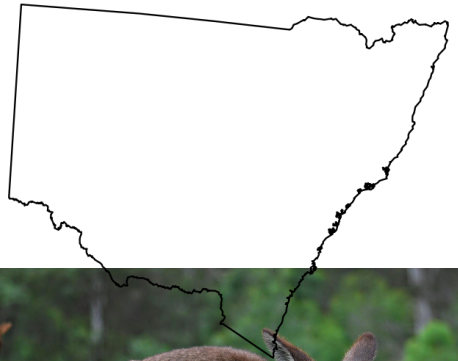
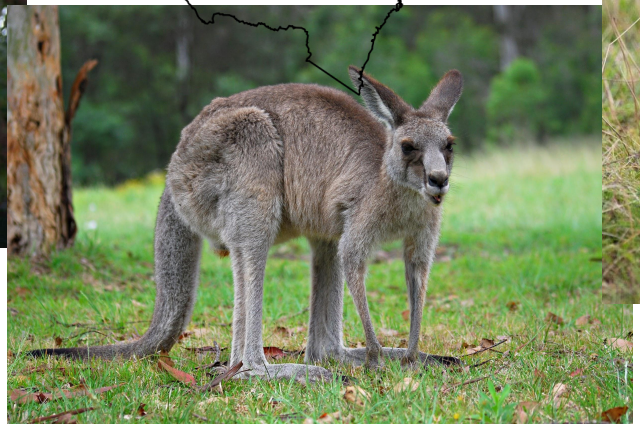
PROJECT 3

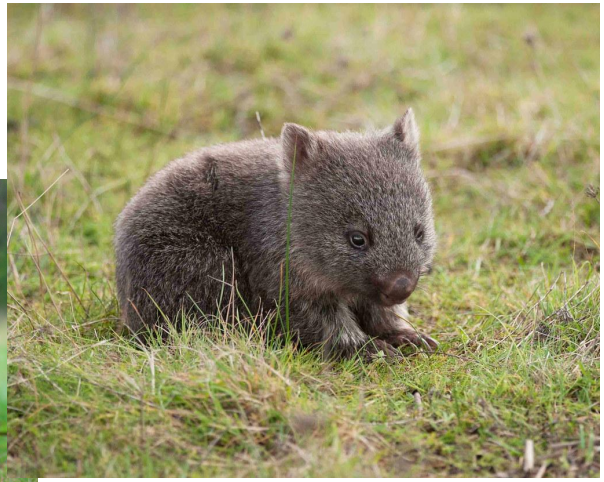
GROUP 1

Team: Mark Flascas, David Jenkins, Ang Li, Anush De Costa

ANIMALS SIGHTINGS NSW







https://www.environment.nsw.gov.au/topics/animals-and-plants/biodiversity/nsw-bionet/web-services

NATIVE ANIMALS - user-driven Interactions

SIGHTED ANIMALS UPDATE

Web Form

Enable users to upload sightings of native animals of NSW via a webform into a Sqlite database. Creating a history of sightings of different species of animals.

INTERACTIVE MAP

Interactive Map

Users can based on interest, filter specific animals and view sightings on the NSW map.

A heatmap is used to show sighting hotspots to promote tourism

CHARTS

Brunch at Noon

Sightings by county;

Sightings over time;

OVERVIEW

Data:

Database: Sqlite 25 000 records

Code: Flask, Sqlalchemy, Ajax, Jquery, D3, Plotly

Visualisations:

Plotly > Interactive Charts

Leaflet > Interactive Map

User Driven Interactions:

Form: User input into Sqlite DB via a HTML form
Visualisations: User Filter Select, Hover-over chart features.

WORK BREAKDOWN AND FLOW

1 - Initial Planning (Team)

Explore project opportunities including:

- Sourcing data - API Query
- Visualisations
- Database selection
- Work breakdown

2 - Setup DB upload & Form (Ang, Mark)

- Python script to convert JSON to Sqlite database
- Initial cleansing and trimming
- Create webform and load script

3 - Filtering and Charts (Anush)

Create code to filter specific animals and using plotly, plot the bar and gauge chart

4 - Interactive Map (David)

Upload map and create heatmap

Review and Presentation (Team)

- Peer review work
- Presentation

LIVE DEMO