

# NOTES [things to do]

- Look into pooled connections for fast querying
- Consider writing bot in Rust with Serenity and use sqlx for compile-time checked queries
- At each step, consider what data you can leverage for analytics and AI purpose. Perhaps a recommendation system for joining a certain 'group' in a server?
- <https://www.pinecone.io/learn/vector-database/>
- A group\_type is a string or phase an admin can set for the allowed groups in the channel. Each group\_type is essentially a pointer to a "Category" in a discord server.
- /preset add (preset for project, team, study)
- /preset remove (all, project, team, study)

## Global Key:

[] = required parameter  
( ) = optional parameter  
[group] = [group\_name] or [channel\_id]

## Index of Commands:

### Server Owner:

/wipe \*WARNING will delete ALL group channels\*  
/recover \*7-day grace period\*

### Admin:

/create group [group\_type] (emoji) (std\_admin\_msg)  
/create poll [question] (choices) (text\_channel\_id)  
/disband [group]

### User:

/form [group\_type] [group\_name] (message)  
/disband

# /create [command]

## /create Command List:

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- /create group
- /create poll

## /create Admin Command(s):

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### 1. Create a Group Type

#### **Command:**

```
/create group [group_type] [post_channel_id] (emoji, default=👍)  
(std_admin_msg, default="")
```

- example admin usage:

```
/create [team] [#find-teams] (👍) (**This is a team group type.**)
```

**Function:** Only server admin can call this method. When invoked, a server [category\_id] is created with the name [group\_type]. If set, an (emoji) and (std\_admin\_msg) is stored for this specific [group\_type]. Anytime a user invokes /form group command, it will refer to the [group\_type] created by the admin, and gather the necessary [category\_id], [post\_channel\_id], (emoji), and (std\_admin\_msg) to initialize a user group.

### 2. Create a Poll

#### **Command:**

```
/create poll [question] (choices) (existing channel_ids)
```

- example admin usage:

```
/create poll [What group do you want to join?] (a, b, c) (#a, #b, #c)
```

**Function: FILL THIS OUT**

## /create User Command(s):

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# /form [command]

## /form Command List:

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- /form group

## /form Admin Command(s):

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## /form User Command(s):

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### 1. Form a Group

#### **Command:**

/form group [group\_type] [group\_name]  
(user message)

- **example user usage:**  
/form group team Jack's Team  
Read this resource:  
- xyz.com

#### **Function: FILL THIS OUT**

#### **Standard Message Format:**

Welcome to our [group\_type] "[group\_name]"!  
Please react with [emoji, default=👍] to board this group.  
(std\_admin\_msg)  
(user message)  
[group\_type] by @user

- **example output:** *font size and spacing may vary*

Welcome to my team "Jack's Project"!  
Please react with 👍 to board this group.  
**This is a team group type.**

Read this resource:  
- xyz.com  
Team by @user

# /disband [command]

## Admin Command(s):

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### 1. Disband a Group

#### **Command:**

/disband [group\_name]

- example user usage:

**Function: FILL THIS OUT**

## User Command(s):

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### 1. Disband a Group

#### **Command:**

/disband

**Function:** Only [group\_owner] can call this method inside the [channel\_id] where the appropriate group exists. When invoked, entire channel data is archived, and sent to the [group\_owner] in a private DM. Then, the associated [text\_channel\_id] and [voice\_channel\_id] are erased from the appropriate [category\_id]. The message with [message\_id] is deleted from the post location. The admin can choose to be notified that a group has been disbanded in the form of a log.

# /create [database dev-guide]

Relevant Data: [server\_id], [group\_type], [group\_type\_color, default=], [emoji, default=👍], [std\_admin\_msg, default=]

## /create Command List:

- /create group
- /create poll

## /create Admin Command(s):

### 1. Create a Group Type

#### **Command:**

/create group [group\_type] [emoji, default=👍] [std\_admin\_msg, default=""]

**Method:** A table stores predefined server\_id, group\_type, category\_id, post\_channel\_id, emoji, and std\_admin\_msg set by the admin. When a **user** invokes the /form group\_type command, it references existing group\_type inside the server\_id and this table provides the category\_id, post\_channel\_id, emoji, and std\_admin\_msg needed to create the user post and server channels.

**Considerations:** Admin creates duplicate group\_type or deletes Category without bot.

**Table Name:** 'group\_types'

#### **Data Variables:**

[server\_id] - Reference to server where command was invoked.

[group\_type] - The type/category of group set by admin.

[category\_id] - The category\_id generated from creation of [group\_type].

[emoji, default=👍] - Reaction role emoji associated with type.

[std\_admin\_msg, default=""] - Standard message by admin for that type.

**Table Relationships:** [server\_id](Foreign Key) references primary key in the Servers Index.

server_id	group_type	category_id	post_channel_id	emoji	std_admin_msg

## User Command(s):

# /form [database dev-guide]

[group\_owner], [group\_type], [group\_type\_color, default=], [group\_name],  
[emoji, default=👍], [std\_admin\_msg, default=], [message\_id], [role\_id], [channel\_id]

Admin Command(s):

User Command(s):

## 1. Form a Group

### Command:

```
/form group [group_type] [group_name]  
(user message)
```

**Method:** A table stores server\_id [foreign key], group\_type, group\_name, group\_owner, message\_id, emoji, text\_channel\_id, voice\_channel\_id and created\_date. When a user invokes form [group\_type], it creates a new [text\_channel\_id] and [voice\_channel\_id] in the [category\_id] in the [server\_id] with the same (group\_name). The user who used the command is stored as [group\_owner]. A message is posted with a [emoji] reaction. The channel's permissions are set to private, only viewable only by users that have reacted to the respective [message\_id] with the appropriate [emoji]. A [created\_date] is formed to keep track of data retention/cleanup tasks. After 30 days of inactivity within a group, an admin and/or [group\_owner] will have 7-day grace period to keep the group up or it will be automatically removed.

**Table Name:** 'groups'

### Data Variables:

[server\_id] - Reference to server where command was invoked.  
[group\_type] - Reference to category\_id using the 'group\_types' table.  
[group\_owner] - Reference to user who created the group.  
[group\_name] - Name of the text and voice channels.  
[message\_id] - ID of the message with the reaction role.  
[text\_channel\_id] - ID of the private text channel created for the group.  
[voice\_channel\_id] - ID of the private voice channel created for the group.  
[created\_date] - Date the group was created.

### Table Relationships:

[server\_id](Foreign Key) - references primary key in the Servers Index.  
[group\_type] - references 'group\_types' indicating the [category\_id], [post\_channel\_id], [emoji], and [std\_admin\_msg] associated with that group\_type.

server_id	group_type	group_owner	message_id	text_channel_id	Voice_channel_id	Created_date

# /disband [database dev-guide]

[group\_owner], [group\_type], [group\_type\_color, default=], [group\_name],  
[emoji, default=👍], [std\_admin\_msg, default=], [message\_id], [role\_id], [channel\_id]

Admin Command(s):

User Command(s):

## 1. Disband a Group

### Command:

/disband

**Method:** In the database table 'form\_group\_type', any rows with [channel\_id] (foreign key) are removed.

**Table Name:** 'form\_group\_type'

### Data Variables:

[server\_id] - Reference to server where command was invoked.

[group\_owner] - Reference to user who created the group.

[group\_name] - Name of the group, role, and channel.

[role\_id] - Role ID create for the group\_name.

[message\_id] - ID of the message with the reaction role.

[channel\_id] - ID of the private channel created for the group.

**Table Relationships:** [server\_id](Foreign Key) references primary key in the Servers Index. [group\_type](Foreign Key) references 'group\_type' in the 'form\_type' table, indicating the type of group, [std\_admin\_msg] and [emoji] associated with type.