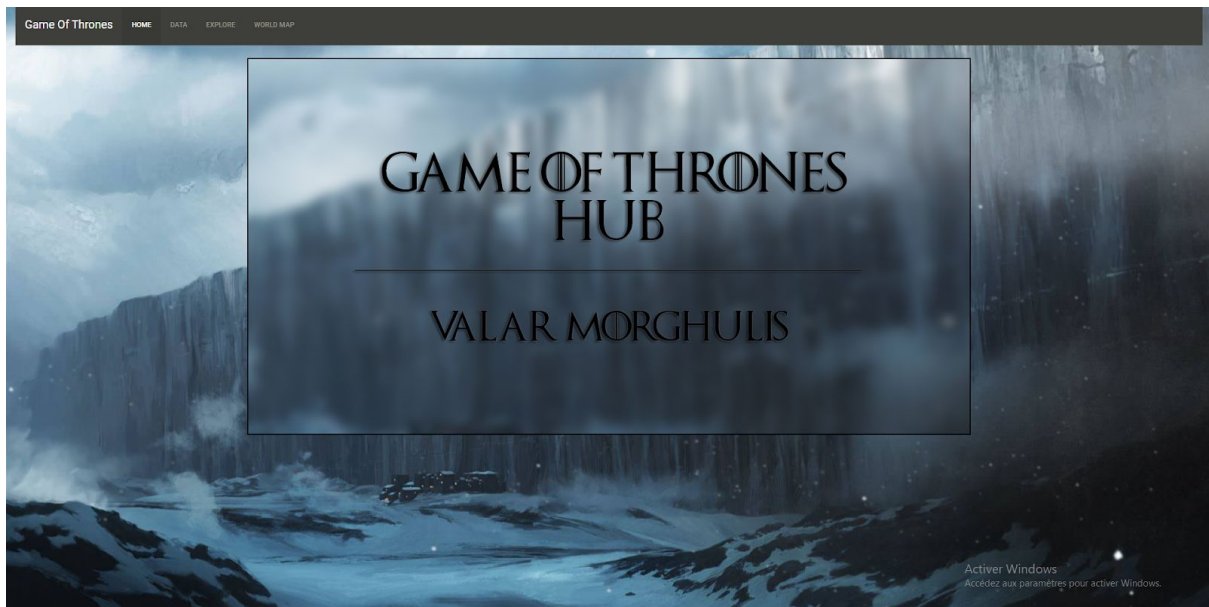
In this project, the final output is a Shiny App that launches to a Home Page and implements 4 interfaces that we can navigate through thanks to a navigation bar at the top of the application interface.

In the following sections, we will go in detail about the Interfaces that compose our applications and the plots that it offers.

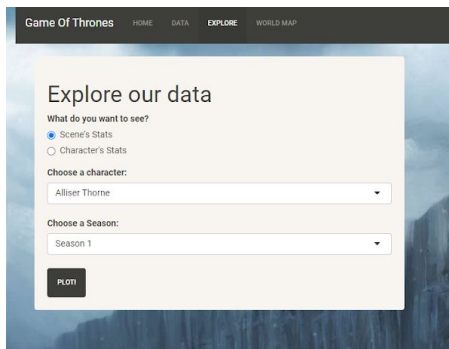
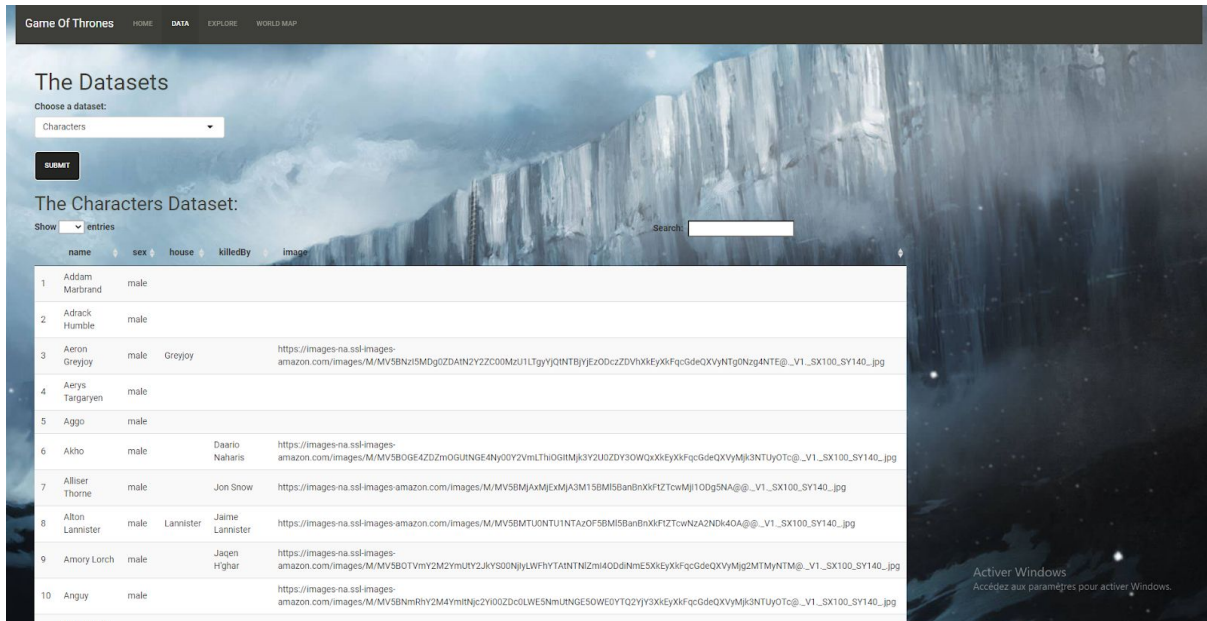
Interfaces :

In this section, we will be going through each of the four interfaces we have in our application:

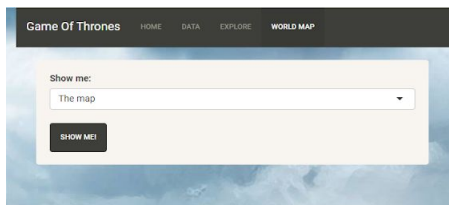
- **Home Page:** This is a classic home page, with a navigation bar and a banner saying “Game of Thrones Hub”, a warm welcome for a user.



- **Data Page:** In this tab, we will have the choice between four datasets to display and look into. The selection is made through a SelectInput, then you submit your choice using the button.



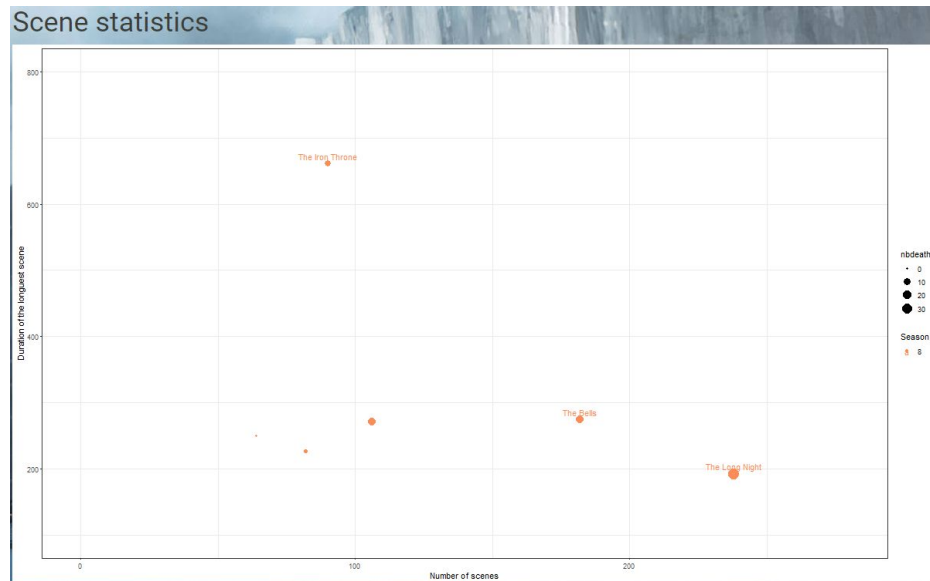
- **Explore Page:** It is in this tab where most of the plotting takes place. We have two RadioButtons to choose from two topics to plot, Scenes stats and Character's stats then we have the option to select a Characters and a season to filter our plots.



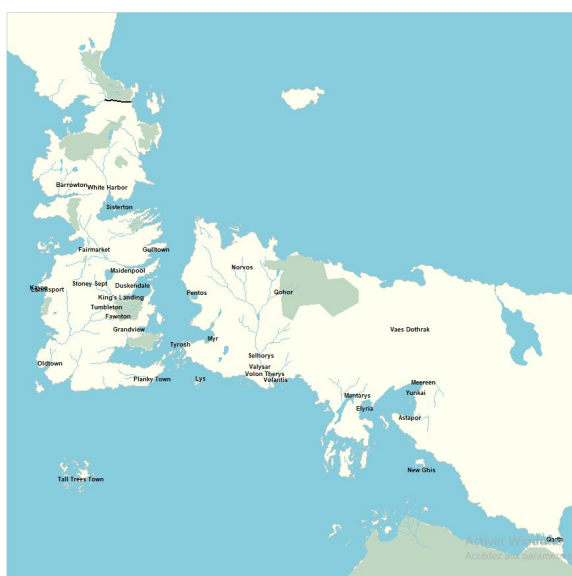
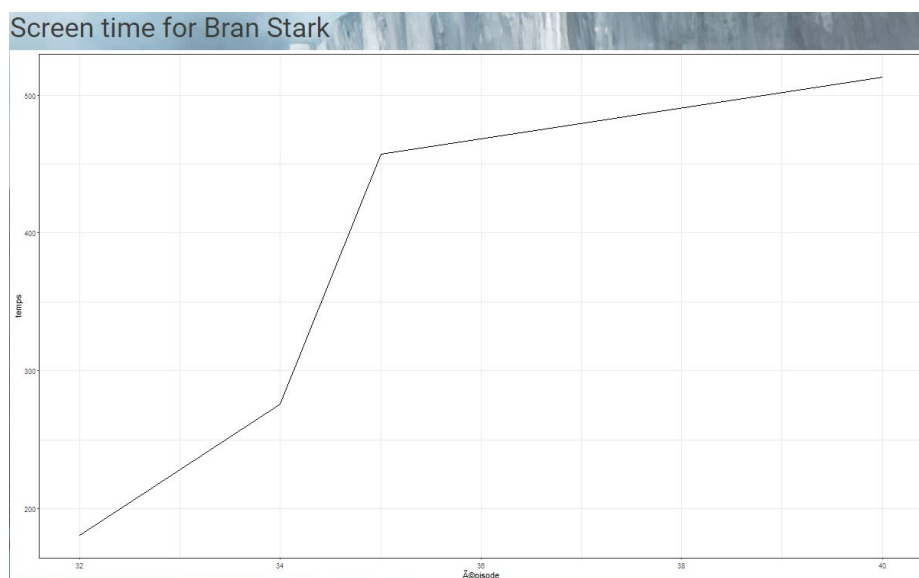
- **World Map Page:** This tab is dedicated to cartography and Geography plots. It contains a simple SelectInput that gives the user the choice between plots to display.

Plots:

- **Scene's Statistics:** This plot shows the episodes of a selected season in the form of circles that are bigger proportionally to the number of deaths during that episode, the x axis is the number of scenes in an episode and the y axis is the duration of the longest scene of an episode.



- **Screen Time:** This plot shows the amount of time a selected character has spent on screen throughout the episodes of a selected season or all the season, here you can see for example the screen time for Bran Stark during season 4.



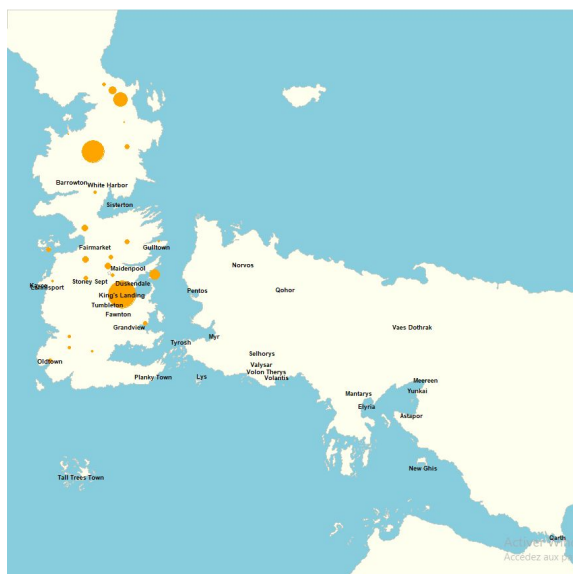
- **World map:** This plot is the first of the geography plots we have in our app, it showcases the whole map of the GoT Universe with all the details to it (lakes, rivers, islands, forests...) .



- **Continents map:** This plot shows in our map the partition of the three continents of the GoT Universe that are Westeros in blue, Essos in red and Sothoryos in green.



- **Kingdoms map:** This plot shows all the kingdoms in the GoT Universe, since there are Kingdoms only in Westeros, the other continents didn't get colored but Westeros did.



- **Number of scenes per location:** This plot shows in our map the repartition of the scenes all around the world map and this clearly shows that the majority of the action is taking place in Westeros.