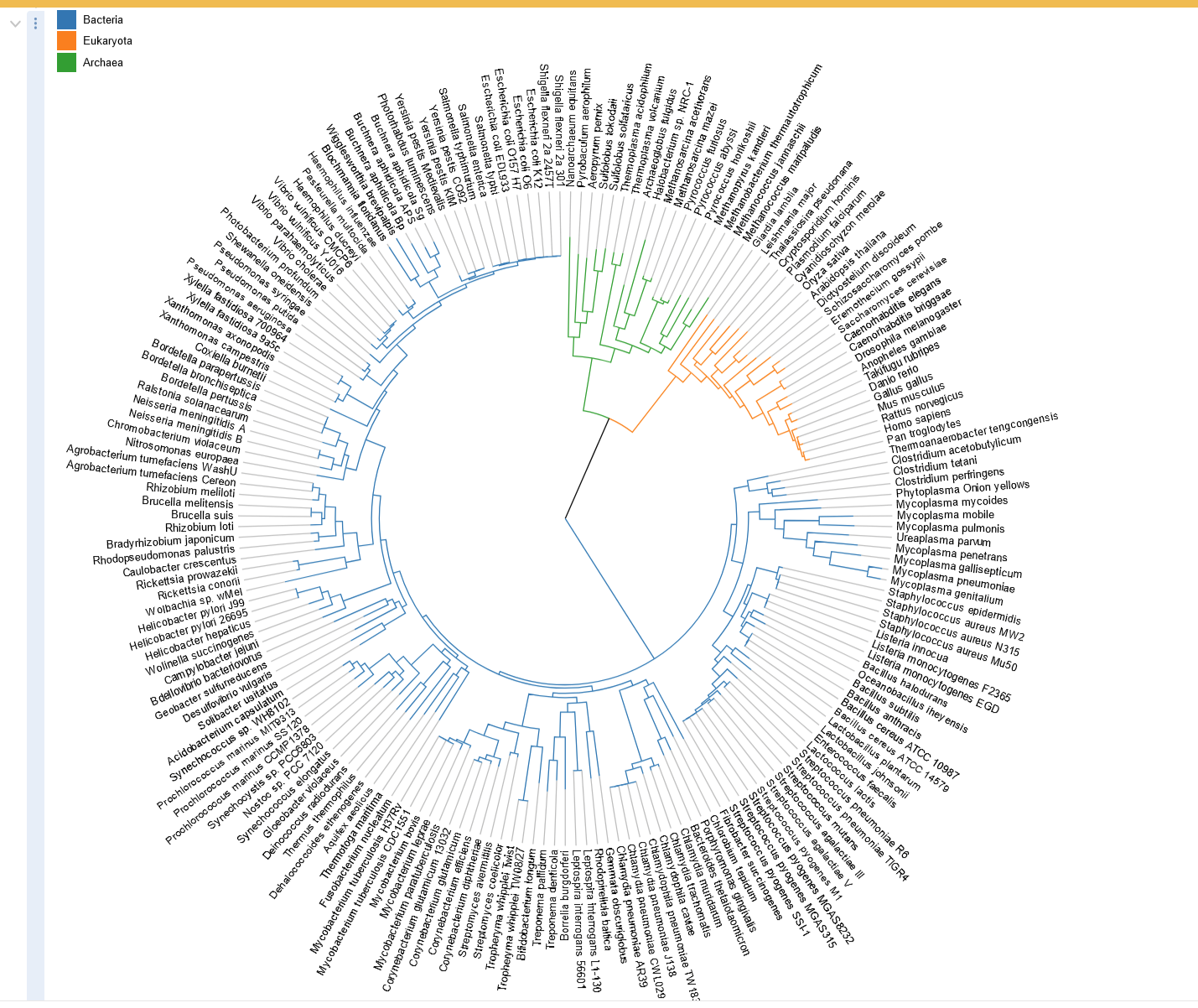
Overview:

The project’s goal is to provide an easy visualization of ecological traits, taxonomy, biogeographic regions, and current status of species. My main motivation for this project, besides liking reptiles, is to allow the reader to more intuitively explore possible relationships between traits in this dataset.

Related Work:



One of my main inspirations for the design of my visualization was this example in d3 that created radial graph of various types of bacteria.

<http://tolweb.org/tree/>

This was another website that inspired me to create an interactive tree to visualize species.

Questions:  
How do certain traits affect a species conservation status?

How are different traits related across species?

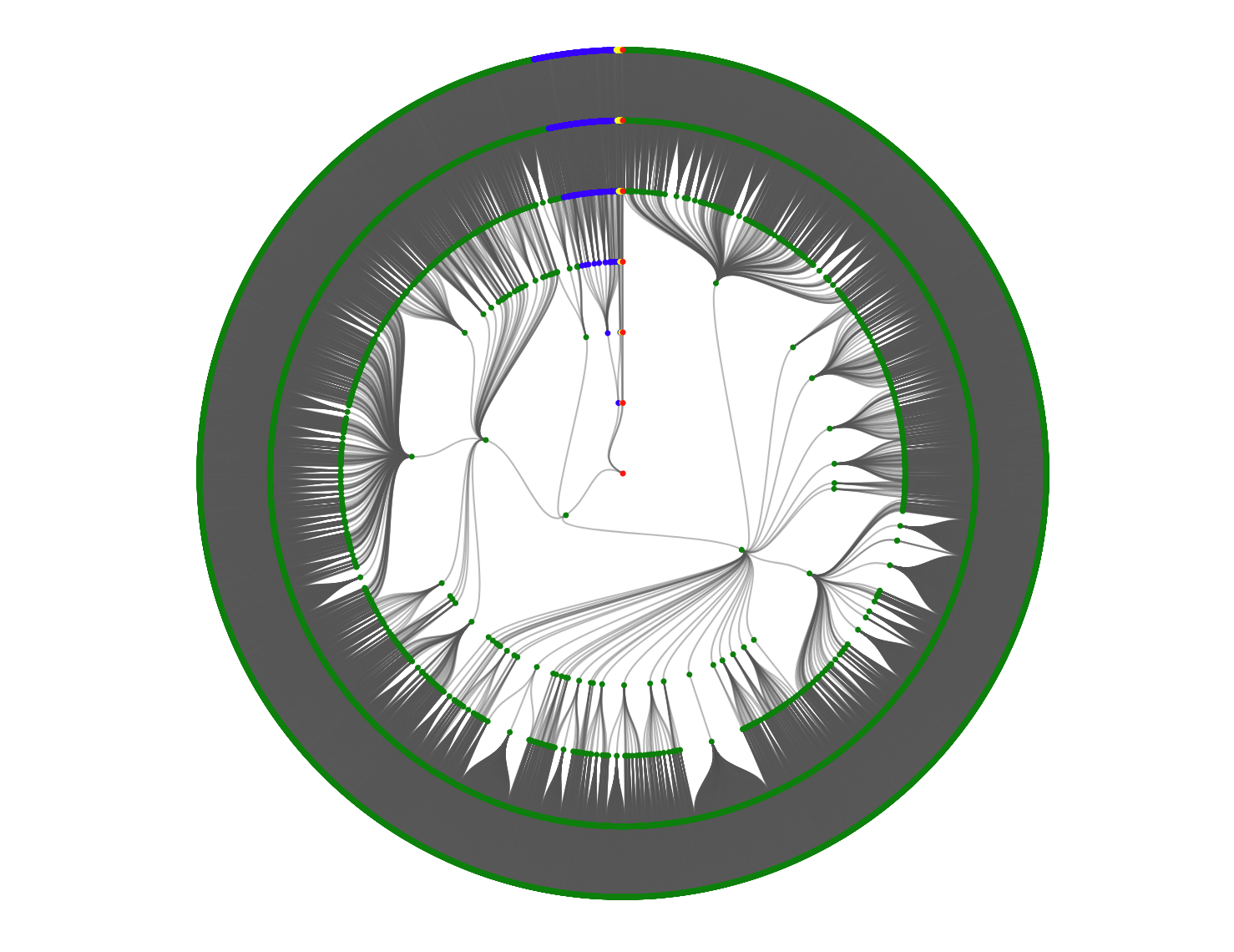
What patterns could be when looking at the biogeographical regions, traits, and conservation?

It was not originally going to be focusing heavily on conservation status, but it is the most impactful correlation that could be found in these visualizations.

Data:  
Source: <https://figshare.com/articles/dataset/ReptTraits_a_comprehensive_database_of_ecological_traits_in_reptiles/24572683>

Exploratory Data Analysis”  
 A pie chart to classify the Order each species was originally used to visualize the data. Doing this revealed to me the approximate distribution of the data, and they were mainly separated into four categories with one majority.

Design Evolution:  
 My original idea was to have a tree chart to visualize the division and splits in taxonomy, but it was more visually interesting to create one that was radial. My current issue with that for now is the lack of readability due to the number of points. There was originally an idea to visualize body size by representing it with linked nodes, but I decided that it may not be feasible with the amount of time and my current level of experience. Unfortunately, I am still somewhat undecided on my different visualizations. For now, the main visualization will be a radial design that is using hue and linked points for their marks and channels.

Implementation:  
 Currently lacking in two more visualizations and interactions. The future intent and functionality of the design is to use the other two visualizations to highlight and narrow down the list of species within the radial graph when selected. For example, I plan on having another visualization for the map showing the distributions of species in the eight main geographical areas. Another visualization that I am planning to create is another chart that shows the prominence of certain traits with different conservation statuses.   
  
  
A legend will be added and scaling will be fixed for this visualization

Evaluation:  
 Not applicable yet, as visualizations are not yet finished