# Authentication Via Discord Bot

タイ高専

Pattarachanon Harnkumnedpong Jaruphich Buakhunnen Kamaithorn Mueangmun Thanyawarat Pawasopon (教員)

## **Introduction**

Key cards or fingerprint scanners are commonly used to check attendance. What if we don't remember to bring the keycard? Using a fingerprint scanner can be very unsanitary, and a pandemic isn't helping matters. Biometrics is the most effective way to monitor employee attendance. Iris scanners come to mind, but they have been shown to be deceptive. Face scanners would be the best option for preventing false attendance. In order to avoid unnecessary contact for hygienic purposes, face scanners are used. While face scanners are quite more complex than fingerprint scanners and voice recognition, they are a much more secure and safe way for attendance. Discord also gives unlimited cloud space, so looking at past messages will also be possible. In recent years, an increasing number of people have been using Discord, a well-known multi-platform communication app where people can hang out and talk/chat. Because Discord is quick and simple to use, some members of the younger generation may want to start managing their businesses on Discord servers. Our idea is to develop a discord bot which can be used to manage your office/school for check-in and more. The bot will be coded to handle commands sent by the face scanner via API, and MSQL.

# **Related Works**

- -Visitor management
- -Personal identification
- -Access control/Check in management (For example, KOSEN-KMITL student dormitory)
- -Quality of life bot features (checking your undone homework, etc.)

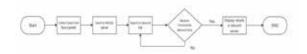
#### **System Realization**

Equipment required: 1. NOTEBOOK COREi7 x 2, 4.3 INCH FACE RECOGNITION x 1, WIFI INTERNET ROUTER x 1

Programs used: Microsoft SQL Server (Python), Discord Bot (VSC, Python), DS-K1T343MWX Face recognition scanner (Coded with C#, and Python).

#### **System Structure**

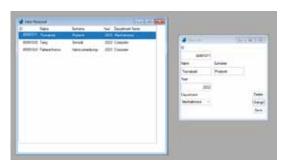
Our idea was to develop a discord bot which can be used to manage your office check-in and more. The bot will be coded to handle commands sent by the face scanner via API. Below is a flowchart of the process.



Visualization of the Process is shown in the diagram below.



## Example of data setup for Personal info screen:



#### Example of output on discord screen:



# **Overview of Future Development**

The hardest part about developing the discord bot itself is the coding, as more features are being implemented into the bot, its complexity and potential for bugs and glitches increases. There are many other obstacles and coding challenges we will have to face, but this experience will turn us from being just the clueless users of discord bots to the creators of a discord bot of our own.