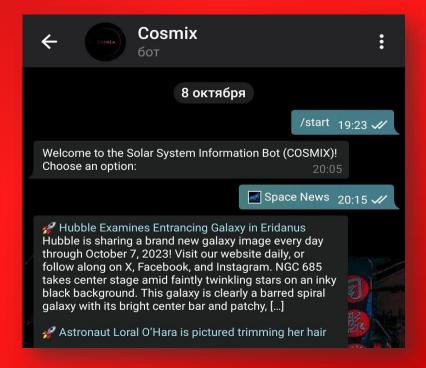# NASA SPACE APP CHALLENGE: CREATE YOUR OWN CHALLANGE

Team: SOOMONI_BLOOD_OVERFLAW

INTRODUCTION OF BOT

Meet our Cosmix - Solar System Educational Bot, your gateway to the cosmos. It's your celestial companion for space exploration, offering planet details, real-time astronomy news, captivating images, space facts, Mars weather updates, asteroid tracking, and the International Space Station's current location. Explore, learn, and be inspired by the universe, all in one bot!

PURPOSE

WE'RE THRILLED TO SHARE THE PURPOSE OF OUR BOT. ITS PRIMARY GOAL IS TO MAKE LEARNING ABOUT SPACE NOT ONLY EDUCATIONAL BUT ALSO FUN FOR CHILDREN AND ENTHUSIASTS OF ALL AGES.

FUNCTIONS

Astronomy News	Astronomy Picture of the Day (APOD)	Space Facts	ISS Location	Planetary Exploration
• Stay up-to-date with the latest happenings in the cosmos, from groundbreaking discoveries to cosmic events which receive news from RSS feed of NASA	• Immerse yourself in the breathtaking beauty of the cosmos with a daily dose of captivating celestial imagery.	• Delve into the depths of space knowledge with fascinating and intriguing space facts that will leave you awestruck.	• Track the real-time location of the International Space Station (ISS) as it orbits our planet and astronauts in spaceships.	• Learn about the planets in our Solar System, each with its own captivating description and mesmerizing imagery.

HOW BOT WAS MADE

OUR SOLAR SYSTEM INFORMATION BOT IS POWERED BY PYTHON AND LEVERAGES SEVERAL LIBRARIES AND APIS TO PROVIDE YOU WITH ACCURATE AND UP-TO-DATE SPACE INFORMATION. HERE'S A GLIMPSE INTO HOW IT OPERATES

Leverages the aiogram library to interact with Telegram's API for user communication
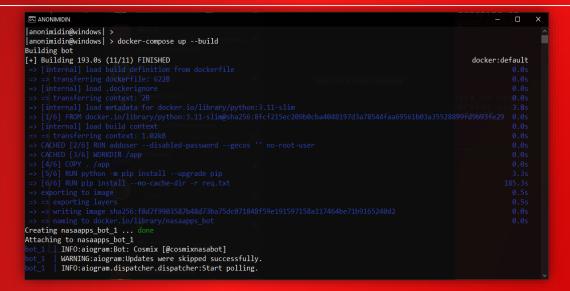
Corporates the BeautifulSoup library for web scraping to fetch space news.

Accesses NASA's API to retrieve Astronomy Picture of the Day (APOD) images and data.

Randomly outputs space facts from a local text file for added entertainment

Fetches data on near-Earth asteroids using NASA's API

Tracks the International Space Station (ISS) location in real-time using an external API and who is in the ship with linked in their wiki bas

Run bot easyly in any OS via securied docker containers

```
ANONIMIDIN                                                         —  □  ×

|anonimidin@windows| >
|anonimidin@windows| > docker-compose up --build
Building bot
[+] Building 193.0s (11/11) FINISHED                          docker:default
 => [internal] load build definition from dockerfile              0.0s
 => => transferring dockerfile: 622B                              0.0s
 => [internal] load .dockerignore                                 0.0s
 => => transferring context: 2B                                   0.0s
 => [internal] load metadata for docker.io/library/python:3.11-slim  3.8s
 => [1/6] FROM docker.io/library/python:3.11-slim@sha256:8fcf215ec209b0cba4048197d3a78544faa69561b03a35528899fd9b93fe29  0.0s
 => [internal] load build context                                0.0s
 => => transferring context: 1.02kB                              0.0s
 => CACHED [2/6] RUN adduser --disabled-password --gecos '' no-root-user  0.0s
 => CACHED [3/6] WORKDIR /app                                     0.0s
 => [4/6] COPY . /app                                             0.0s
 => [5/6] RUN python -m pip install --upgrade pip                 3.3s
 => [6/6] RUN pip install --no-cache-dir -r req.txt             185.3s
 => exporting to image                                           0.5s
 => => exporting layers                                          0.5s
 => => writing image sha256:f8d7f9903587b48d73ba75dc071848f59e191597158a117464be71b9165240d2  0.0s
 => => naming to docker.io/library/nasaapps_bot                  0.0s
Creating nasaapps_bot_1 ... done
Attaching to nasaapps_bot_1
bot_1  | INFO:aiogram:Bot: Cosmix [@cosmixnasabot]
bot_1  | WARNING:aiogram:Updates were skipped successfully.
bot_1  | INFO:aiogram.dispatcher.dispatcher:Start polling.
```
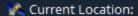
FUTURE IDEAS FOR BOT

IN THE FUTURE, WE PLAN TO EXPAND THE BOT'S CAPABILITIES TO ENHANCE ITS EDUCATIONAL VALUE:

1. INTERACTIVE QUIZZES. WE'LL INTRODUCE SPACE-THEMED QUIZZES TO TEST AND REINFORCE KNOWLEDGE.

2. SPACE HISTORY. ADDING HISTORICAL SPACE EVENTS TO PROVIDE CONTEXT FOR CURRENT DISCOVERIES.

3. ASTRONAUT INSIGHTS. INTERVIEWS AND STORIES FROM ASTRONAUTS TO INSPIRE THE NEXT GENERATION OF SPACE EXPLORERS.

4. FEEDBACK. WE'RE GOING TO ADD FEEDBACK FUNCTION FOR THE USERS THAT THEY COULD SENT THEIR IDEAS AND SUGGESTIONS DIRECTLY TO THE ADMIN E-MAIL OR TO IT'S TG ID.

5. BUGS THAT NEED TO BE FIXED. MARS WEATHER AND PLANETS FUNCTION OF BOT WILL BE FIXED IN FUTURE UPDATES

Cosmix
бот

🚀 Space Fact 15:04 ✓✓

🪐 The dwarf planet Eris is located in the Kuiper Belt and is about 27% more massive than Pluto. 15:04

🚀 Space Fact 15:04 ✓✓

🪐 The atmosphere of Venus is primarily composed of carbon dioxide and has a runaway greenhouse effect. 15:04

🛰 ISS Location 15:00

🛰 The ISS: The International Space Station is a space station located in low Earth orbit. It is a multinational collaborative project involving space agencies such as NASA (United States), Roscosmos (Russia), ESA (European Space Agency), JAXA (Japan Aerospace Exploration Agency), and CSA (Canadian Space Agency). It serves as a platform for scientific research, technological development, and international cooperation in space exploration.
The ISS orbits the Earth approximately every 90 minutes, providing a unique vantage point for scientific experiments and observations of our planet. It is a symbol of international cooperation in space exploration and continues to play a crucial role in advancing our understanding of life in space and conducting research in microgravity environments.
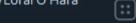
🛰 Current Location:
• Latitude: 44.7955
• Longitude: 11.3466

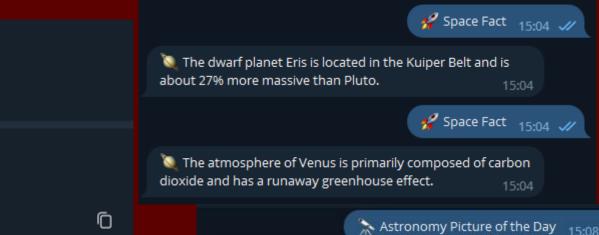🚀 Astronauts on board:
• Jing Haiping on Tiangong
• Gui Haichow on Tiangong
• Zhu Yangzhu on Tiangong
• Jasmin Moghbeli on ISS
• Andreas Mogensen on ISS
• Satoshi Furukawa on ISS
• Konstantin Borisov on ISS
• Oleg Kononenko on ISS
• Nikolai Chub on ISS
• Loral O'Hara on ISS

https://en.wikipedia.org/wiki/Loral O'Hara

/start 14:58 ✓✓

Welcome to the Solar System Information Bot! Choose an option: 14:58
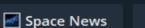
🌌 Space News 14:58 ✓✓

🚀 Hubble Examines Entrancing Galaxy in Eridanus
Hubble is sharing a brand new galaxy image every day through October 7, 2023! Visit our website daily, or follow along on X, Facebook, and Instagram. NGC 685 takes center stage amid faintly twinkling stars on an inky black background. This galaxy is clearly a barred spiral galaxy with its bright center bar and patchy, [...]

🔭 Astronomy Picture of the Day 15:08

Plane, Clouds, Moon, Spots, Sun 15:08

© Doyle & Shannon Slifer 201 15:08 ❤️

What's that in front of the Sun? The closest object is an airplane, visible just below the Sun's center and caught purely by chance. Next out are numerous clouds in Earth's atmosphere, creating a series of darkened horizontal streaks. Farther out is Earth's Moon, seen as the large dark circular bite on the upper right. Just above the airplane and just below the Sun's surface are sunspots. The main sunspot group captured

Написать сообщение...

🪐 Planets | 🌌 Space News | 🚀 Space Fact

🔭 Astronomy ... | 🌤 Mars Weath... | ⭐ Near-Earth ...

🛰 ISS Location

SCREENSHOTS

THANKS FOR YOUR ATTENTION

SOMONI_BLOOD_OVERFLAW

For Nasa Space App

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Project pushed to GitHub:

https://github.com/anonimidin/cosmix