Matchmaking Bot

Finds people with similar interests to chat with HSE CS AMI 227

Roles

<u>Conversation search frontend</u>: Engel Danila <u>Communication frontend</u>: Mishchenko Alexander <u>Conversation search backend</u>: Artem Abrosimov <u>Communication backend</u>: Goibov Dadojon

Description

The database stores information about participants who are looking for a suitable companion. Each participant has a unique set of qualities, such as gender, age, hobbies, and more. Based on these characteristics, some range of "quality spread" is used, for example, to connect an 18-year-old participant with those whose ages range from 16 to 20.

When interacting with the bot, messages from one user are stored in a database and then forwarded to another user in their chat with the bot based on a unique identifier (ID). In addition, we are considering implementing additional functionality to improve the participant experience.

Parts

- 1. Set up a bot in Telegram:
 - Create a new bot via BotFather and get a token.
 - Create a new chat bot in Telegram.
- 2. Customize the development environment:
 - Install the required packages such as python-telegram-bot, Pandas, etc.
 - Create a new project in the selected IDE.
- 3. Create a data model for the questionnaire:
- Design a data structure to represent the completed questionnaire. For example, you can use a class or dictionary to store information about the questionnaire.
- 4. Create a database to store the questionnaires:
- Select and configure a database (e.g., SQLite or PostgreSQL) that will be used to store the questionnaires.
- Create a database schema that defines a table or collection to store the questionnaires.

- 5. Create and process bot commands:
- Create bot command handlers for registering, filling out a questionnaire, and joining a group chat.
- Customize the handling of messages from users so that the bot can receive and process data from the questionnaire.
- 6. Implement an algorithm for gathering like-minded users:
 - Develop an algorithm that will compare user profiles to determine their similarities.
- Create functionality to find like-minded users based on given criteria and form a group chat for discussion.

7. Adding topics for discussion:

- Define a list of discussion topics for group chat.
- Implement functionality to select a random topic or provide a list of available topics to chat participants.
- 8. Implement commands to manage group chat:
 - Create commands to add and remove participants from group chat.
- Implement functionality to check the activity of chat participants and remove inactive participants.

9. Testing and debugging:

- Test the functionality of the bot at different stages to make sure it works properly.
- Perform debugging to fix possible bugs or issues in the bot code.

10. Deploy and publish the bot:

- Set up a web server or hosting to host the bot.
- Publish the bot so that other users can use it and fill out surveys.