***Winston's Cat Shelter* Members**: Brandon Leung (10458237), Michelle Grilli (10470952), Liam Concannon (10465928), Joe Grosso (10469209)
GitHub: https://github.com/mkgrilli/cs554final

Our website will be a bird sighting logging website. A person will be able to post a sighting of a bird that they have seen. This will include the bird's name (or "unsure" if they cannot ID it), the location the bird was seen, the time the bird was seen, and an optional place to upload a picture.

We plan to implement an ID voting feature. While posts will not have likes or comments in a traditional sense, if a user doubts the post's classification of the bird, they can submit an alternative, which will show up under the post. Other users can then vote if they believe that's the correct choice which will be displayed as a percentage of confidence. The original ID will not be overwritten, and users cannot submit the same alternative.

Users will be able to search areas using a map and display birds that have been sighted nearby within a certain radius. If a bird is selected from the map, the post will be displayed. Users will be able to search for a bird's name which will then display all posted birds matching that name. Users will also be able to view all posts, show recent posts, and sort based on name/location/date posted.

A QOL feature we *may* implement is displaying bird information using eBird API. This will make it so users can click on the name of a bird from a post and view information about it, such as its scientific name, taxonomy, category, and more.

Class technologies:
Redis - This will allow us to cache data to show recent posts and reduce API calls, increasing efficiency.
React - This will serve as our single-page application UI.
TypeScript - Using TypeScript over JavaScript will help facilitate a better developer experience by having strictly typed elements and having in advance type validation.

Independent technologies:
Auth0 (https://auth0.com/) - This provides authentication and authorization services, as well as integration with social media to allow different means of secure login/account creation.
Web Host Provider (such as Microsoft Azure, Heroku, AWS**)** - These services provide a reliable cloud host for our web application and its technologies. Most importantly, it will allow our website to be live.

APIs:
OpenLayers (https://openlayers.org/) - An open-source map API. It supports dynamic maps, map manipulation, accessibility, and can have custom tiles, animations, and layers.
eBird (https://ebird.org/explore**)** - An extensive library of bird information that can provide nomenclature information.