

SE 3XA3: Module Internal Specification

Red Discord Bot

Team #31, R-DB V2
Jason Tsui tsuij8
Hareem Arif arifh1
Abdul Elrahwan elrahwaa

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This is an MIS for the implementation of Red Discord Bot as of 08/11/2018

Table 1: Revision History

Date	Change
Nov 08,2018	Initial implementation
...	...

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1 Module Hierarchy

Level 1	Level 2
General Module	
Cogs Module	Music Module* Images Module* Moderation Module* Trivia Module*

Table 2: Module Hierarchy

*: Not yet implemented

2 MIS of General Module

2.1 Interface Syntax

2.1.1 Exported Access Programs

Name	In	Out	Exceptions
OnReady	-	String	-
OnMessage	String	String	-
OnMessageDelete	String	String	-
OnMessageEdit	String	String	-
owner	-	String	-
echo	Arguments	String	-
clear	Context, Integer	String	-

2.2 Interface Semantics

2.2.1 State Variables

Token: String - Bot specific identification token

ONDELETE: int - Variable for blocking onMessageDelete when command !clear is called.

2.2.2 Environmental Variables

Not Applicable

2.2.3 Assumptions

Token variable is a valid bot token generated from the discord website.

2.2.4 Access Program Semantics

onReady():

Input: None

Transition: None

Output: Print 'Bot is ready'

Exceptions: None

OnMessage(message):
Input: Message message
Transition: Finds the name of the message's author and content.
Output: Printed statement in the format author: message
Exceptions: none

OnMessageDelete(message):
Input: Message message
Transition: If the ONDELETE variable is positive, nothing happens. Otherwise it finds the message's author, content and the channel it was sent on. Then it notifies the server that the message was deleted.
Output: Printed statement in the format 'Message deleted by author'
Exceptions: none

OnMessageEdit(message):
Input: Message message
Transition: finds the message's author, content and the channel it was sent on. Then it notifies the server when the message was edited.
Output: Printed statement in the format 'Message edited by author'
Exceptions: none

owner():
Input: None
Transition: None
Output: Print Name of the server's owner.
Exceptions: none

echo():
Input: *args
Transition: Creates a variable called output and adds all the arguments into the output variable.
Output: Print content of the output variable
Exceptions: none

clear():
Input: Context ctx, Int amount
Transition: Access the ONDELETE variable and adds 1 to its value. It then creates an array of 'amount' number of messages in the channel and calls the delete messages function for all of the array's contents.
Output: Prints a statement in the format 'amount' Messages cleared by admin
Exceptions: none