

Technical Requirements Document - Antelope Dashboard

Objective:

The purpose of this document is to specify the technical requirements and functionalities of the Antelope Dashboard application, which allows visualizing various data about antelopes through charts.

Features:

The Antelope Dashboard application should be able to:

- Display a data table about antelopes, including their name, continent, weight, height, horns, and image.
- Display a chart of antelope distribution by continent.
- Display a chart of average antelope weight by continent.
- Display a chart of average antelope height by continent.
- Display a chart of antelope horn distribution.
- Display a chart of antelope horn distribution by continent.

Technology used:

The Antelope Dashboard application utilizes the following technologies:

- React.js for building the user interface.
- Material-UI for user interface components.
- Recharts for data visualization.
- JavaScript for application logic.
- HTML and CSS for the structure and styling of the user interface.

Architecture:

The application is structured according to the following architecture:

- React Components: Each feature of the application is encapsulated in reusable React components, such as AntelopeTable, AntelopeChart, etc.
- React Router Routes: Different views of the application are managed using React Router, with routes defined for each page and each chart.
- CSS Styles: CSS styles are used to customize the appearance of the user interface, following Material-UI guidelines.

Technical specifications:

- Data Interoperability: Antelope data is retrieved from a JSON file via an HTTP request.

- Navigation: Navigation within the application is based on React Router, with navigation links to access each page and each chart.
- Chart Customization: Charts are customized with colors and styles suitable for the application, using Recharts features.
- Responsiveness: The user interface of the application is designed to be responsive and adapt to different screen sizes and devices.

This Technical Requirements Document describes the technical requirements and functionalities of the Antelope Dashboard application. It provides an overview of the architecture, technologies used, and technical specifications for the development of the application.