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Software Requirement Specification (SRS) Document

Clist Lite Discord Bot

0. Preface

The document is for the software requirements for Clist lite discord bot which is targeted to be used in India.

1. Introduction

a. Context :

The document outlines the system's goal and features, as well as the system's interface, what the system will perform, and the limitations that must be implemented to ensure that the programme runs smoothly. This paper is meant for system stakeholders as well as developers.

b. Problem Specification :

Since nowadays there is an increasing amount of people doing competitive programming, there is a need for a easy to use technological equipment which helps people to know there current level and also compare their current level with their friends to increase healthy competition. Our bot helps in the process and is very easy to use.

c. Scope of the Document :

Each and every person using discord and having a knack for competitive programming can be a platform use. Educational sector will be major contributor to platform users.

d. Overview of the Document :

Things like, how the programme will appear and what technical and physical needs will be needed to complete the task of developing this discord bot are all mentioned in the document.

More specifically, topics included are : Workflow, Use-Cases, Functional Requirements, Interface Requirements, Performance Requirements, Design Constraints, Non-Functional Requirements and Schedule and Budget Status.

2. General Description

a. Workflow :

Once the authorization of the bot is done and the clist lite bot is added to the discord server, the users in the server can now access the bot according to the restrictions imposed by the server host. The host will be able to disable certain bot functions for certain roles assigned in the server inorder to prevent excessive or misuse of any function.

b. Use-Cases :

Things you can do using this bot :

- Get list of all the upcoming contests of CodeForces and CodeChef.
- Stalk other user's recent solutions.
- Upsolve Problems for increasing rating. [yet this command is not updated in the script]
- Get the user information of specified CodeForces handle.
- Bored??? You can also get funny programming memes.

3. Functional Requirements

These are the functions required by the user for using the clist discord bot :

- Register users codeforces handle the username in the discord server.
- Provide memes related to programming to the user.
- Stalk other users using their codeforces handle.
- View future contests which are planned on the codeforces and codechef platforms.
- View list of registered users in the discord server.
- A command which provides information on how to use different commands.

4. Interface Requirements

- Discord Web App or discord apk installed with the latest version.
- Database Management System will be required for backend data storage.

5. Performance Requirements

- The bot should be able to manage 10 commands per second.
- It should store data of about 1000 users.

6. Design Constraints

- Platform should work independent of different screen resolutions and screen ratios.
- Should not use more than 100-200 mb of RAM allocated.
- Should be able to execute commands at low internet speed.

7. Non-Functional Requirements

- Bot should work with a small response time.
- Should be able to be maintained easily.
- Should be scalable.

8. Schedule and Budget Status

The Bot would require a work team of 3-5 members to complete the task within 3-4 months.

The budget will only include the wages of all employees involved in the development of the platform, as well as all engineers who will test it. This would roughly be around 3-5 lakhs INR.