

Documentation - Look Up

1 Pitch

Many people find it difficult to keep track of astronomical events and identify stars or planets when stargazing. This often results in missed opportunities to experience the wonders of the night sky, especially for amateur astronomers and curious minds. "Look Up" is an app that helps solve this problem by offering an interactive platform for exploring the night sky and sharing stargazing experiences. Whether you're a city dweller curious about the stars or a traveler looking to discover new stargazing spots, "Look Up" makes the cosmos more accessible and engaging.

2 Main Features

1. Interactive Sky Map

- Location-based sky map showing stars and planets visible from your current position
- Similar to Google Maps interface for familiar and intuitive navigation
- Real-time updates based on your location to show the current state of the sky above you

2. Social Sharing and Discovery

- Share your stargazing photos through the feed
- View and rate other users' astronomical photographs
- Interactive map with location markers showing where photos were taken
- Personal profile to view and manage your own posts

3. Educational Content

- Interactive 3D visualization of planets in our solar system
- View detailed rotating models of each planet
- Astronomy quizzes to test and expand your knowledge
- Calendar of upcoming astronomical events

3 Features

3.1 Location Features

- GPS integration for accurate sky mapping
- Google Maps integration showing stargazing photo locations
- Location-based feed showing nearby astronomical observations

3.2 User Feature

- Google authentication for secure account access
- Sign in and log in using our app's authentication system
- Personal profile showing your posted photos
- Rating system for interacting with community posts
- Track your quiz progress

3.3 Offline Mode Features

The app continues to provide value even without an internet connection:

- Access to astronomy quizzes
- Interactive 3D planet visualization system
- Progress tracking for educational content

4 Technical Implementation

The app utilizes several key technologies and features:

- Google Authentication for secure user management
- GPS integration for location-based features
- Camera sensor for capturing and sharing stargazing photos
- Gyroscope sensor for observing the sky via the Sky Map
- Interactive maps for both sky viewing and photo location discovery
- Real-time photo sharing and rating system
- Local storage for offline functionality

4.1 Target Audience

- Amateur astronomers
- Photography enthusiasts
- Sky watching beginners
- Educational institutions
- Anyone interested in astronomy and space

Look Up combines educational content, social features, and practical tools to create an engaging platform for astronomy enthusiasts of all levels. Whether you're learning about our solar system, sharing your latest astrophotography, or finding the best local spots for stargazing, Look Up provides the features you need to explore and share the wonders of the night sky.