

Requirements Report

Requirements Collection Report

Primary	Priority	Approval Status	Description	Requirements	Desired Date
Project Requirements:			DBG Discord Bot		
Project Initiation			Basics to getting started		
Vision Statement	!	Approved	Overview of project goals and benefits	[attach project overview document]	05/06/22
Requirements Discovery & Research			How and where to gather requirements?		
Identify Capture Techniques			How will you collect the information?	[attach prep materials and results to each row]	
Brainstorming	↓	Approved	Use to collect a flow of ideas in quantity; qualify and improve on them later		05/06/22
Document Analysis	!	Approved	Review existing as-built specifications, tutorial documentation, and similar materials		05/06/22
Requirements Analysis			Break down discovery findings into specific, categorized requirements. Edit, remove, and add indented rows as needed to make requirements clear and actionable.		
Functional Requirements	!	In progress	What tasks does it perform?	[add functional requirement descriptions]	
FR 1	!	Approved	login	bot must be able to log into discord	04/24/22
FR 2	!	Approved	join server	bot must be able to accept invite into discord server	04/24/22
FR 3	!	Approved	read messages	bot must be able to read messages sent by server members	04/24/22
FR 4	!	Approved	write messages	bot must be able to write messages to the discord server	04/24/22
FR 5	↓	Submit for Approval	post quotes	bot must be able to post quotes from an API	05/08/22
FR 6	!	Submit for Approval	store custom messages	users should be able to store custom messages in the bot database	05/08/22
FR 7	!	Submit for Approval	post custom messages	bot must be able to post the custom messages from the database	05/08/22
FR 8	↓	Submit for Approval	retrieve custom messages	users should be able to retrieve the list of custom messages stored in the bot database	05/08/22
FR 9	!	Submit for Approval	delete custom messages	users should be able to delete the custom messages from the bot database	05/08/22
FR 10	!	Needs review	respond to keywords	users should be able to enter specific keywords for specific bot responses	05/08/22

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FR 11	!	Needs review	on/off switch	users should be able to turn on and off whether the bot responds to the specified keywords	05/08/22
FR 12	↓	Not started	online status/continuous availability	bot should be able to stay online at all times	05/22/22
Nonfunctional Requirements	—	In progress	What are the constraints on the system?	[add nonfunctional requirement descriptions]	
Performance & Scalability	↓	In progress	How fast does the system return results? How much will this performance change with higher workloads?	The bot should respond within 5 seconds from a user call The bot may become unresponsive from higher workloads	TBD
Portability & Compatibilty	!	Approved	Which hardware, operating systems, browsers, and their versions does the software run on? Does it conflict with other applications and processes within these environments?	The bot runs on the most current version of Discord The bot should not conflict with any other bots in a server	04/24/22
Reliability, Availability, & Maintainability	—	In progress	How often does the system experience critical failures? and how much time is it available to users against downtimes?	The bot should be online and available at all times	05/22/22
Security	!	Approved	How are the system and its data protected against attacks?	Bot login TOKEN is stored as an environmental variable	04/24/22
Usability	!	Approved	How easy is it for a customer to use the system?	Users need to invite the bot to their discord server before use Default configurations/permissions are pre-set for users Users need to know what keywords call which bot responses	04/24/22
Dependencies	!	Needs review	What external dependencies are used in the system?	[add package name and version]	
Package 1			NumPy is the fundamental package for array computing with Python	numpy 1.22.3	
Package 2			Python HTTP for Humans	requests 2.27.1	
dependencies			urllib3 certifi chardet idna charset-normalizer		
Package 3			A mirror package for discord.py. Please install that instead	discord 1.7.3	
dependencies			discord.py		
Package 4			A library for interacting with the features of repl.it	replit 3.2.4	
dependencies			typing_extensions Flask Werkzeug aiohttp requests		

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Use Case Diagram			<i>How is the solution used? Paint a picture of how users experience it.</i>		
Server Members & DBG Bot Use Case 1	!	Submit for Approval	<i>Use Case 1 explores the potential interactions between DBG discord server members and the DBG bot</i>	[attach diagram]	05/08/22