The PDF Files: Tahmim Hassan, Abidur Rahman, Marco Quintero, Tawab Berri
SoftDev
P02
2025-1-9
TARGET SHIP DATE: 2025-1-17

VERSION 1

Overview

A devo dating app, with the guided assistance of a Topher bot. Users will create their profile by adding a description about themselves and add preferences such as their favorite coding language, and song to listen to while coding. Once their profile is created, devos are sent to the main page where they can accept or reject a preset profile. When a user matches with a profile, they will be redirected to the messages page where they can send messages to the user they matched with. If the user prefers to talk to an AI over actual people, they have the option to message an AI replica of the great Topher Mykolyk and ask him advice on how to master social interaction with other devos. Topher will only respond to specific keywords so users must make sure the questions are topical.

Program Component Connections:

- Flask/Python: connects the routes to different pages and connects the backend databases to the frontend.
- SQLite3: stores information about user info (login information) and all info displayed on user profile (description, preferences) including preset profiles. User dialogue and bot dialogue options are saved on a different table.
- HTML + Jinja + CSS + Tailwind: creates web pages that create a clean and accessible user interface. Will provide notifications and flash messages any important information to the user.
- JavaScript: implemented into frontend to create messages that update in real time. Also will provide notifications for any new messages if on a different tab or matches.

Database Organization:

The database for the devo dating app is organized into at least six tables to manage user data, matches, messages, and Topher dialogue. The Users table stores user-specific information like login credentials, a personal description, and preferences such as favorite coding language, and song. The Matches table tracks if the user accepted (true) or rejected (false) another user. Both users must have accepted each other before a prompt opens up to start a conversation. The conversations table holds which chat histories are available. A chat history table is then created corresponding to each row in the conversations table. The Topher messages table stores the chat history between the user and Topher (will be erased once the user moves to a different page). The Topher dialogue table is how the bot knows what to respond to a message with. It recognizes a keyword from the user message and returns the corresponding dialogue. If there are multiple keywords, the bot will send the dialogue response tied to the first keyword found. If no keywords are found, the null dialogue option is returned.

The PDF Files: Tahmim Hassan, Abidur Rahman, Marco Quintero, Tawab Berri
SoftDev
P02
2025-1-9
TARGET SHIP DATE: 2025-1-17

SQL Databases:

User Table

ID	Username	Password	Description	Language	Song
0	tophertime42	tiempodetopher	Loves coding	Javascript	Happy
1	shmopher69	impostadevo	Lonely but ok	Python	Not Like Us
2	devofam123	wedabestmusic	Optimistic		Coconut Song

Matches

Recipient UserID	0	1	2
0	False	True	False
1	True	False	True
2	False	True	False

Conversations Table

User1	User2
0	1
1	2

The PDF Files: Tahmim Hassan, Abidur Rahman, Marco Quintero, Tawab Berri
SoftDev
P02
2025-1-9
TARGET SHIP DATE: 2025-1-17

Chat History Table (one for every row in the conversations table)

Message ID	User ID	Content	Date Sent
0	0	“Hi”	2024-10-01 10:00 AM
1	0	“Good morning”	2024-10-01 10:03 AM
2	1	“Help me”	2024-10-01 10:05 AM

User Messages to Topher Table

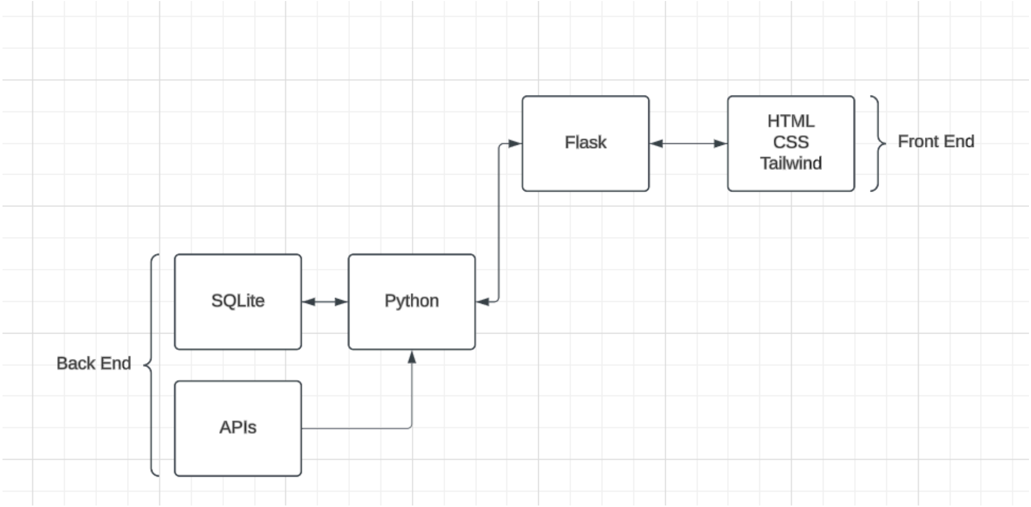
Message ID	Sender	Content
0	“User”	“Hi”
1	“Topher”	“Hello fellow devo of the intertrash”
2	“User”	“I can’t talk to other humans Topher”
3	“Topher”	“If the conversation is online, measure thrice and cut once before sending a message.”
4	“User”	“Hey Topher, what do you think of our team name?”
5	“Topher”	“I don’t know the to answer that. Post the question on piazza and see if your fellow devos have an answer.”

The PDF Files: Tahmim Hassan, Abidur Rahman, Marco Quintero, Tawab Berri
SoftDev
P02
2025-1-9
TARGET SHIP DATE: 2025-1-17

Topher Dialogue Table

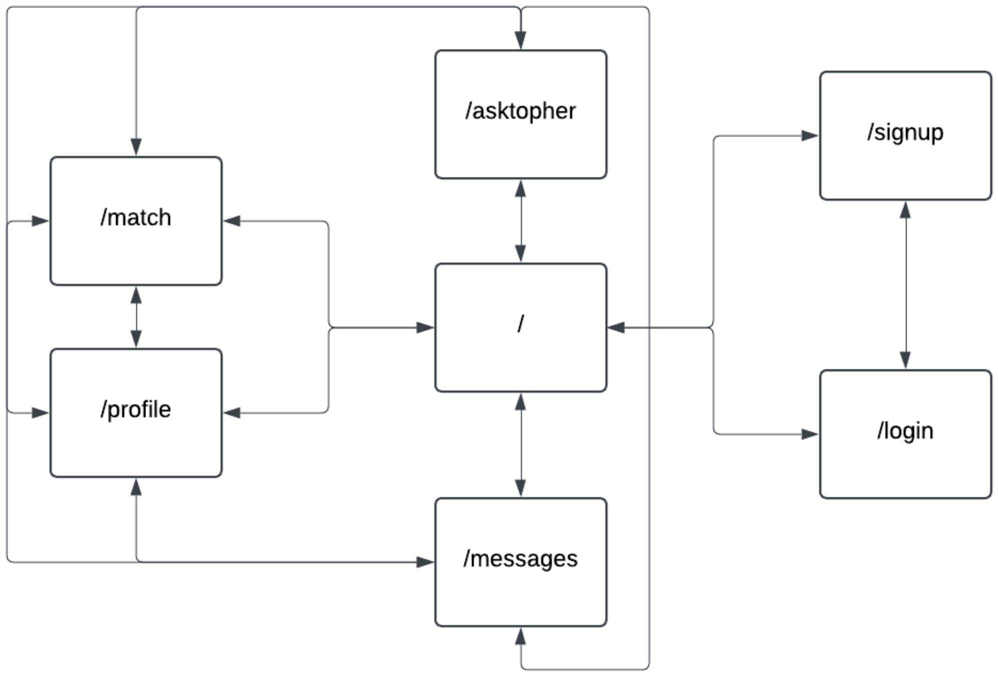
User Keyword	Topher Response
“Hi”	“Hello fellow devo of the intertrash”
“I can’t talk to”	“If the conversation is online, measure thrice and cut once before sending a message.”
null	“I don’t know the to answer that. Post the question on piazza and see if your fellow devos have an answer.”

Component Map:



The PDF Files: Tahmim Hassan, Abidur Rahman, Marco Quintero, Tawab Berri
SoftDev
P02
2025-1-9
TARGET SHIP DATE: 2025-1-17

Site Map:



- / is the home directory where users can view notifications such as messages from other matched users or alerts such as an incomplete profile
- /match is where users can view the profile of other users and accept or reject them. User profiles will not show up unless the user's own profile is completed
- /messages is where users can view their conversations with other matched users
- /profile is where users can view their own profile, update their profile information that is viewed by other users and change their account credentials
- /asktopher is where users can chat with the AI replica of Topher Mykolyk and ask him questions pertaining to the social interaction between devos
- /signup and /login are self-explanatory

The PDF Files: Tahmim Hassan, Abidur Rahman, Marco Quintero, Tawab Berri
SoftDev
P02
2025-1-9
TARGET SHIP DATE: 2025-1-17

Task Breakdown:

- **Abidur:**
  - Oversees the project and assists other members in their tasks.
  - Organizes the overall structure and ensures the team stays on track with deadlines.
  - Assist members with front-end and back-end components
  - Primarily responsible for tackling the javascript
- **Tawab:**
  - Primarily responsible for Database and Database functions
- **Tahmim:**
  - Responsible for frontend and CSS styling
- **Marco:**
  - Responsible for Python backend and routing

Front-end Framework:

We will use Tailwind as our Front-end Framework. This is mainly due to the fact that the team is well acquainted with it after utilizing it for previous projects, and we have found Tailwind to be much more suited to our dating application with its inline styling applications. Not only do we want users to find love within each other, but we also hope that they will love the website with its styling!