Telescope AR

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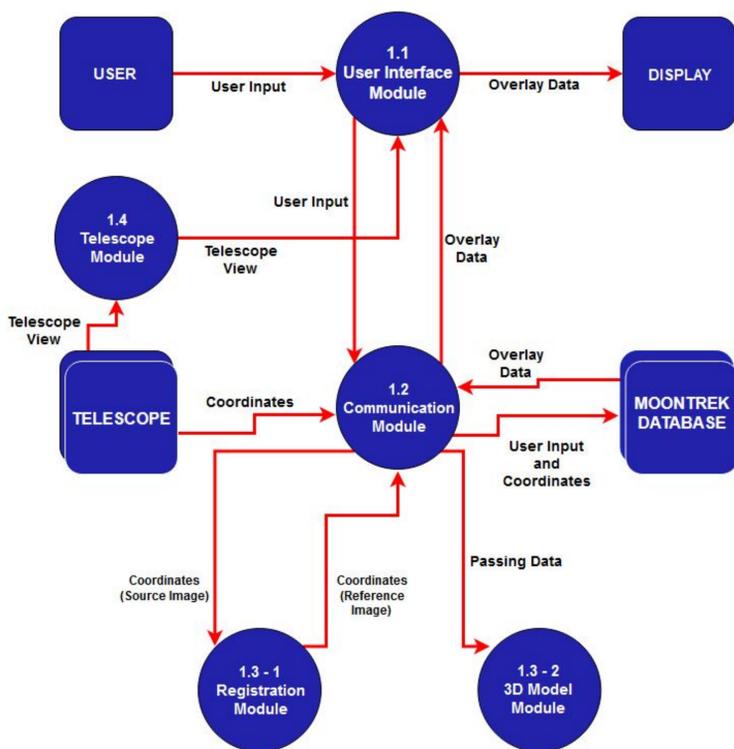California State University, Los Angeles

BACKGROUND

Jet Propulsion Laboratory is partnering with California State University - Los Angeles, College of Engineering, Computer Science, and Technology to build an interface between Moon Trek and telescopes amateur astronomers use to look at the Moon. When images from the telescope are routed to a laptop or a smartphone they will be annotated with names of lunar features and landmarks, local temperature, chemical makeup of the soil -- or any available information the astronomer chooses.
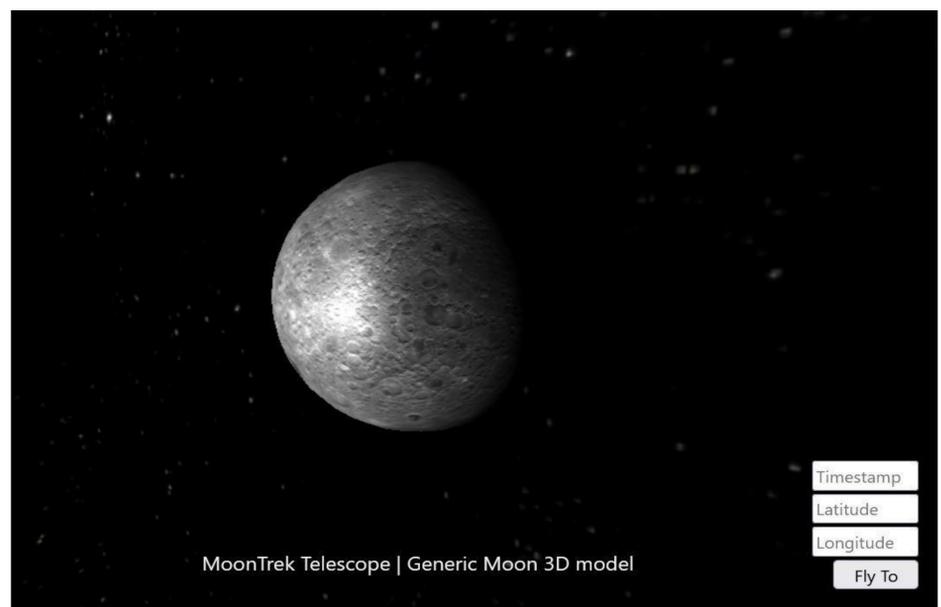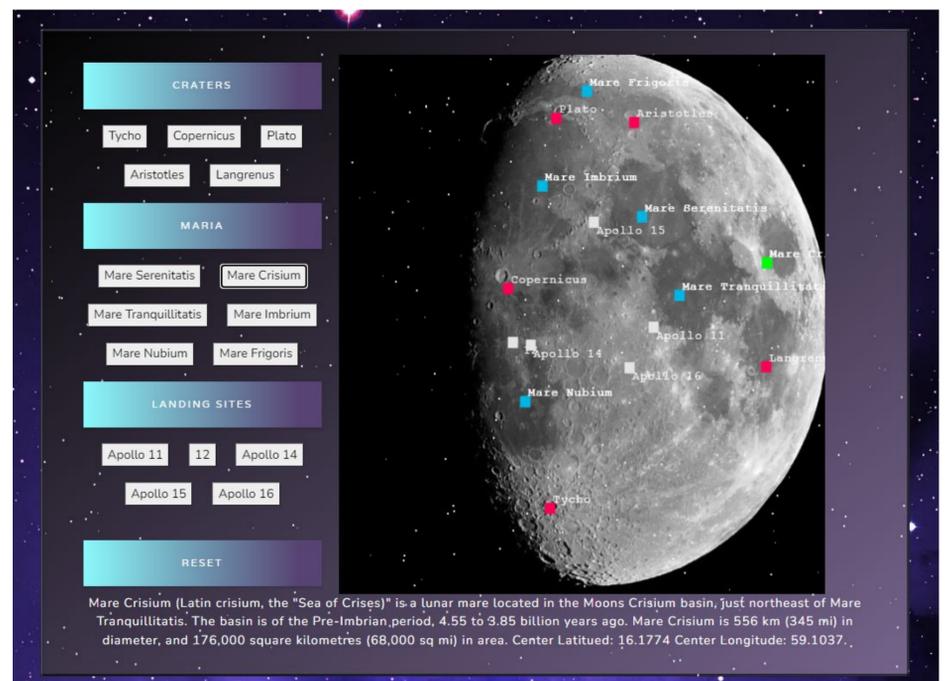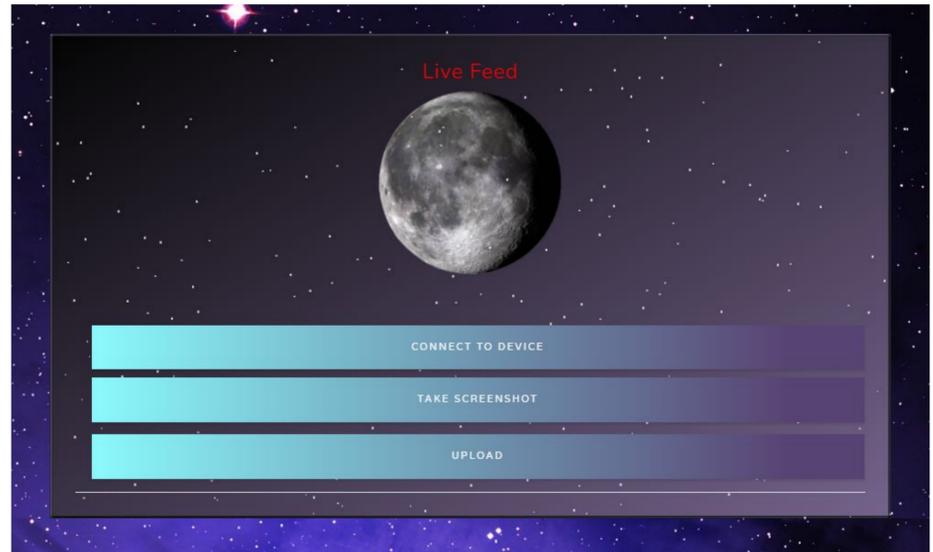
OBJECTIVE

Provide a user-friendly interface that uploads images of the Moon and plots point of interests on the Moon such as craters, maria, and landing sites.

ARCHITECTURE

GOALS

- Complete telescope integration to capture an image
- Improve the accuracy of image registration detection
- Create a 3D model of the Sun, Earth, and Moon based off user submitted images
- Allow annotation of where the picture was taken, time, and the Moon's position

Mare Crisium (Latin crisium, the "Sea of Crises)" is a lunar mare located in the Moons Crisium basin, just northeast of Mare Tranquillitatis. The basin is of the Pre-Imbrian period, 4.55 to 3.85 billion years ago. Mare Crisium is 556 km (345 mi) in diameter, and 176,000 square kilometres (68,000 sq mi) in area. Center Latitued: 16.1774 Center Longitude: 59.1037.

MoonTrek Telescope | Generic Moon 3D model

TECHNOLOGIES