

Discord bot

TUTORIAL

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Voorwoord

In deze handleiding zullen we de verschillende stappen zien om een Discord Bot te creëren.

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Vereisten

Het creëren van een bot heeft verschillende vereisten waar ik in deze handleiding niet op zal ingaan.

- Server waar de bot op kan draaien
- Node.js is geïnstalleerd op de server
- Discord account
- Discord server
- Tekst editor

1. Creëren van de omgeving op de server

Maak een map bot aan op je server.

```
kerim@homeServer:~$ mkdir bot
```

Navigeer naar deze map.

```
kerim@homeServer:~$ cd bot
```

Maak volgende bestanden aan:

- token.json
- package.json

```
kerim@homeServer:~/bot$ touch token.json package.json
```

Open package.json en plaats volgende code hierin:

```
{  
  "name": "Tutorial bot",  
  "version": "1.0.0",  
  "description": "Dit is een tutorial bot",  
  "main": "bot.js",  
  "author": "Kerim Popelier",  
  "dependencies": {}  
}
```

Natuurlijk kan je de verschillende waarden aanpassen zoals je wilt. Zorg er wel voor dat je weet wat main precies is. Hierin zal de code staan om je bot te starten.

Als laatste moeten we ook nog een package installeren. We doen dit door volgende code:

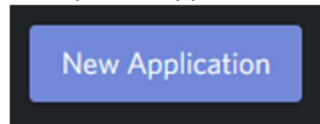
```
kerim@homeServer:~/bot$ npm install discord.js
```

2. Creëren van bot in Discord

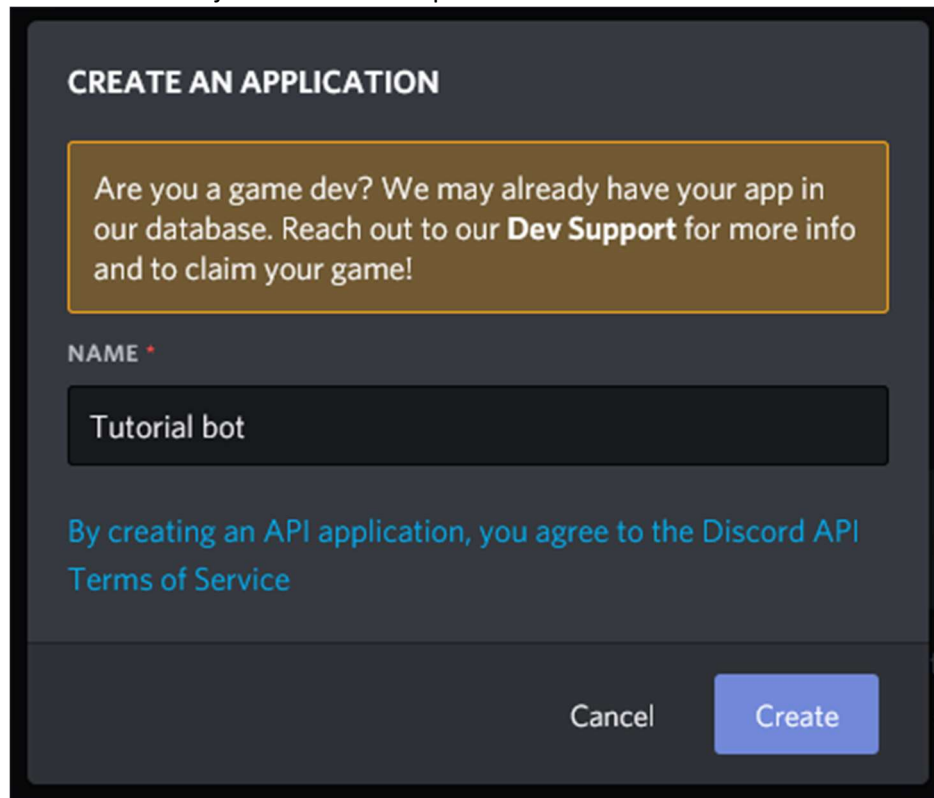
Zorg dat je bent ingelogd op Discord in je browser en ga naar volgende link:

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

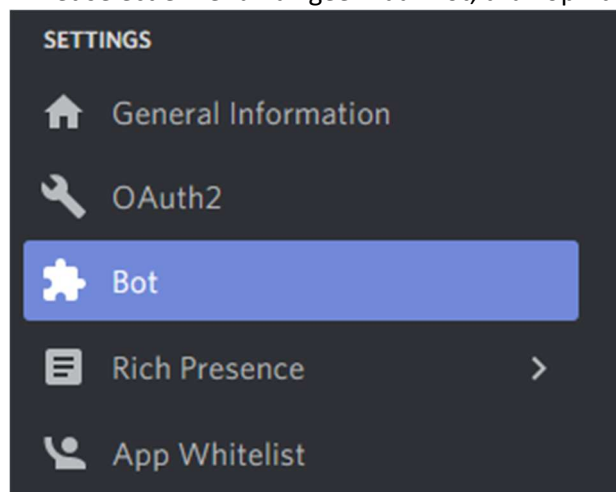
Klik op New Application.



Vul de naam van je bot in en druk op Create.

A dark gray modal window titled "CREATE AN APPLICATION". Inside, there is a brown box with text: "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!". Below this is a text input field labeled "NAME *" containing the text "Tutorial bot". Under the input field, it says "By creating an API application, you agree to the Discord API Terms of Service" in blue. At the bottom right are two buttons: "Cancel" and "Create".

In het selectie menu navigeer naar Bot, druk op Add Bot en klik op "Yes, do it!".



Add Bot

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!

3. Token

Nu dat we onze bot hebben aangemaakt hebben we de token nodig om verder te gaan.

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



USERNAME

Tutorial bot #9687

TOKEN

Click to Reveal Token

Copy Regenerate

Note: De bot icon kan hier ook worden aangepast.

Je kan de bot token zien door te klikken op “Click to Reveal Token”. Het is ook mogelijk om deze direct te kopiëren door op de knop “Copy” te klikken.

Nu we onze token hebben gaan we terug naar onze server en openen we token.json.

We voegen volgende code toe:

```
{  
  "token": "Past token here"  
}
```

We vervangen Past token here natuurlijk door onze token.

4. Bot code

Nu we ons token hebben zullen we beginnen aan het schrijven van onze bot.

Documentatie kan je hier vinden: <https://discord.js.org/#/>.

Echter voor we beginnen met het coderen moeten we eerst de file maken:

```
kerim@homeServer:~/bot$ touch bot.js
```

Voeg hier volgende code in toe:

```
var token = require("./token.json");
const Discord = require("discord.js");
const client = new Discord.Client();

client.on('message', msg => {
  if (msg.content === "Hello there") {
    msg.reply("General Kenobi");
  }
});

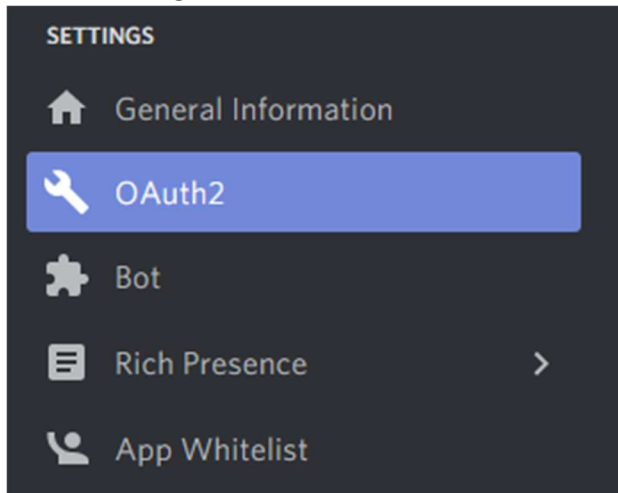
client.login(token.token);
```

(Padillo, 2019)

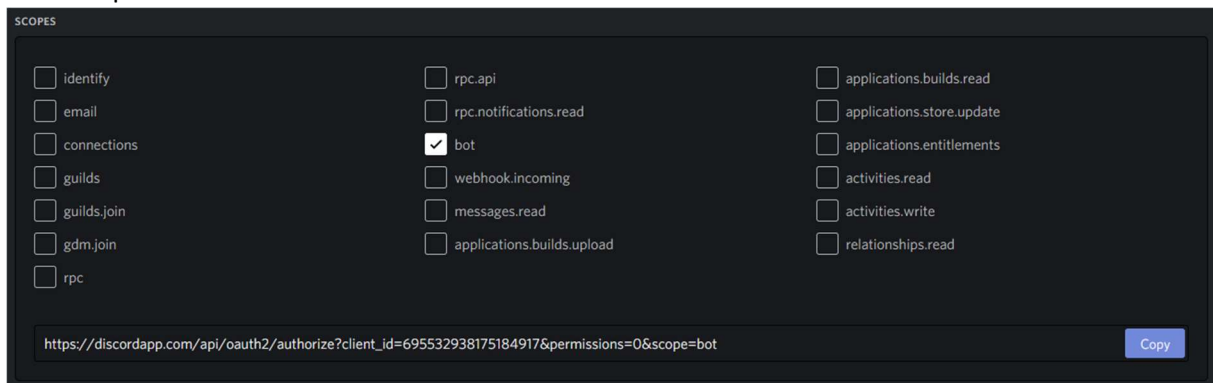
5. Bot toevoegen aan server

Om de bot toe te voegen aan onze server zullen we opnieuw naar het developer portaal gaan.

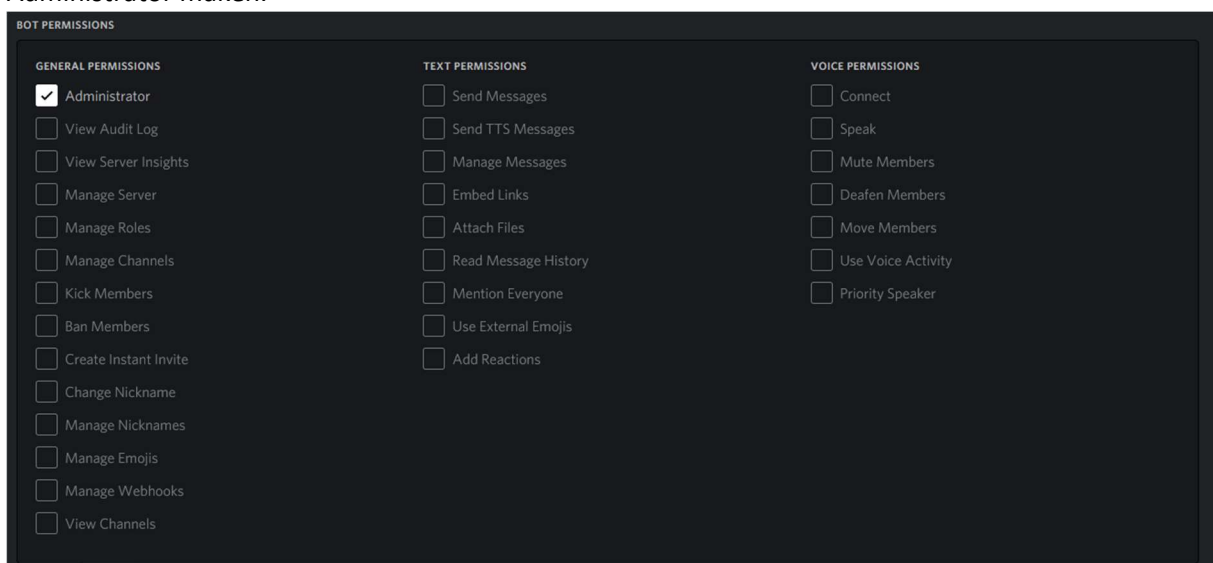
Eens hier navigeren we naar OAuth2.



In de scope kiezen we bot:



Hierna specificeren we de bot permissies. Om het ons makkelijk te maken zullen we onze bot Administrator maken.

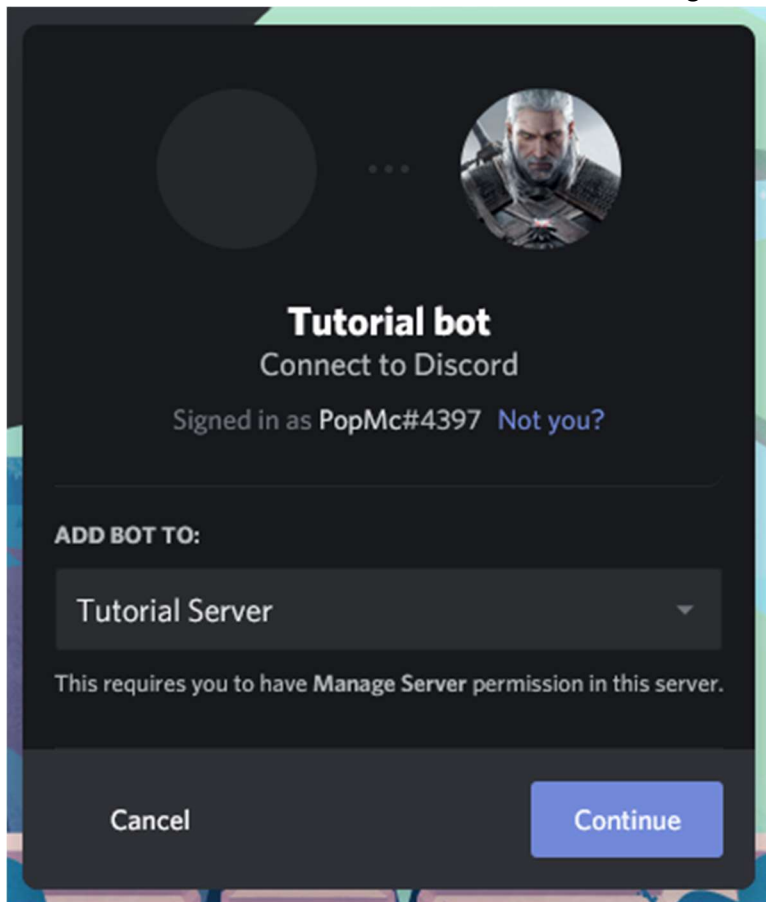


We kopiëren de link en gaan hier naar toe.

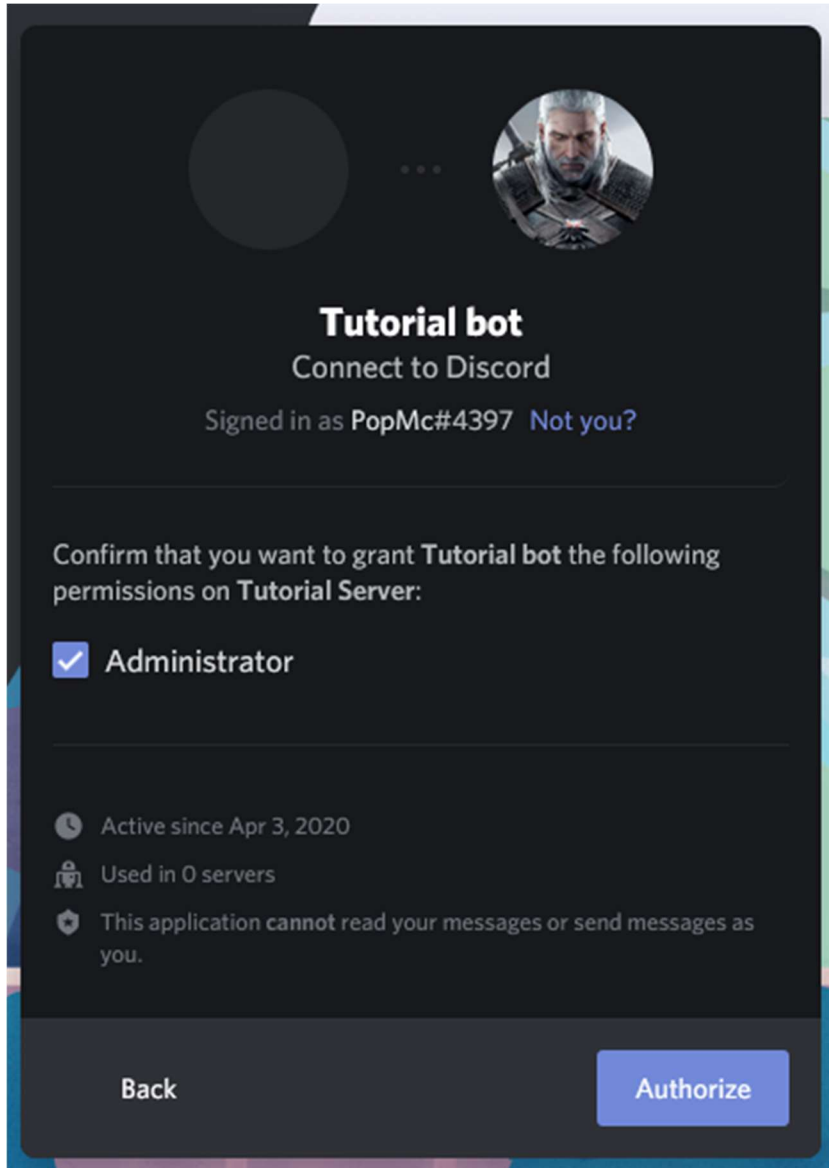
https://discordapp.com/api/oauth2/authorize?client_id=695532938175184917&permissions=8&scope=bot

Copy

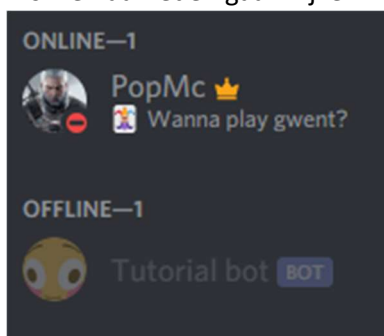
We selecteren in welke server we onze bot willen toevoegen en klikken op “Continue”



We authorizen onze bot en valideren de Captcha



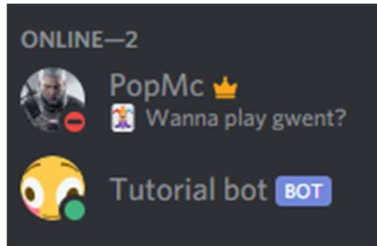
Als we naar leden gaan kijken in onze Discord server kunnen we zien dat de bot nu is toegevoegd.



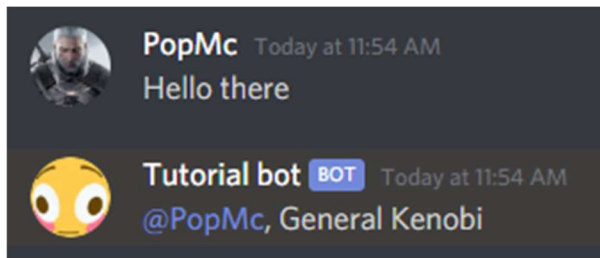
De bot is echter offline. We zullen hem nu online brengen door volgend command uit te voeren op onze server

```
kerim@homeServer:~/bot$ node bot.js
```

De bot is nu online



Laten we deze even testen



6. Let's have some fun

Wat als we nu willen dat onze bot enkel maar reageert als het bericht begint met een uitroep teken?

```
client.on('message', msg => {  
  if (msg.content.substring(0,1) == "!") {
```

En wat als we verschillende commands willen kunnen uitvoeren na het uitroep teken?

```
client.on('message', msg => {  
  if (msg.content.substring(0,1) == "!") {  
    router(msg);  
  }  
});  
  
function router(msg) {  
  switch(msg.content.substring(1)) {  
    case "quote":  
      quote(msg);  
      break;  
    case "jedi":  
      jedi(msg);  
      break;  
    case "sith":  
      sith(msg);  
      break;  
    case "code":  
      code(msg);  
      break;  
    case "leave":  
      leave(msg);  
      break;  
    case "gif":  
      giff(msg);  
      break;  
    default:  
      msg.reply("\nCommands:\n!quote for a quote; \n!gif to get a Star war gif; \n!jedi to join the Jedi; \n!sith to join the Sith; \n!code to get the Code of the order you belong to; \n!leave to leave your current order;");  
  }  
}
```

De quote functie en giff functie kunnen we nu ook al uitvoeren.

```
function quote(msg) {  
  msg.reply(quotes[Math.floor(Math.random() * quotes.length)]);  
}  
  
function giff(msg) {  
  msg.channel.send(gif[Math.floor(Math.random() * gif.length)]);  
}
```

Maar hoe zit het met de andere? Wel, jedi en sith voegen rollen toe aan de gebruiker. Hoe gebeurt dit?

Eerst zoeken we alle rollen op voor wat optimalisatie te hebben.

```
function setRoles(msg) {  
  if (Jedi === "") {  
    Padawan = msg.guild.roles.cache.find(role => role.name === "Padawan");  
    Jedi = msg.guild.roles.cache.find(role => role.name === "Jedi");  
    Apprentice = msg.guild.roles.cache.find(role => role.name === "Apprentice");  
    Sith = msg.guild.roles.cache.find(role => role.name === "Sith");  
  }  
}
```

Note: Doe dit niet indien je een bot maakt die publiek beschikbaar is.

Daarna voegen we de rollen toe aan de gebruiker.

```
function jedi(msg) {  
  msg.member.roles.add(Padawan);  
  msg.member.roles.add(Jedi);  
  msg.reply("There is no emotion, there is peace!");  
}  
  
function sith(msg) {  
  msg.member.roles.add(Apprentice);  
  msg.member.roles.add(Sith);  
  msg.reply("Peace is a lie. There is only passion!");  
}
```

De reply functie pinged de gebruiker iedere keer het iets stuurt. Maar wat indien we dit niet willen? Wel, dit is wat code doet. Naast het geven van de code van de order natuurlijk.

```
function code(msg) {  
  if (msg.member.roles.cache.find(role => role === Jedi)) {  
    msg.channel.send(JediCode);  
  } else if (msg.member.roles.cache.find(role => role === Sith)) {  
    msg.channel.send(SithCode);  
  } else {  
    msg.reply("You need to join an order to see the code");  
  }  
}
```

En wat als we een Order willen verlaten? Dan nemen we de rollen gewoon af!

```
function leave(msg) {  
  if (msg.member.roles.cache.find(role => role === Jedi)) {  
    msg.member.roles.remove(Padawan);  
    msg.member.roles.remove(Jedi);  
    msg.reply("You have fallen to the dark side my Padawan!");  
  } else if (msg.member.roles.cache.find(role => role === Sith)) {  
    msg.member.roles.remove(Apprentice);  
    msg.member.roles.remove(Sith);  
    msg.reply("We will hunt you down Jedi!");  
  } else {  
    msg.reply("You need to join an order to leave it");  
  }  
}
```

Volledige code:

```
const token = require("./token.json");
const Discord = require("discord.js");
const client = new Discord.Client();
const quotes = ["Do. Or do not. There is no try", "I find your lack of faith disturbing", "The Force will be with you. Always.",
"No. I am your father.", "POWER! UNLIMITED POWER!", "DEW IT!"];
const gif = ["https://tenor.com/view/star-wars-darth-vader-dancing-happy-gif-4289259", "https://tenor.com/view/anakin-darth-vader-gif-5233555", "https://tenor.com/view/yoda-muchtolearn-starwars-gif-10182983"];
const JediCode = "\nThere is no emotion, there is peace. \nThere is no ignorance, there is knowledge. \nThere is no passion, there is serenity. \nThere is no chaos, there is harmony. \nThere is no death, there is the Force";
const SithCode = "\nPeace is a lie. \nThere is only Passion. \nThrough Passion I gain Strength. \nThrough Strength I gain Power. \nThrough Power I gain Victory. \nThrough Victory my chains are Broken. \nThe Force shall free me.";
var Padawan = "";
var Jedi = "";
var Apprentice = "";
var Sith = "";

client.on('message', msg => {
  setRoles(msg);
  if (msg.content.substring(0,1) == "!") {
    router(msg);
  }
});

function router(msg) {
  switch(msg.content.substring(1)) {
    case "quote":
      quote(msg);
      break;
    case "jedi":
      jedi(msg);
      break;
    case "sith":
      sith(msg);
      break;
    case "code":
      code(msg);
      break;
    case "leave":
      leave(msg);
      break;
    case "gif":
      giff(msg);
      break;
    default:
      msg.reply("\nCommands:\n!quote for a quote; \n!gif to get a Star war gif; \n!jedi to join the Jedi; \n!sith to join the Sith; \n!code to get the Code of the order you belong to; \n!leave to leave your current order;");
  }
}

function quote(msg) {
  msg.reply(quotes[Math.floor(Math.random() * quotes.length)]);
}

function giff(msg) {
  msg.channel.send(gif[Math.floor(Math.random() * gif.length)]);
}

function jedi(msg) {
  msg.member.roles.add(Padawan);
  msg.member.roles.add(Jedi);
  msg.reply("There is no emotion, there is peace!");
}

function sith(msg) {
  msg.member.roles.add(Apprentice);
  msg.member.roles.add(Sith);
  msg.reply("Peace is a lie. There is only passion!");
}

function code(msg) {
  if (msg.member.roles.cache.find(role => role.name === Jedi)) {
    msg.channel.send(JediCode);
  } else if (msg.member.roles.cache.find(role => role.name === Sith)) {
    msg.channel.send(SithCode);
  } else {
    msg.reply("You need to join an order to see the code");
  }
}

function leave(msg) {
  if (msg.member.roles.cache.find(role => role.name === Jedi)) {
    msg.member.roles.remove(Padawan);
    msg.member.roles.remove(Jedi);
    msg.reply("You have fallen to the dark side my Padawan!");
  } else if (msg.member.roles.cache.find(role => role.name === Sith)) {
    msg.member.roles.remove(Apprentice);
    msg.member.roles.remove(Sith);
    msg.reply("We will hunt you down Jedi!");
  } else {
    msg.reply("You need to join an order to leave it");
  }
}

function setRoles(msg) {
  if (Jedi === "") {
    Padawan = msg.guild.roles.cache.find(role => role.name === "Padawan");
    Jedi = msg.guild.roles.cache.find(role => role.name === "Jedi");
    Apprentice = msg.guild.roles.cache.find(role => role.name === "Apprentice");
    Sith = msg.guild.roles.cache.find(role => role.name === "Sith");
  }
}

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

<https://github.com/PopMc/DiscordBotStarWars.git>

Bibliografie

Padillo, R. (2019, April 18). *V2 Tutorial: Creating your first Discord Bot — Part 1*. Opgehaald van medium.com: <https://medium.com/davao-js/2019-tutorial-creating-your-first-simple-discord-bot-47fc836a170b>