

# Technical Documentation

## Assignment 1

# Summary

1. The project
2. deployment / installation
3. functionalities

# 1- The project

For this project we have been developing à Chatbot that is able to connect to the chat of a platform called “Twitch”. We also developed a web UI that able us to configure and change different parameters of the bot. And everything has been deployed on a raspberry pi through a docker container.

## 2 - Deployment and installation

The deployment and installation is quite simple and automatized, but make sure to have your system up to date.

Start by getting the project repository, for that simply run the following command:

```
git clone https://github.com/charles-claude/Embedded
```

Then go into the project folder and run this command:

```
./install.sh
```

It will run the installation script, to get every required dependencies, which are Flask, docker and docker-compose.

After the script's execution, use the command `./run.sh start` to start the bot. This will launch the docker container and start the Flask webserver.

If an error occurs, try to create a new user group for docker by running following commands before launching the program once again:

```
groupadd docker
```

```
usermod -aG docker
```

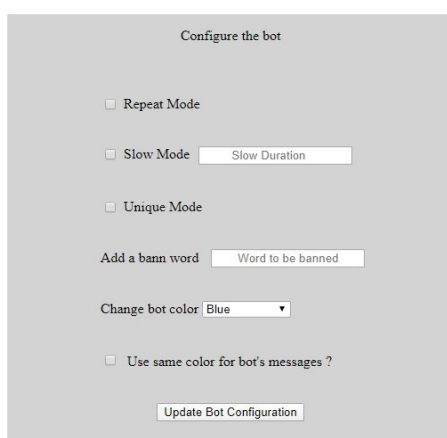
```
newgrp docker
```

# 3- Functionalities / how to use

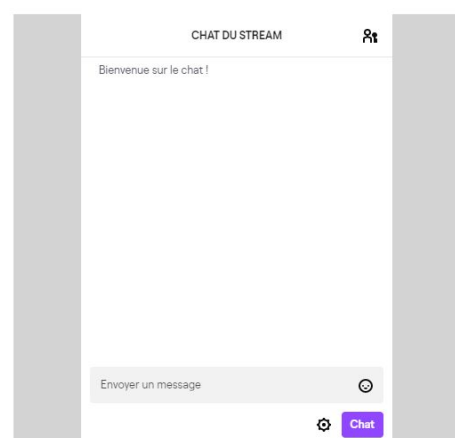
## How to use :

Once everything has been installed , open the Home.html file in the template folder in your browser.  
Then execute the following command : `./run.sh start` in order to launch the bot.

You will arrive on this page :



The screenshot shows a configuration interface titled "Configure the bot". It contains several settings: a checkbox for "Repeat Mode", a checkbox for "Slow Mode" with an adjacent "Slow Duration" input field, a checkbox for "Unique Mode", an "Add a bann word" section with a "Word to be banned" input field, a "Change bot color" dropdown menu currently set to "Blue", a checkbox for "Use same color for bot's messages ?", and an "Update Bot Configuration" button at the bottom.



The screenshot shows a chat interface titled "CHAT DU STREAM" with a group icon. A message "Bienvenue sur le chat !" is displayed. At the bottom, there is a text input field with the placeholder "Envoyer un message", a smiley face icon for emojis, a gear icon for settings, and a purple "Chat" button.

On the left side of the page you will find the configuration side that will able you to activate / deactivate or configure functionalities of our bot. On the right side you will see an embedded chat. We are using an Iframe provided by Twitch website. This will able us to test our bot. If the bot has been successfully launched the bot will write a message in the chat. (the bot is called BjtubOT)

In order to use the chat you first need to write a message in it, the chat will then ask you to log in to your twitch account. If you don't own a account you can use following credentials :

Username : embedded\_bot

Password : 98Bjtub42

You can now configure the bot and try it.

## Functionalities :

You can see in the left panel different option. We will now explain what are those options doing.

The repeat function : If checked the bot will repeat any message written in the chat

The slow mode : if checked you have to put a number which represent the delay in seconds that user have to wait between the send of two messages.

The Unique mode : This command disallows users from posting non-unique messages to the channel. It will check for a minimum of 9 characters that are not symbol unicode characters and then purges and repetitive chat lines beyond that. Uniquechat is a unique way of moderating essentially allowing you to stop generic copy-pasted messages intended as spam among over generally annoying content.

Add a ban word : You can put a word or a list of word (each words have to be separated by a ',') that are going to be banned of the chat from the bot. This mean that when you write à banned word in the chat , à message will appear telling that your message has been deleted by an administrator. Other users won't be able to see the "banned message" anymore.

Change bot Color : You can select one of the listed color and i will change bot's name's color in the chat.

Use same color for bot's messages ? : if checked , bot's message will be written is the same color as its name.

and finally the update button that you have to press everytime you change the configuration. It will restart and change the bot configuration. (the bot might take between 5 and 10 seconds to restart).

In addition, the bot can perform several commands using the prefix “!” such as help, hi, harry, bjt.

For example, “!help” display available commands, “!hi” and “!harry” reply with a custom answer, and “!bjt” link the website of the university.