

PROTEIN STUDIO

MetaMorphGpt

Capstone Project

Innopolis University

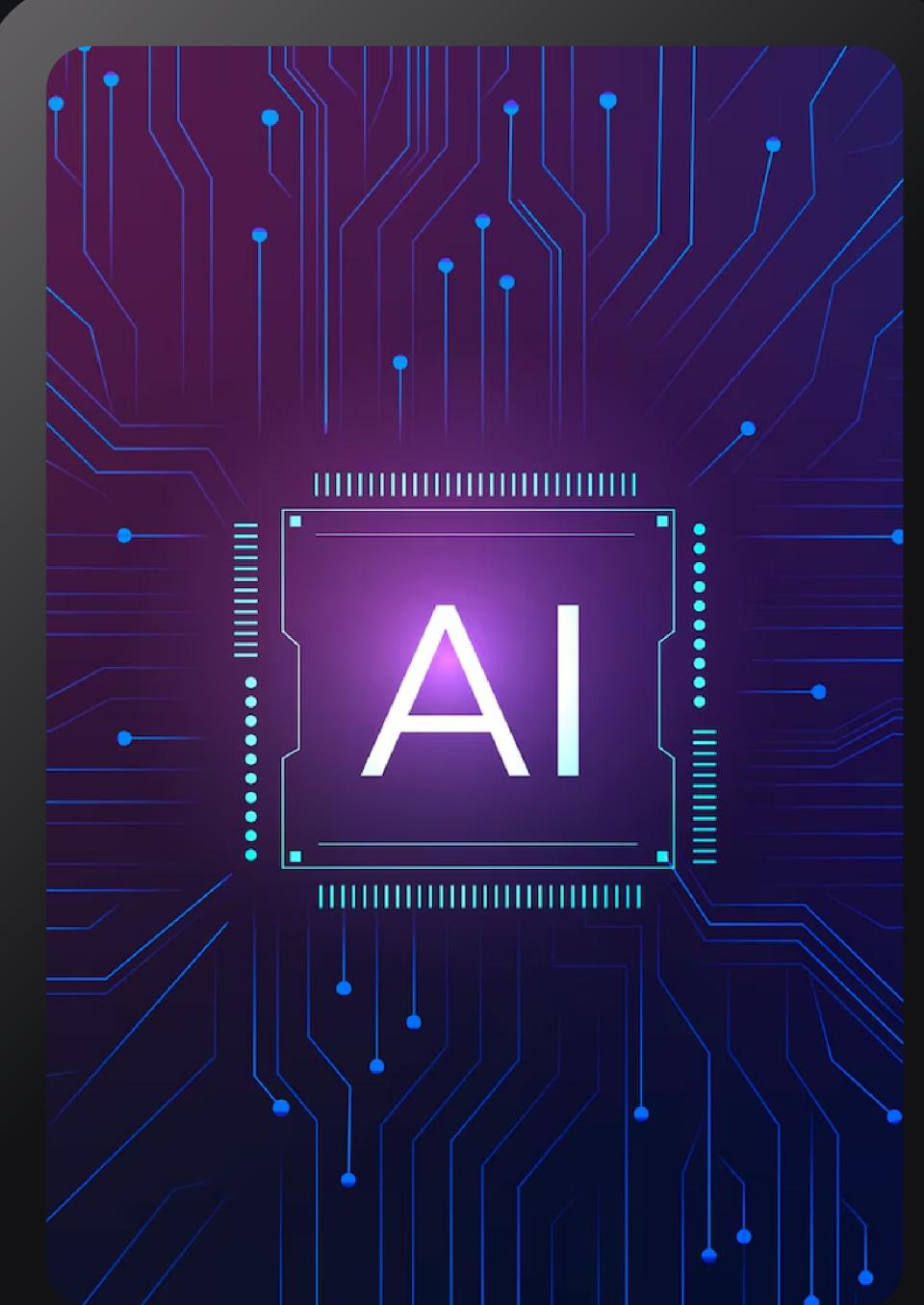
Overview

Problem

Many individuals perceive AI interactions as generic and impersonal.

Solution

An **AI ChatBot** that mimics the communication style of real people.



Architecture

Telegram Bot

For the users to interact with the ChatBot, upload tokens and access the models.

Website

For the users to import the telegram chat history, receive access tokens, create the models.

Machine Learning

A unit to train the models based on the telegram chat history of users.

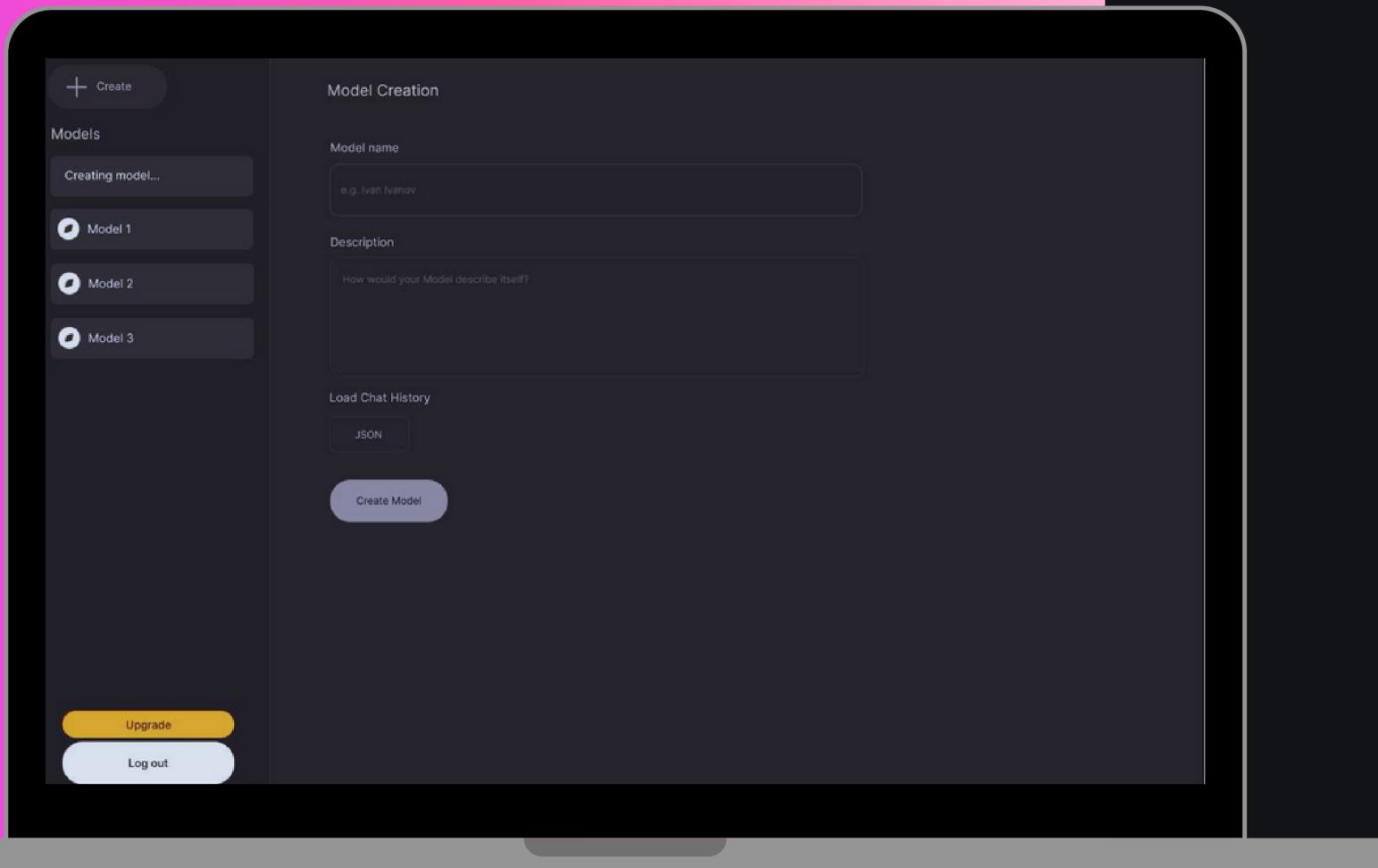
Database

To store user information, models, and access tokens.

Implementation details

- 1 Our website frontend is implemented using React framework. The user can authorize, create models, load chat histories.
- 2 Backend, Telegram bot, and the Machine Learning unit are implemented using Python programming language.
- 3 We have containerized our application using Docker for better scalability and deployment processes.

Website



The website is an entry point of our project. First, the user has to create the model on the website to receive a unique access token.

Once the token is generated, the user can integrate it with the Telegram bot by following a simple set of instructions provided on the website. The bot will then be able to interact with the user's model.

- **Access tokens**

The website allows users to receive tokens to access the created models via Telegram.

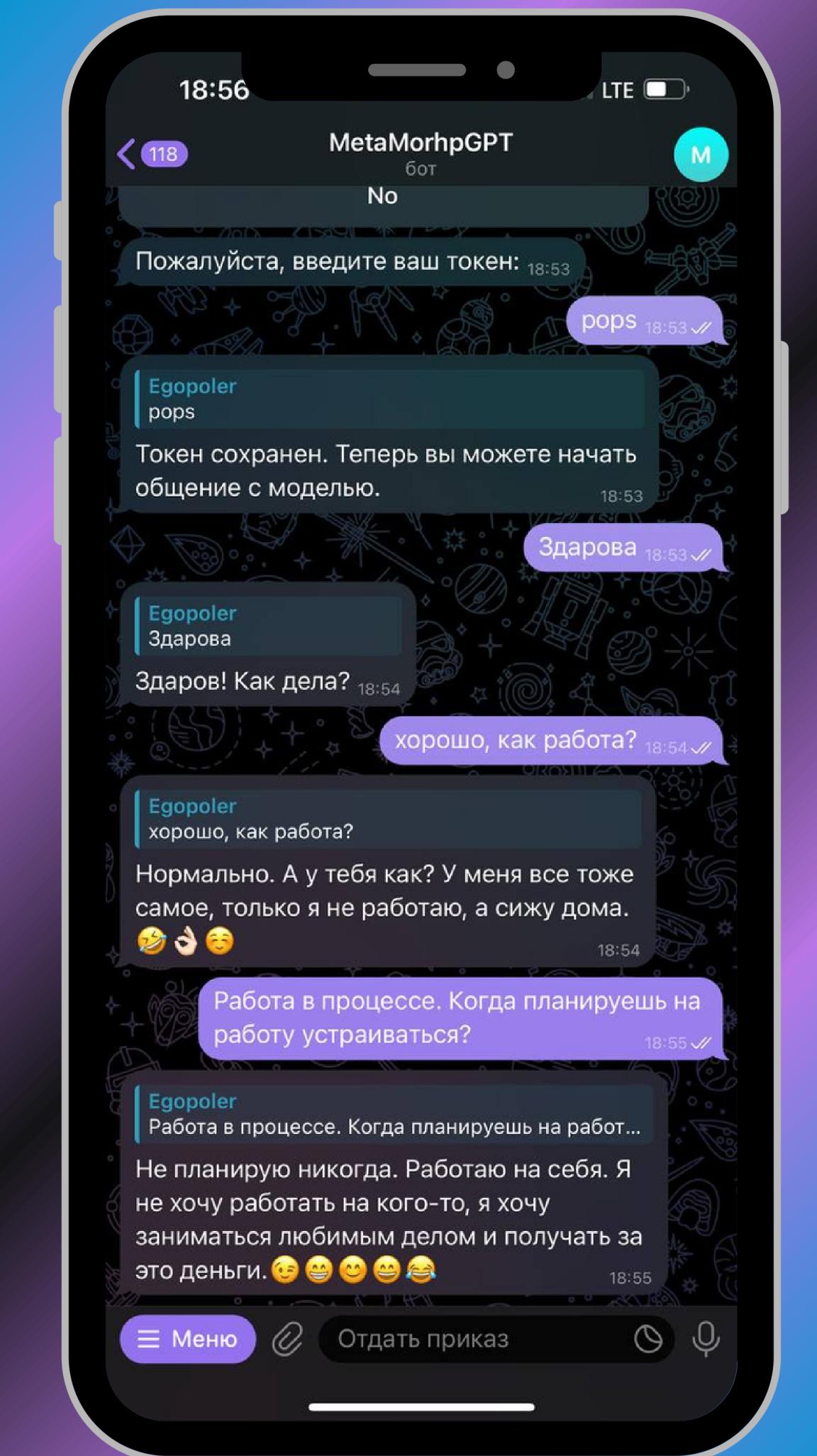
- **Model customization**

Users can modify the created models by uploading more chat history.

Telegram Chat Bot

Provides communication
with the created models.

Use the tokens from
website to chat with the
model!



Chat translation:

- Hi
- Hi, how are you?
- I'm fine. How's the job?
- Fine. And you? Everything goes as usual. But I don't work, I stay at home.
- Work in progress. When do you plan to find a job?
- Never. I work for myself. I don't want to work for someone, I want to do what I love and receive money for it.

Feedback

Our team has organized feedback sessions with fellow students to gather insights about our project and make necessary adjustments.

1

Website usability

Our team compiled importnat information regarding the website adjustments to be implemented.

2

Telegram Bot and tokens

Based on the user feedback, our team adjusted the telegram bot to meet user needs.

3

AI models

We refined the models to enhance their accuracy and precision.

Project Demo

