

TBot

Interactive Telegram bot for ZU-CSE students

[Source Code](#)

[Live Instance](#)

Intro

ChatBots are a very convenient way of communication. User does not have to install a whole new program to use some service. Or to get some job done. He/she just would talk to a bot to do so.

Telegram APIs

Telegram provides a REST APIs for their bot platform. A developer is able to create the bot using that APIs. Its documentation is available [here](#).

Why Telegram?

They have easy-to-use APIs and we could get started developing our bot quickly.

TBot

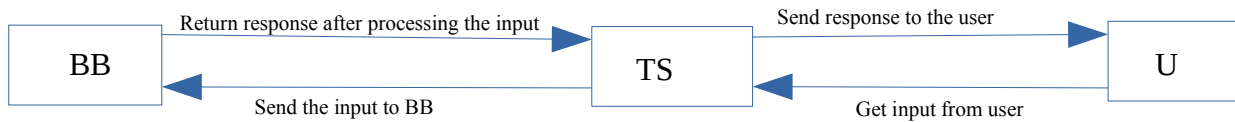
An interactive chatbot on the telegram bot platform that is intended to be a student buddy, it has three major jobs:

1. Provide some utility commands that we might need
2. Remind the students with the schedule of the day
3. Tell the students about important events in college

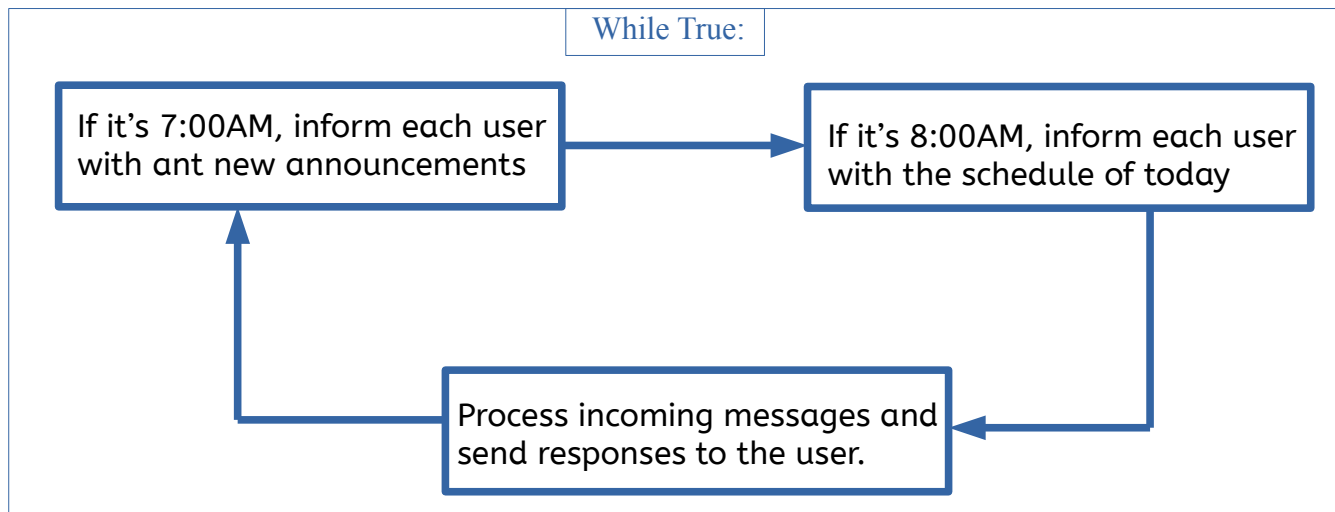
How it works

Three main components that create our system: our bot back-end (BB), telegram server (TS), and the user (U)

We're using the long-polling technique, which is: Every some seconds BB connects to TS and asks: is there a new messages from U? If yes, it handles them and then sends response to TS then TS sends it back to U



BB is using an infinite while loop to accomplish its tasks:



Used Technologies

Python A universal programming language that's expressive, extendable, and easy-to-use. It saves you the hassle of deciphering the code it self and lets you focus on your business logic.

Git The most popular distributed version control system that helps with team development and track the history of code.

GitHub A platform for hosting open source projects for free.

SQLite A DBMS that does not need a server to run. Just one file to handle and have python built-in support.

Requests A python library that provides easy and convenient APIs to make HTTP requests.

Tweepy A python library that helps with twitter APIs.

Design considerations

BB is built by us from scratch without using any frameworks, just two extra libraries that helps with development convenience. Also Database is handled without any use of external [ORM](#) libraries. We built almost everything from scratch. The code is heavily commented and we follow best practices. That's why not much things was done, because it's intended to be a useful learning project for us and for anybody else who sees the code and tries to understand it.

Conclusion

TBot is an interactive chatbot on the telegram chatting platform. It is built to be useful for us as students, therefore it provides some utility commands for general uses, and periodically informs the students about each day's schedule plus the important events that occur in the college.