

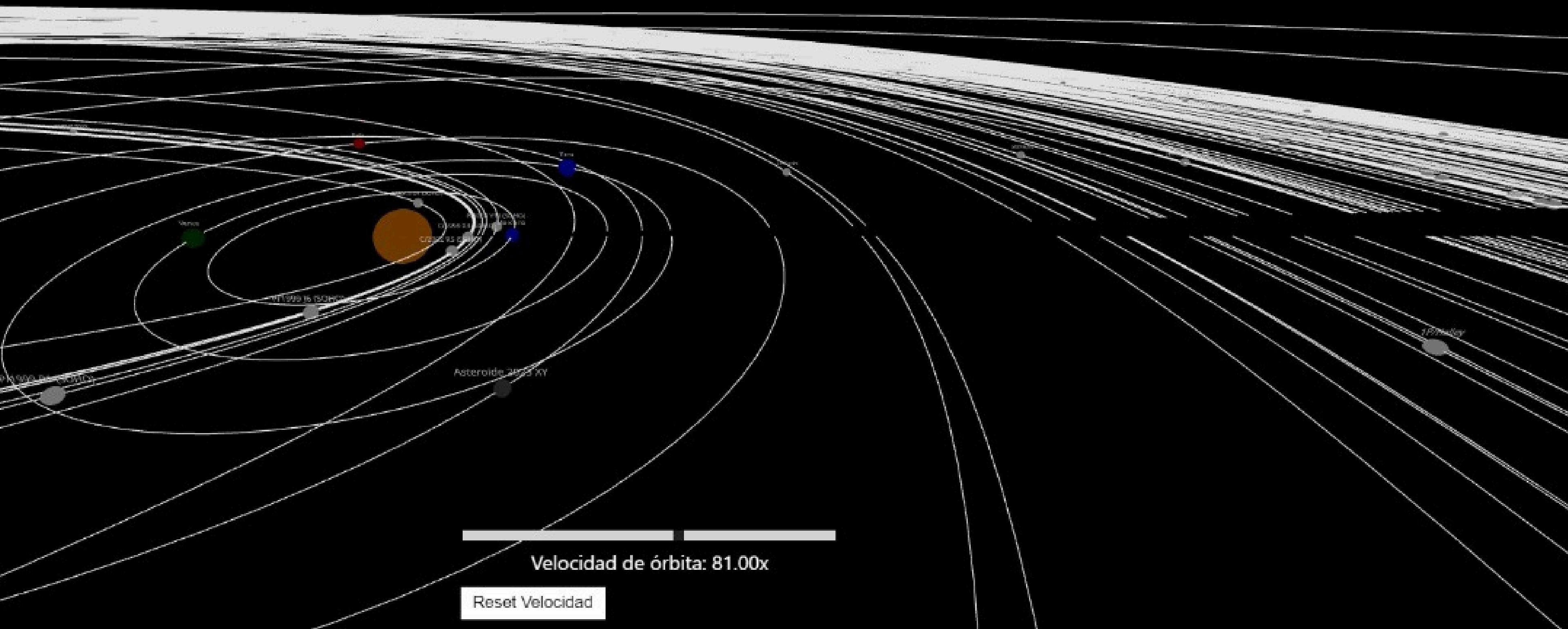
ORRERY COMET TRACKER

TEAM ROSAS DEL ESPACIO

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The challenge we chose is to create an orrery web application that displays near-Earth objects. We developed an application in React that utilizes the NASA API to visualize the orbits of planets and comets, providing an interactive and educational experience

CHALLENGE

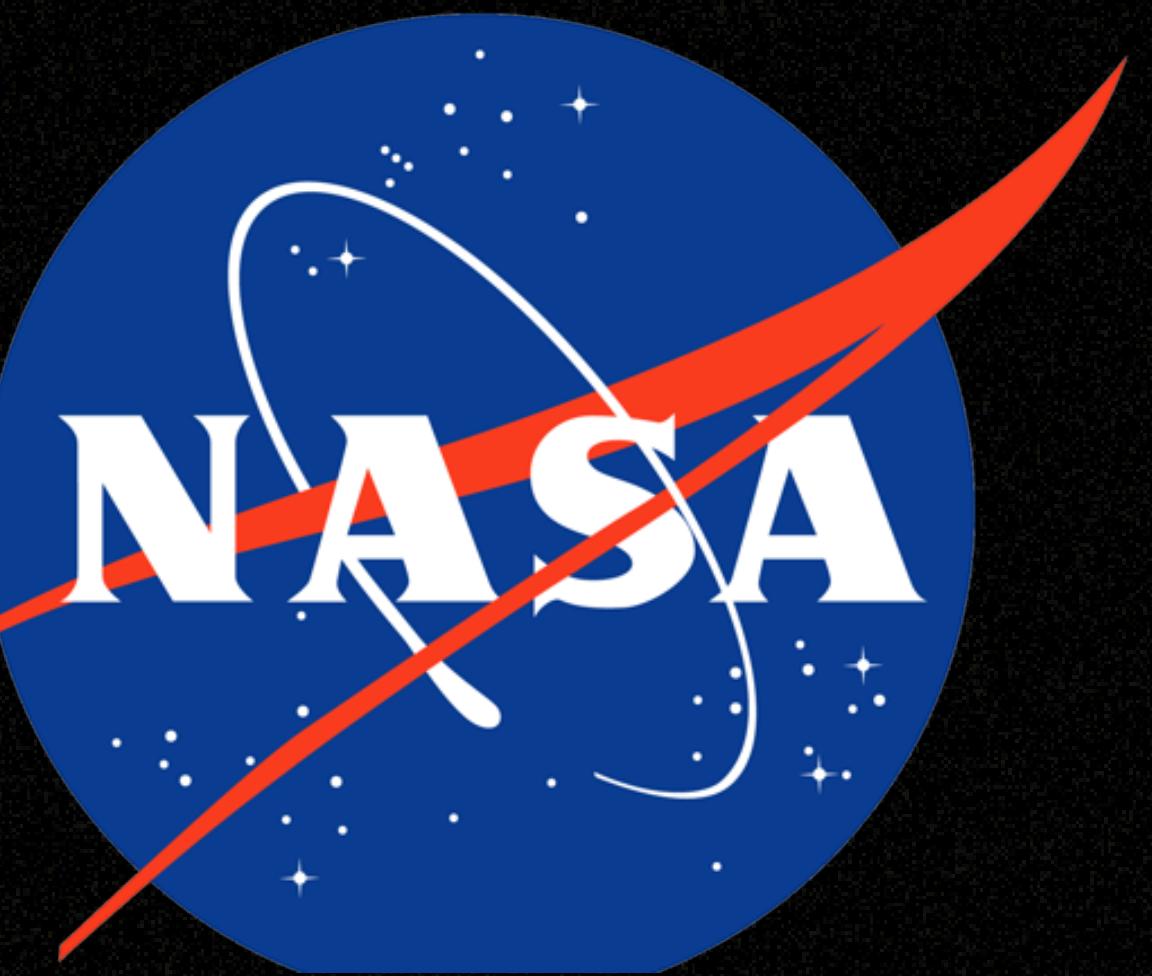


USER EXPERIENCE

When entering the application, users see a clean interface that displays the solar system. There is also interaction with the planets, facilitating learning and interest in astronomy. Users can adjust the speed of the orbits of planets and comets with a slider. Utilizing the NASA API, the data will be automatically updated, enriching the experience

The open data from NASA is essential for our application, as it provides updated information about near-Earth objects. By using the NASA API, we can access real-time data on the orbits of planets and comets.

NASA's technology, which includes astronomical models and visualization algorithms, allows us to effectively represent the trajectories. This improves accuracy and facilitates user interaction, creating a dynamic and educational experience about the solar system.



EDUCATIONAL BENEFITS

- **Active Learning:** How the application fosters learning through exploration.
- **Scientific Curiosity:** Stimulating interest in astronomy and space sciences.
- **Accessibility:** Availability of complex information in an understandable way for all users.

FUTURE IMPROVEMENTS AND EXPANSIONS

Simulations of Astronomical Events

Incorporate events such as eclipses, meteor showers, and planetary transits so that users can experience celestial phenomena in real time.

Input of Coordinates

Allow users to enter specific coordinates to determine when eclipses will occur or when a comet will pass near Earth at their location.

