

# Space Era

## Development Team

I'm a lone wolf. Rather than staring at the full moon at night, I stare into my computer. When everyone else sleeps, I'm burning the midnight oil.

I have 10 years of experience with mobile application development. I worked for various companies around the world on tens of applications.

On top of that, I've developed a few applications of my own in my spare time. For over a year I've worked on this app just over the weekends and evenings.

Enjoy!

## App Description

### Key Features

Simply point your iPhone or iPad to the Sky and get to know more about every object you can see. The application uses AR concepts to guide you to find any celestial object in the night sky.

In the app can be found every star visible by the naked eye even from the darkest locations - there are almost 120 000 stars. Positions of more than 1200 satellites are tracked in real-time. On top of that app contains constellations, complete Messier and Caldwell catalogs of deep space objects, all planets, Moon, Sun, and the most prominent meteor showers. That's accompanied by over 100 stunning images and more than 1000 interesting facts about celestial bodies.

## Supported Apple technologies

The app is taking advantage of Metal as the position of every celestial object is computed on GPU in the fragment shader.

The user interface is developed by SwiftUI.

Application is developed exclusively for iOS14 (no other platforms nor iOS versions) to take advantage of its performance and abilities. While developed with the latest technologies and standards in mind, the application is still running on 6 years old iPhones.

## Business Model

This is the first phase of rolling out the app. Initial price will be set to US\$3.99 (Tier 4). The goal is to spark interest of as many users as possible by original visual, UI and available feature set.

The second phase will be subscription model for various features.

Here are some items on the road map: Apple Watch support, Jupiter's and Saturn's moons positions, push notification for rising Starlink satellite constellation, interactive Moon map and many more.

Timing of the second phase depends on how successful and how fast will the initial phase go.

## Marketing Plans

The ultimate goal is to educate people about the thrilling and interesting universe above us.

Based on the initial rollout I want to reach out to several observatories worldwide to start cooperation about content enhancements and audience acquisition.

# Your Story

I love problem-solving and challenging myself. That's why developing apps as a multi-disciplinary task is an exciting quest for me.

Each of my apps has some aspect making users ask themselves: How is that even possible to do? Space Era app is no different. Now everyone can have a night sky guide in their pocket. To know some interesting facts about every object visible in the sky by the naked-eye user only have to point his iPhone above.

Space Era is celebrating the golden age of space pioneers in the 60's and 70's by the distinctive retro visual style. There are many unique features nowhere to be seen, for example:

- real-time position of all Starlink satellites
- current ISS crew onboard
- real-time image of Sun to identify sunspots
- original implementation solution is the computation of all celestial body's positions on-device GPU using Metal shaders
- the app doesn't need the internet to be fully functional
- push notifications about ISS rising above the horizon and other interesting celestial events

**contact:** [JanPlesek@gmail.com](mailto:JanPlesek@gmail.com)

**web:** [www.spaceera.app](http://www.spaceera.app)