

## 1. Introduction

### 1. Purpose

Pengaelic Bot is an automated user (“bot”) for the chat platform “Discord”, it has numerous features of varying importance, utility, and amusement, each of which can be accessed with “commands”.

### 2. Intended Audience

This bot is intended to be used by everyday Discord users.

### 3. Intended Use

Each command has its own purpose, so there isn’t really one general intended use.

### 4. Scope

Pengaelic Bot was originally created as a side project to learn how bots work, and it has grown to become a bot with features that I wanted but hadn’t seen in other bots, as well as a sort of spiritual successor to the now-discontinued bot “Kwako”, created by an old friend.

### 5. Definitions and Acronyms

1. “bot” – Refers to Pengaelic Bot or other Discord bots created by other people, such as MEE6 or Carl-bot
2. “command” – Refers to a string of text with a certain prefix (usually p! for this bot) that the bot will parse to perform an action.
3. “server” – A feature of Discord, essentially a group chat taken to the next level with multiple text and voice channels.
4. “host” – A user who can manage the bot, and read and execute the files on their computer.

## 2. Overall Description

### 1. User Needs

1. To use this bot, the user needs a functional Discord account, and a Discord server for it to be used in.
2. To run this bot, the host needs Linux (elaborated on in section 3.3).

### 2. Assumptions and Dependencies

1. We are assuming that the user is already familiar with bots.
2. We are assuming that the host is already familiar with the Bash terminal.

## 3. System Features and Requirements

### 1. Functional Requirements

As of now, there are many features, and it would take too long to list them all. Planned features for the future are as follows, emojis mark completeness.

1. Meme templates to be filled out via the commands
2. Fully-functional profile system
3. Birthday notifier
4. Suggestion ID and approval system
5. Warning system for moderation
6. “Starboard”/“Pinboard” system for saving messages as a form of archival
7. “Reaction Roles” system (may use Discord’s “Buttons” API instead)
8. Music player for voice channels
9. Soundboard for voice channels
10. XP (experience points) system based on messages sent in the server, with rewards being given in the form of special server roles at administrator-defined XP milestones

(it is likely that only a couple of these will be complete within the next 10 weeks)

### 2. System Features

### 3. Nonfunctional Requirements

1. To run Pengaelic Bot on their machine, a developer/host will need...
  1. A Debian-based Linux distribution installed as an operating system or as the Windows Subsystem for Linux
  2. Python 3.9 or newer
2. The bot has multiple package dependencies, both in APT and Pip. However, it will automatically check and install whatever ones are missing upon each run.