**Executive Summary**

*It is known that there is a numerous number of wild animals being threatened in the world, however It can be challenging to find all the species, where they are localized and why they are endangered. I want to make an interactive map where the user can select an animal species group (mammal, bird, amphibian, reptile), the status (endangered, threatened, extinct), a specific animal and see on a map where they are localized, and get more information such as a picture, scientific name, etc. I will be using data from WWF, RedList and ECOS so far. The biggest challenge will be to get more information on why certain species are more endangered.*

**Motivation**

*I always have been fascinated with animals. I used to live in a tropical island next to Mauritius island (east of Madagascar in the Indian ocean) and I learned about the infamous story of the dodo, a bird that looked a little bit like a turkey. This bird was endemic to the island of Mauritius and was thriving before human discovered the island. It was then hunt by sailors and was extinct in less than a century after it was discovered. As dinosaurs, we have little information of their exact appearance. Nowadays, there is several species that are in high risk of extinction such as the Orangutan, the Bengal tiger, the blue whale, the black rhino and the Florida panther. What I would like to achieve if data are available is to have a comprehensive map of species in danger, their location and why they are endangered.*

**Data Question**

*Where are localized endangered and threatened species and what can be the cause?*

**Schedule (through 1/23/2021)**

1. Get the Data (12/20/2020)
2. Clean & Explore the Data (1/6/2021)
3. Create Presentation and Shiny App (1/18/2021)
4. Internal Demos (1/19/2021)
5. Midcourse Project Presentations (1/23/2021)

**Data Sources**

[*https://www.worldwildlife.org/pages/wildfinder-database*](https://www.worldwildlife.org/pages/wildfinder-database)

[*https://www.iucnredlist.org/*](https://www.iucnredlist.org/)

[*https://ecos.fws.gov/*](https://ecos.fws.gov/)

**Known Issues and Challenges**

*The challenges will be to find and use geospatial data (polygons or points) for each species (since some are found in different location, to be able to have a picture of the animal when the user select an animal. Finally, probably the biggest challenge since I was not able to find a dataset so far is why certain species are endangered… the only possibility would be to add datasets of possible cause (but of course not all) such as deforestation and urbanization if I have time*

What I know is that the causes for endangered species are:

Destruction of habitats, Changes in natural living conditions, Hunting, Fishing, Pollution, Insufficient reproduction rate, Invasive species, Genetics, Diseases, Degree of specialization, Conflicts between wildlife and humans

However, so far, I can’t find a dataset with this information…