Read ME

The purpose of this project was to build a functional dashboard for the Grazioso Salvare organization to help them identify rescue dogs that match specific search and rescue training categories. The dashboard connects to a MongoDB database, retrieves data using a custom CRUD Python module, and displays it interactively. The interface allows users to filter animals by rescue type, view data in a table, explore breed trends in a bar chart, and display locations on a geolocation map.

**This dashboard includes:**

* A MongoDB connection using the aac database and animals collection
* A CRUD Python module to access database records (read() functionality used)
* An interactive data table that supports sorting, filtering, and searching
* Button filters for key rescue categories:
  + All animals
  + Water Rescue
  + Mountain or Wilderness Rescue
  + Disaster or Individual Tracking
* A Top Breeds bar chart that updates dynamically with filters
* A Leaflet geolocation map that shows the location of the selected animal
* A Grazioso Salvare company logo and unique identifier

This project uses MongoDB to store and retrieve animal data and PyMongo to connect the database to Python. The interactive dashboard was built using the Dash framework along with Dash DataTable for data display and Dash Leaflet for geolocation mapping. Pandas was used for data handling and transformation, while a custom CRUD Python module managed database operations. Together, these tools provided a simple and effective way to build a responsive, data-driven dashboard.

Had issues with dashboard callbacks threw update errors so added guard checks for empty data.





