Use Case: Save & Retrieve Persisted Code Snippets

**Traceability ID: SAVE-RETRIEVE-SNIPPETS-TECHNICAL**

**Relevant Requirements:**

### 3.1.5  Saving to Database

### 3.1.6  Retrieving from Database

### 3.1.7  Connecting to Discord messaging layer

### 3.1.8  Connecting to Discord authentication layer

### 3.1.9  Connecting to Discord context layer

### 3.3.2  Database query access specification

### 3.4.1  Text input

### 3.4.2  Text output

Non-functional

### 3.3.1  Execution timeout

### 3.5.1  User identification

**Primary Actor:** User

**Pre-conditions:** User is in a channel for which the ResearchRealms bot has access to messages, and that their bot instance is running.

**Post-conditions**: The user is presented with the output of the command which executes a relevant query and returns the result from the database (DB) driver. Displays either a save confirmation or returned snippet(s).

**Basic Flow or Main Scenario:**

1. The user enters their code snippet / program into the current channel, preceded by the **!save** command string.
2. The user receives the confirmation that the snippet has been saved along with an **id** for the saved object.

**Alternate Flows:**

1. The user enters a code snippet / program **id** unique identifier into the current channel, preceded by the **!snippet** command string
2. The user receives the retrieved formatted code snippet / program source code as output into the channel.
3. The user enters the **!snippets** command string into the current channel
4. The user receives a retrieved list of **ids** for code snippets / programs that have been saved by the user.

**Exceptions:** If no connection can be established to the DB instance, the user is presented with a **connection timeout** exception error message.

**Related Use Cases:** (disjoint)

**REVISION HISTORY**

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| --- | --- | --- |
| Date | Description | By |
| Mar 17, 2020 | Added Initial Use Case | Andrii Dobroshynskyi |