



Ric



Dan



Rob



Emer



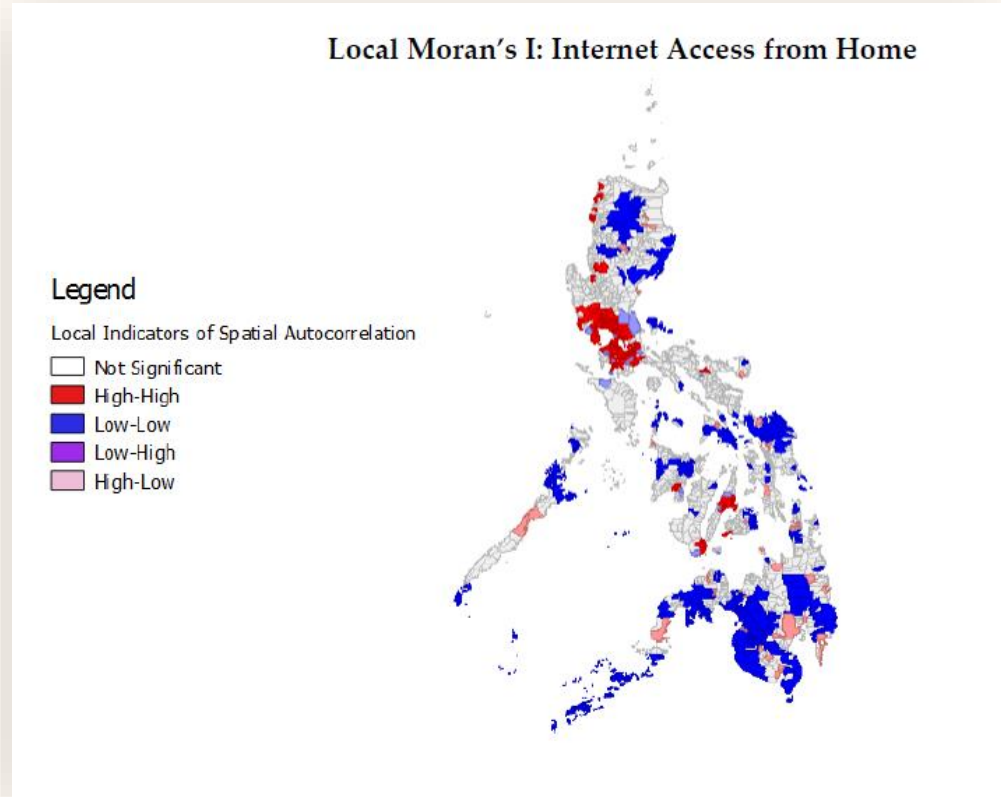
Ran



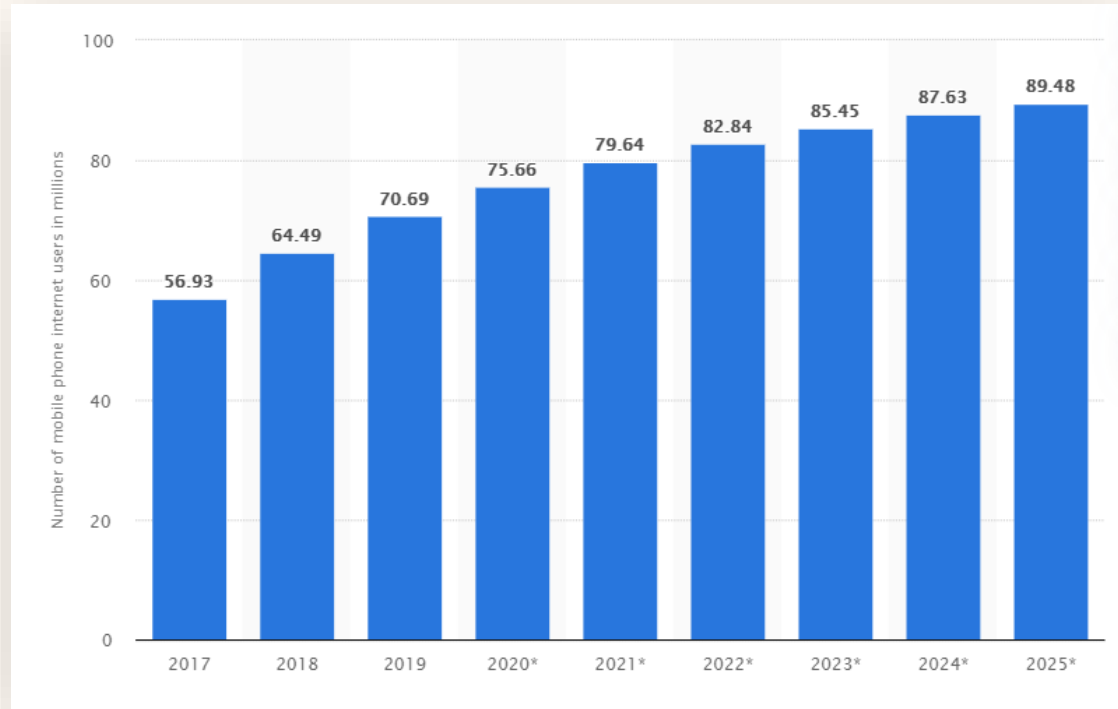
A math chatbot

MuttBOT

The most expensive and 2nd slowest internet in Asia is in the Philippines



Number of mobile phone internet users in the Philippines from 2017 to 2019 with a forecast until 2025 *(in millions)*



Source: <https://www.statista.com/statistics>.

Audience

High school and Senior high school students.

Topic Inclusions

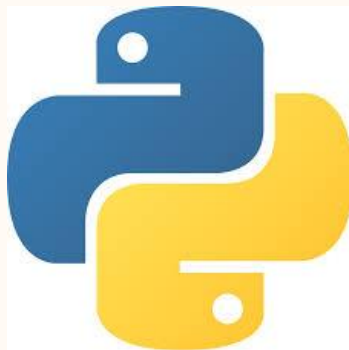
Basic arithmetic, Algebra, Geometry and Trigonometry.



TOOLS



Wikipedia



Python



Jupyter Notebook



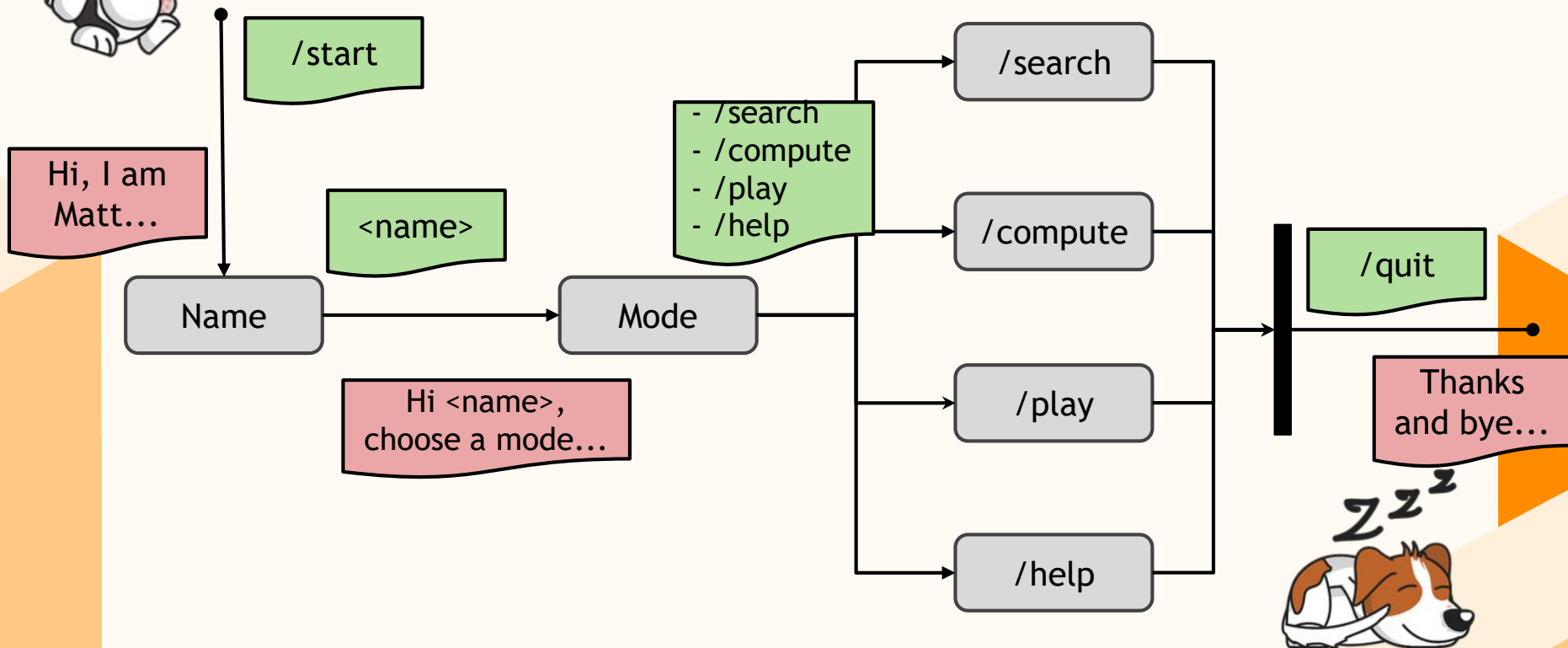
Telegram

spaCy

spaCy



Chatbot High-level Process Flow

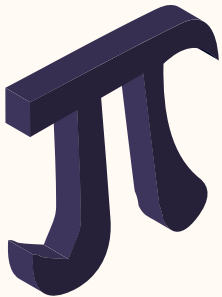


SCOPE

Functions

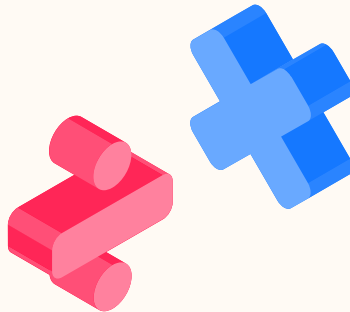
Search

Looks up mathematicians
and math concepts



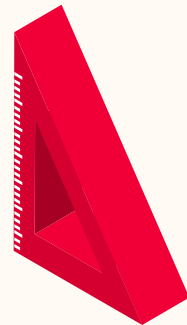
Compute

Calculates arithmetic and
trigonometric problems



Play

Tests your skills by asking
you math problems



Search:

Looks up mathematicians and math concepts

Tokenize text with spaCy

Check for math concepts:
mathematicians, terminologies,
formula

Use Wikipedia API and offline files for
search results

Integrate with Telegram API.



Rhey Ann Magcalas

✓ 7:45 PM

who is plato?



ranibot

7:45 PM

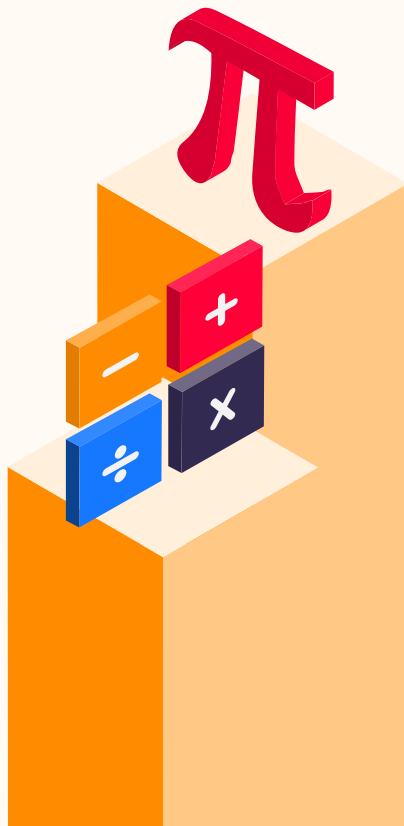
Plato was an Athenian philosopher during the Classical period in Ancient Greece, founder of the Platonist school of thought, and the Academy, the first institution of higher learning in the Western world

COMPUTE

01

Arithmetic Operations

Perform calculations
such as $1+2/(3-4)$



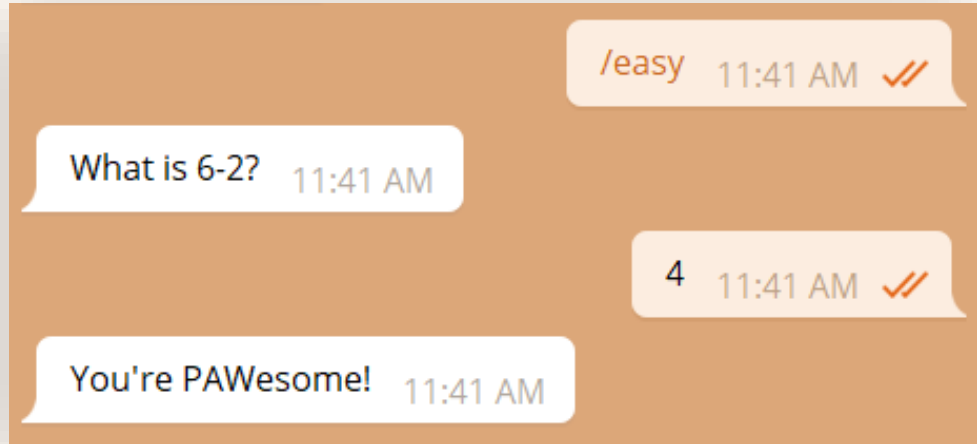
02

Trigonometric Operations

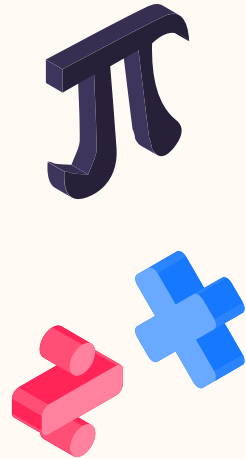
Compute for sin, cos,
tan, etc

PLAY

Test out your math skill with math questions ranging from easy, average and hard



Recommendations



- Saving of information to a database for multiple user sessions
- Search
 - ◆ Include additional keywords for search
 - ◆ Make bot more conversational
- Compute
 - ◆ Integrate additional mathematical functions for increased capability (Calculus, Matrix computations, Algebraic Functions, Finance, etc.)
 - ◆ Support math word problems
- Review
 - ◆ Include concept and word problems
- Include a function that automatically exits the chatbot after it exceed a specific idle time.

