

Discord JS

SQLite3

Creating a Level & Rep Bot

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**Prerequisite Setup
if you intend to follow along.**

Set Up Dev Environment

- Requires:

- NODE JS
- DISCORD JS
- SQLITE3
- SPRINTF-JS

- (basically, make a bot directory, and in that directory:)
- `npm install -g n`
- `npm install discord.js`
- `npm install sqlite3`
- `npm install sprintf-js`

Google is Your Friend

Screenshots and Steps Upcoming

**Set Up Dev Directory
and Discord Bot Link**

The Terminal is Your Friend

```
botRepLevel — -bash — 100x30
[tford@~: cd bot
[tford@~/bot: mkdir botRepLevel
[tford@~/bot: ls
.          botGuardian          bot_dice_coin_code.txt
..         botLitRPG             bot_notes.txt
.DS_Store botNut                bot_objects.txt
botActivity botOverlord         bot_working_new_code_clips.txt
botBartender botPlot           database_call_example.js
botBartender copy botQuotes
botCensor     botRepLevel
botClerk      botRoboCrab
botCommander  botTTT
botCreative   botTrivia
botGesture    botUSN
[tford@~/bot: cd botRepLevel/
tford@~/bot/botRepLevel: █
```

```
cd // change directory
mkdir // make directory
ls // list files
```



```
tford@~/bot/botRepLevel: ln -s ../node_modules .
tford@~/bot/botRepLevel: touch package.json
tford@~/bot/botRepLevel: touch settings.json
tford@~/bot/botRepLevel: touch indexRepLevel.js
tford@~/bot/botRepLevel: ls
.          indexRepLevel.js package.json
..         node_modules      settings.json
tford@~/bot/botRepLevel: █
```

Your node_modules may be somewhere else.

```
ln // create link
touch // create file
ls // list files
```


Copy

```
{
  "name": "Sir Rep Level Bot",
  "version": "1.0.0",
  "description": "Services and Seekers",
  "main": "indexRepLevel.js",
  "scripts": {
    "test": "test"
  },
  "keywords": [
    "reputation",
    "level"
  ],
  "author": "Slate (www.Cattail.Nu)",
  "license": "CC-BY-NC-4.0"
}
```


Paste in package.json



The screenshot shows a code editor window with a sidebar on the left titled "Currently Open Documents". It lists three files: "indexRepLevel.js", "package.json" (which is selected and highlighted in blue), and "settings.json". The main editor area displays the content of "package.json" at the path "~/bot/botRepLevel/package.json". The JSON content is as follows:

```
1 {  
2   "name": "Sir Rep Level Bot",  
3   "version": "1.0.0",  
4   "description": "Services and Seekers",  
5   "main": "indexRepLevel.js",  
6   "scripts": {  
7     "test": "test"  
8   },  
9   "keywords": [  
10     "reputation",  
11     "level"  
12   ],  
13   "author": "Slate (www.Cattail.Nu)",  
14   "license": "CC-BY-NC-4.0"  
15 }
```

The closing curly brace on line 15 is highlighted with a yellow background.

Create an Application at:

<https://discord.com/developers/applications>

← → ↺

discord.com/developers/applications

⌨ ☆ ⚙ Paused

DEVELOPER PORTAL

Applications

Teams

Server Insights

Documentation

Applications


Find the perfect feature set for your game in our Game SDK, and sign up for Server Commerce to start selling directly in your server. Get started by creating a new application. We can't wait to see what you make!

Sort By: Date Created


Small Large

New Application


My Applications




Artemis Kitten




bartender




storyteller




quotes




gesture




Creative Bot




RoboCrab




Plot Device




Grandmom




Guardian



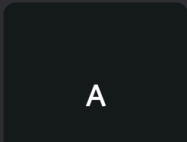
Overlord




A.I.



A



ZPZA



C

Find the perfect feature set for your game in our Game SDK, and sign up to use it directly in your server. Get started by creating a new application. We can't

Sort By:

Date Created

My App

CREATE AN APPLICATION

Are you a game dev? We may already have your app in our database. Reach out to our **Dev Support** for more info and to claim your game!

NAME *

Sir Rep Level

By creating an API application, you agree to the [Discord API Terms of Service](#)

Cancel

Create

Artemis

quotes

RoboCrab

Plot Device

Grandmom

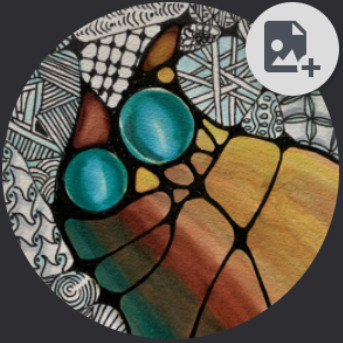
Guardian

Save It !!!

Careful — you have unsaved changes!	<input checked="" type="checkbox"/> Bake a cake	Reset	Save Changes
	<input checked="" type="checkbox"/> Buy you a nice seafood dinner		
	<input checked="" type="checkbox"/> Have an existential crisis		

All your edits have been carefully recorded.

APP ICON



Remove

NAME

Sir Rep Level

CLIENT ID

75...2262

Copy

CLIENT SECRET

[Click to reveal](#)

Copy


Regenerate

DESCRIPTION (MAXIMUM 400 CHARACTERS)

Add a Bot to the App

← Back to Applications

SELECTED APP

 Sir Rep Level ▼

SETTINGS

🏠 General Information

🔧 OAuth2

🧩 Bot

☰ Rich Presence >

👤 App Whitelist

Bot

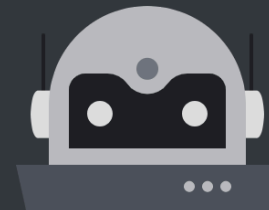


Bring your app to life on Discord with a Bot user. Be a part of chat in your users' servers and interact with them directly.

[Learn more about bot users](#)

Build-A-Bot

Bring your app to life by adding a bot user. This action is irreversible (because robots are too cool to destroy).



Add Bot



Build-A-Bot

Bring your app to life by adding a bot user. This action is irreversible (because robots are

ADD A BOT TO THIS APP?

Adding a bot user gives your app visible life in Discord.
However, this action is irrevocable! Choose wisely.

Nevermind

Yes, do it!

Make it Private and Save It !!!

Sir Rep Level

SETTINGS

General Information

OAuth2

Bot

Rich Presence

App Whitelist

DEVELOPER LICENSE

Create store pages in your server

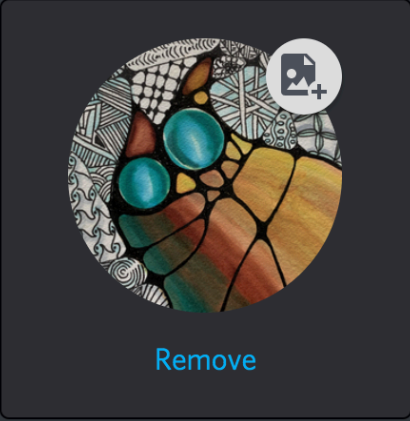
Run Alpha and Beta tests for your game

Check it out

Build-A-Bot

Bring your app to life by adding a bot user. This action is irreversible (because robots are too cool to destroy).

ICON



Remove

USERNAME

Sir Rep Level

#2997

TOKEN

Click to Reveal Token

Copy

Regenerate

Authorization Flow

These settings control how OAuth2 authorizations are restricted for your bot (who can add your bot and how it is added).

PUBLIC BOT

Public bots can be added by anyone. When unchecked, only you can join this bot to servers.

☐

REQUIRES OAUTH2 CODE GRANT

If your application requires multiple scopes then you may need the full OAuth2 flow to ensure a bot doesn't join before your application is granted a token.

☐

Careful — you have unsaved changes!

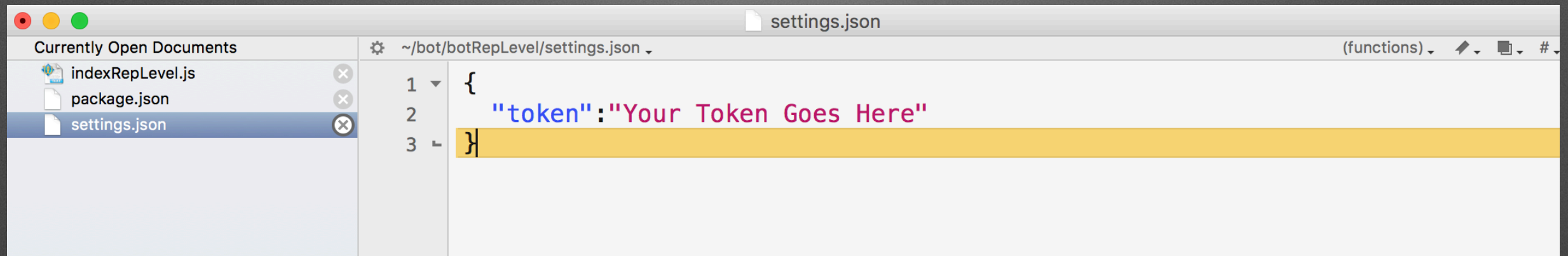
Reset

Save Changes

Copy

```
{  
  "token": "YourTokenHere"  
}
```



Paste in settings.json




Copy Bot Token


← Back to Applications


SELECTED APP


 Sir Rep Level


SETTINGS

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Bot


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ICON



Remove

USERNAME

Sir Rep Level

#2997

TOKEN

[Click to Reveal Token](#)

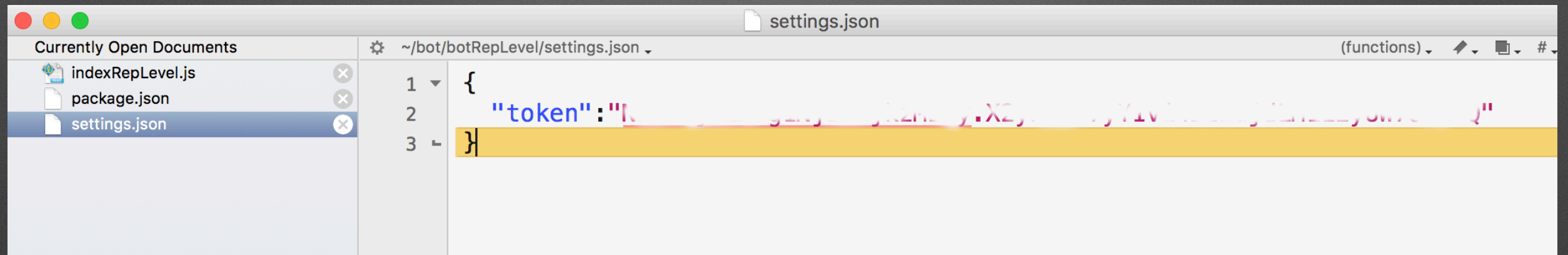
Copy

Regenerate

Authorization Flow

Paste

Paste Your Token in between the Quotes



The screenshot shows a code editor window with a sidebar on the left titled "Currently Open Documents". It lists three files: indexRepLevel.js, package.json, and settings.json. The settings.json file is selected and open in the main editor. The editor's title bar shows the file path as ~/bot/botRepLevel/settings.json. The code in the editor is a JSON object with a single key-value pair: "token": "...". The value is a long alphanumeric string. The text "Paste Your Token in between the Quotes" is overlaid on the string, indicating where to paste the token. The entire line of code is highlighted in yellow.


```
{  
  "token": "k2H...X2j...Y1V...OW7C..."  
}
```

Don't ever share your token with anyone.


Get the Add Bot URL with the Right Permissions


← Back to Applications


SELECTED APP


 Sir Rep Level ▼


SETTINGS

 General Information

 OAuth2

 Bot

 Rich Presence >

 App Whitelist

DEVELOPER LICENSE

- Create store pages in your server
- Run Alpha and Beta tests for your

SCOPES

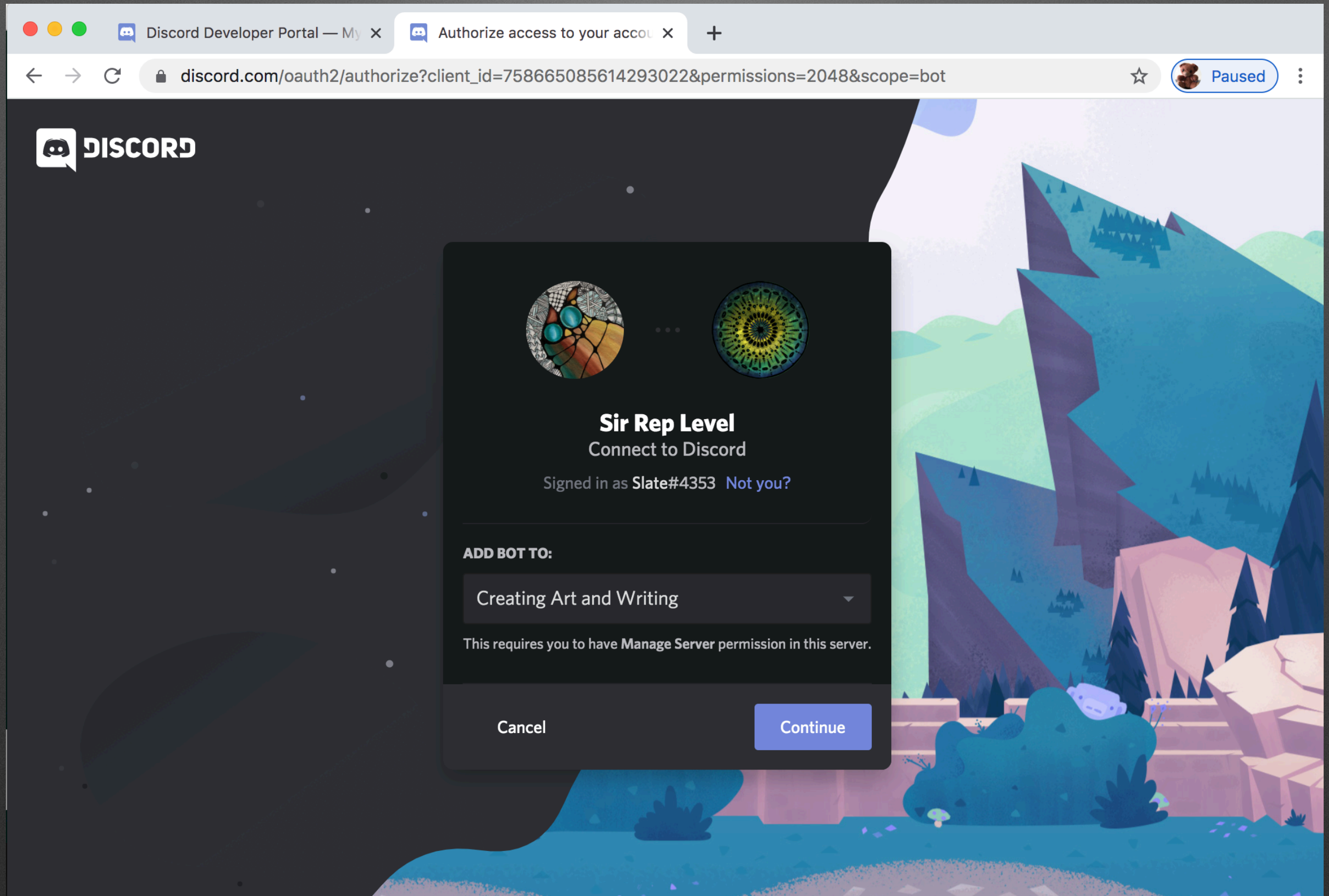
<input type="checkbox"/> identify	<input type="checkbox"/> rpc	<input type="checkbox"/> applications.builds.read
<input type="checkbox"/> email	<input type="checkbox"/> rpc.notifications.read	<input type="checkbox"/> applications.store.update
<input type="checkbox"/> connections	<input checked="" type="checkbox"/> bot	<input type="checkbox"/> applications.entitlements
<input type="checkbox"/> guilds	<input type="checkbox"/> webhook.incoming	<input type="checkbox"/> activities.read
<input type="checkbox"/> guilds.join	<input type="checkbox"/> messages.read	<input type="checkbox"/> activities.write
<input type="checkbox"/> gdm.join	<input type="checkbox"/> applications.builds.upload	<input type="checkbox"/> relationships.read

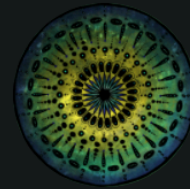
https://discord.com/api/oauth2/authorize?client_id=758665085614293022&permissions=2048&scope=bot Copy

BOT PERMISSIONS

GENERAL PERMISSIONS	TEXT PERMISSIONS	VOICE PERMISSIONS
<input type="checkbox"/> Administrator	<input checked="" type="checkbox"/> Send Messages	<input type="checkbox"/> Connect
<input type="checkbox"/> View Audit Log	<input type="checkbox"/> Send TTS Messages	<input type="checkbox"/> Speak
<input type="checkbox"/> View Server Insights	<input type="checkbox"/> Manage Messages	<input type="checkbox"/> Video
<input type="checkbox"/> Manage Server	<input type="checkbox"/> Embed Links	<input type="checkbox"/> Mute Members
<input type="checkbox"/> Manage Roles	<input type="checkbox"/> Attach Files	<input type="checkbox"/> Deafen Members
<input type="checkbox"/> Manage Channels	<input type="checkbox"/> Read Message History	<input type="checkbox"/> Move Members

Use your Bot URL





Sir Rep Level

Connect to Discord

Signed in as **Slate#4353** [Not you?](#)

Confirm that you want to grant **Sir Rep Level** the following permissions on **Creating Art and Writing**:

☒ Send Messages

🕒 Active since Sep 24, 2020

🏠 Used in 0 servers

🛡️ This application **cannot** read your messages or send messages as you.

Back

Authorize

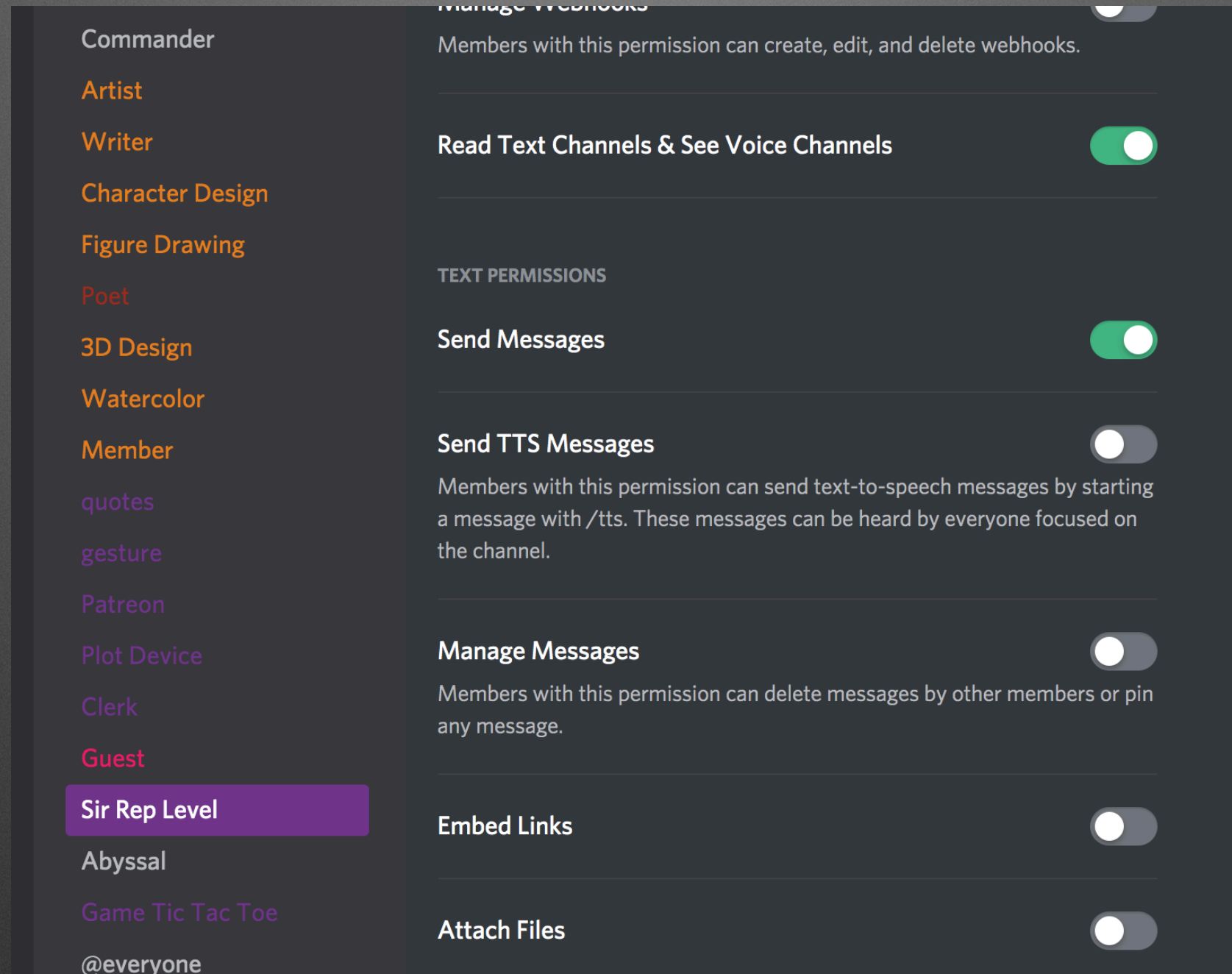




Authorized

You may now close this window or tab.

Set Up Channel Permissions



Your Bot must be able to read and send messages on whatever channel you want to use it on.

Copy

```
const Discord = require('discord.js');
const client = new Discord.Client();
const settings = require('./settings.json');

client.on('ready', () => {
    console.log("online");
});

client.on('message', message => {
    if (message.author === client.user) return;
    if (message.author.bot) return;

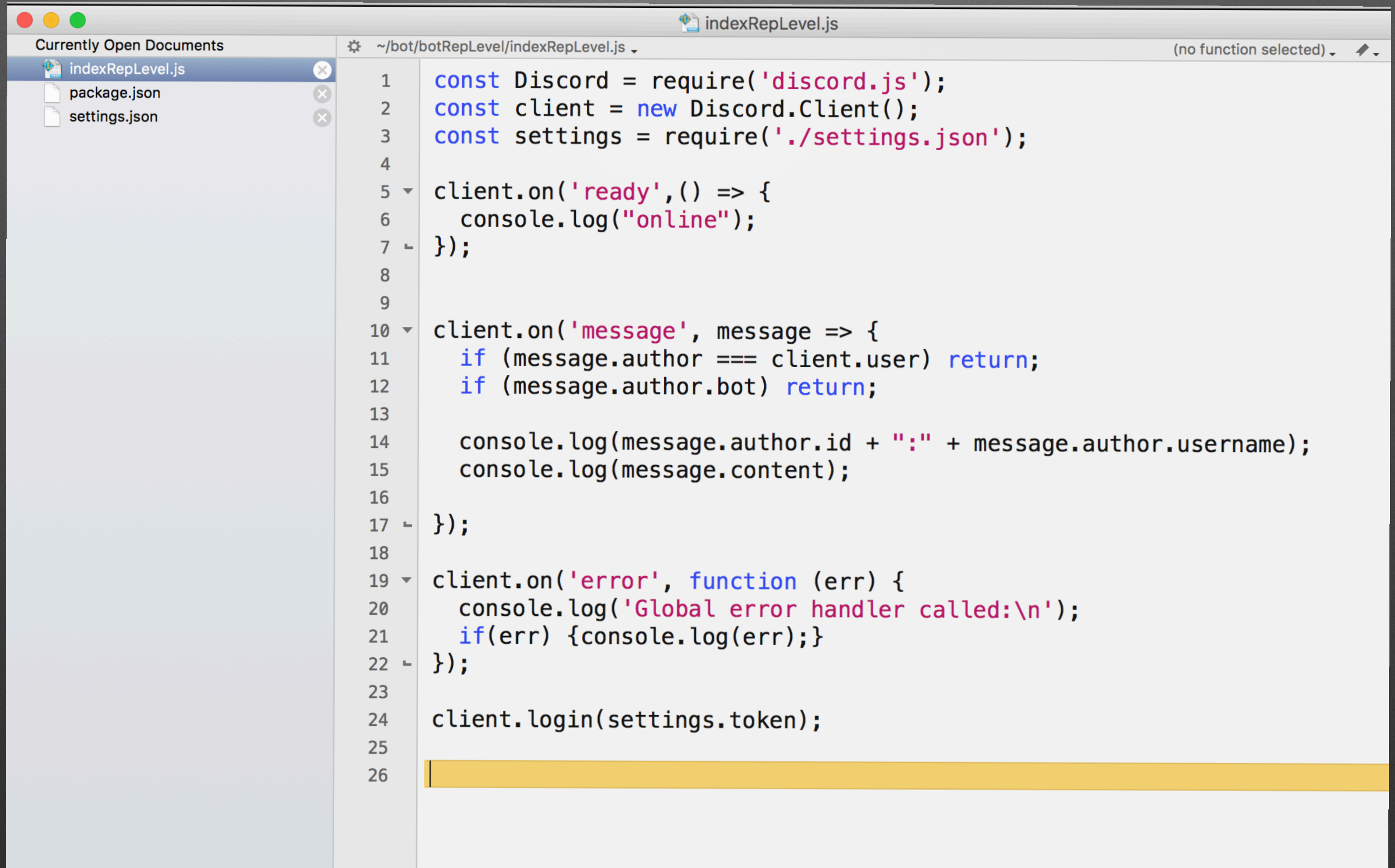
    console.log(message.author.id + ":" + message.author.username);
    console.log(message.content);

});

client.on('error', function (err) {
    console.log('Global error handler called:\n');
    if(err) {console.log(err);}
});

client.login(settings.token);
```


Paste in indexRepLevel.js



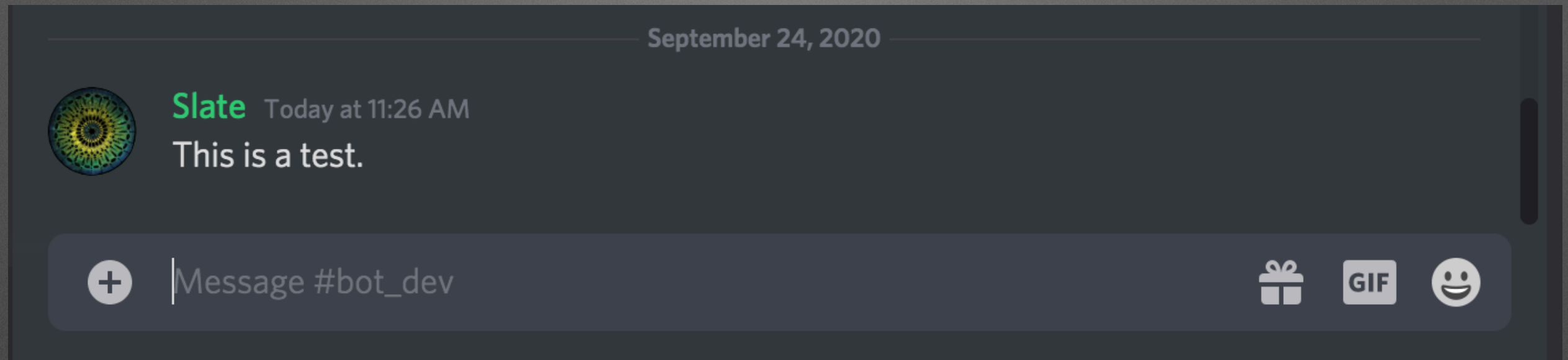
```
1  const Discord = require('discord.js');
2  const client = new Discord.Client();
3  const settings = require('./settings.json');
4
5  client.on('ready', () => {
6    console.log("online");
7  });
8
9
10 client.on('message', message => {
11   if (message.author === client.user) return;
12   if (message.author.bot) return;
13
14   console.log(message.author.id + ":" + message.author.username);
15   console.log(message.content);
16
17 });
18
19 client.on('error', function (err) {
20   console.log('Global error handler called:\n');
21   if(err) {console.log(err);}
22 });
23
24 client.login(settings.token);
25
26
```


Run your Bot

```
[tford@~/bot/botRepLevel: ls  
  .                indexRepLevel.js node_modules      settings.json  
  ..               indexShell.js    package.json  
[tford@~/bot/botRepLevel: node indexRepLevel.js  
online  
█
```


Test your Bot

Type a Message on Discord



See the Bot Working

```
botRepLevel — node indexRepLevel.js — 92x27
tford@~/bot/botRepLevel: node indexRepLevel.js
online
206757095280869377:Slate
This is a test.
```

If your bot does not do this... one of the steps is not done correctly.
Read the error message carefully.
If you still can't figure it out, ask on Discord.

You Are Now Ready For

Creating a Level & Rep Bot

T. L. Ford

www.Cattail.Nu

Discord JS

SQLite3