Senior Project Proposal

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March 22, 2017

1   Objective

On a whim, I decided to try my hand at making a bot for the voice and text chat service Discord.
I quickly became very absorbed with it and

2   Technologies

- Discord Bot API (RESTful)

- DiscordPHP (client for interacting with the API)

- Ubuntu Server

  - API proxy and static file serving
  - SSL Security: LetsEncrypt
  - Store Tokens Securely
  - Process Management

- PHP 7.1

- Asynchronous functions through Promises interface

- Git

3   What I hope to learn

I hope to become more familiar with PHP (especially PHP 7, which is new to me, having used 5.4
extensively). I would also like to improve the style of my code to meet the PHP Style Recommen-
dations (PSRs). Namespacing and dependency management is also an important part of modern
PHP development, so I would like to learn how to leverage Composer to manage dependencies,
namespaces, and class autoloading.

I will need to set up and maintain a server for my bot, so I hope to learn how to create a stable,
reliable, self-healing management system for the main bot process.

4   Proposed Features and Points

5   Grading Scale

50 points total.

    45+ => A
    40+ => B
    35+ => C
    30+ => D
    25+ => F

    The items that have a higher point value are the features that I am least familiar with and will require the most effort/learning on my part.