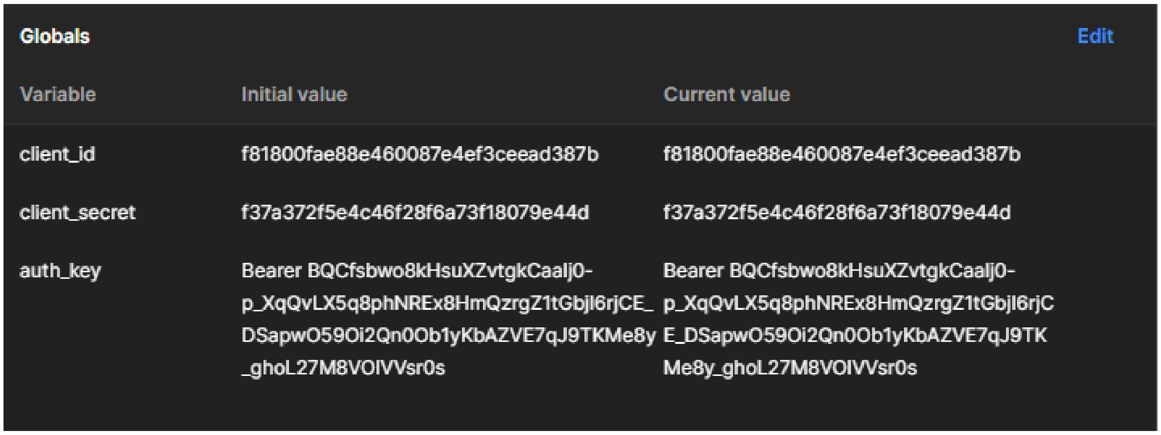
Manual Test QA – SPOTIFY API

TestCase	Steps	Functionality	Results	Outcome	Test Case ID	Configuration
Validate the generation of the Spotify Web API key	• Use the POST method to request the service with the endpoint: “https://accounts.spotify.com/api/token”. • Add in the body the client_id and the client_secret (choose the option in the body of x-www-form-urlencoded for security reasons).	Access Token	It is expected to respond with the generation of an access token that will be used to make other requests within the service.	PASSED	101030	Breakpoint: L, M Browser: Firefox Operating System: Windows 11
Validate search item (album, playlist, artist, track, show, episode) through specific params	• Use the GET method to request the service with the endpoint: “https://api.spotify.com/v1/search” • Add the following params: q(keywords), type (if is artist, track, album, etc), market (country code ES, EN, UK, etc), limit (maximum number of results)	Search for Item	It is expected that when entering the corresponding parameters, it will respond with all the correct information of the item	PASSED	111030	Breakpoint: L, M Browser: Firefox Operating System: Windows 11
Validate being able to add tracks to an existing playlist with permissions	nethod to request the service with the endpoint: y.com/v1/playlists/{playlist_id}/tracks st_id}” with a real id the URI that would be the track id ack_id")	Add Tracks to Playlist	It is expected that the track will be successfully added to the playlist and generate the snapshot ID	PASSED	121030	Breakpoint: L, M Browser: Firefox Operating System: Windows 11
Validate that the name and description of the playlist are updated	• Use the PUT method to request the service with the endpoint: https://api.spotify.com/v1/playlists/{playlist_id} • Replace “{playlist_id}” with a real id • Add in the body the name and description to be replace and in the "public" field put if it is private or not with true and false.	Update Playlist Items	The playlist is expected to automatically update the name and description fields, it should generate a snapshot of the change	PASSED	131030	Breakpoint: L, M Browser: Firefox Operating System: Windows 11
Validate that tracks can be deleted from the playlist	• Use the DELETE method to request the service with the endpoint: https://api.spotify.com/v1/playlists/{playlist_id}/tracks • Replace “{playlist_id}” with a real id • Add in the body the URI that would be the track id ("spotify:track:track_id"), and the snapshot_id that was generated when adding the track to the playlist	Remove Playlist Items	The selected tracks are expected to be removed successfully, and the snapshot_id will be generated correctly	PASSED	141030	Breakpoint: L, M Browser: Firefox Operating System: Windows 11

Wiki

These global variables were made for security reasons because they are authorization keys and because it is only necessary to change the content of the variable once since it is represented by one that does not change.

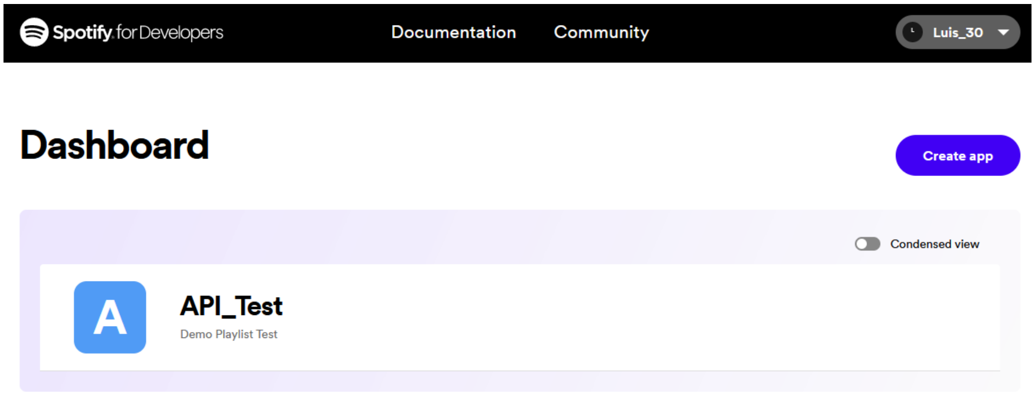


Variable	Initial value	Current value
client_id	f81800fae88e460087e4ef3ceead387b	f81800fae88e460087e4ef3ceead387b
client_secret	f37a372f5e4c46f28f6a73f18079e44d	f37a372f5e4c46f28f6a73f18079e44d
auth_key	Bearer BQCfsbwo8kHsuXZvtgkCaalj0-p_XqQvLX5q8phNREx8HmQzrgZ1tGbjl6rjCE_DSapwO59Oi2Qn0Ob1yKbAZVE7qJ9TKMe8y_ghoL27M8VOIVVsr0s	Bearer BQCfsbwo8kHsuXZvtgkCaalj0-p_XqQvLX5q8phNREx8HmQzrgZ1tGbjl6rjCE_DSapwO59Oi2Qn0Ob1yKbAZVE7qJ9TKMe8y_ghoL27M8VOIVVsr0s

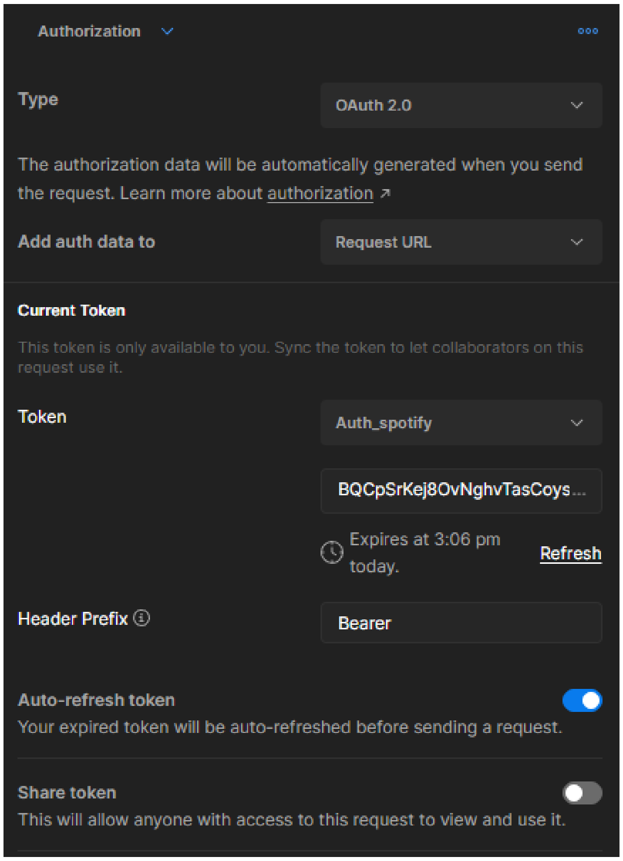
Pre-requisites for testing

- Have a Spotify account.

- Create a new app in a Spotify for Developers Console, to be able to use the generated client_id and client_secret.



- Configure the Authorization header in Postman for POST, PUT and DELETE request. Authorization scopes: playlist-modify-public, playlist-modify-private. The GET request doesn't need this authorization configuration since it only consults information from the service.



Type: OAuth 2.0

The authorization data will be automatically generated when you send the request. Learn more about authorization ↗

Add auth data to: Request URL

Current Token

This token is only available to you. Sync the token to let collaborators on this request use it.

Token: Auth_spotify

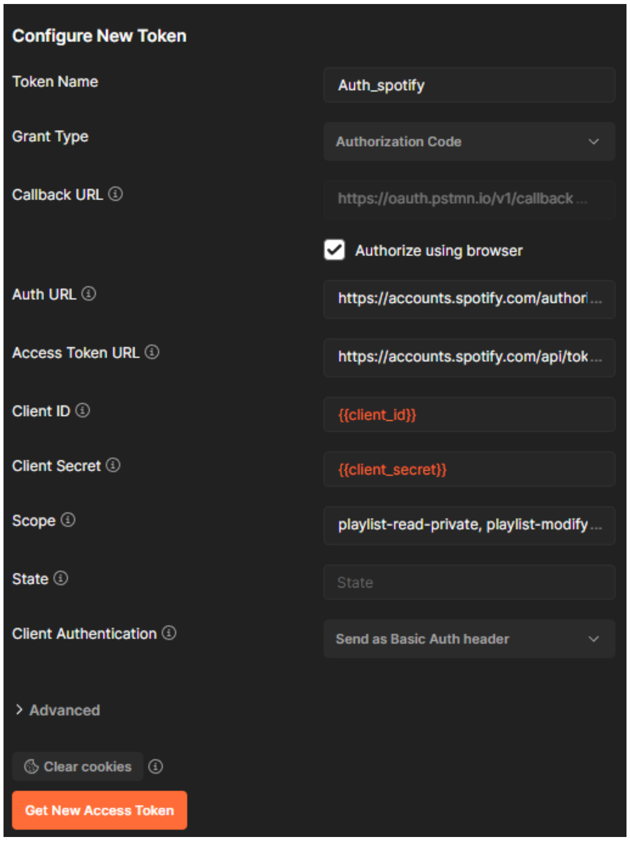
BQCpSrKej8OvNghvTasCoys...

Expires at 3:06 pm today.

Header Prefix: Bearer

Auto-refresh token: on
Your expired token will be auto-refreshed before sending a request.

Share token: off
This will allow anyone with access to this request to view and use it.



Configure New Token

Token Name: Auth_spotify

Grant Type: Authorization Code

Callback URL: https://oauth.pstmn.io/v1/callback...

☑ Authorize using browser

Auth URL: https://accounts.spotify.com/authori...

Access Token URL: https://accounts.spotify.com/api/tok...

Client ID: {{client_id}}

Client Secret: {{client_secret}}

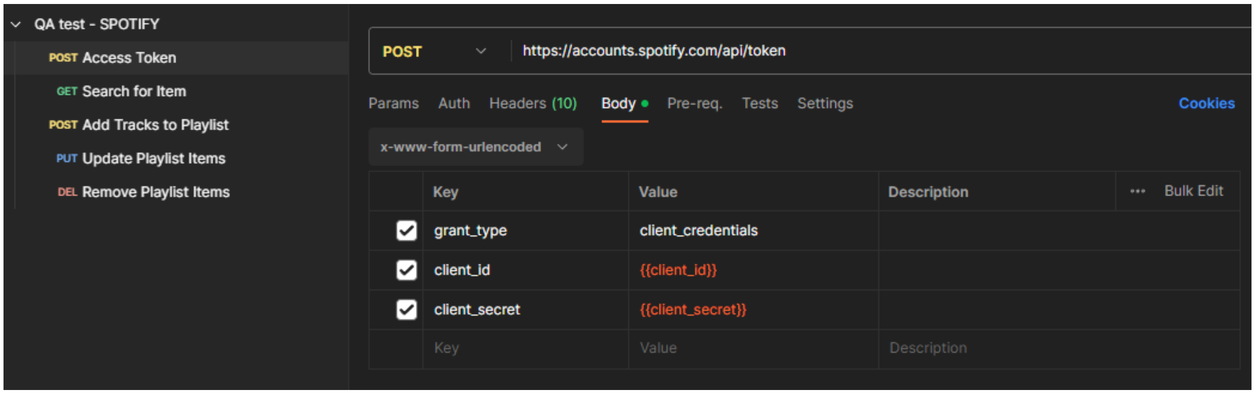
Scope: playlist-read-private, playlist-modify...

State: State

Client Authentication: Send as Basic Auth header

TC: Validate the generation of the Spotify Web API key ID:101030

Evidence

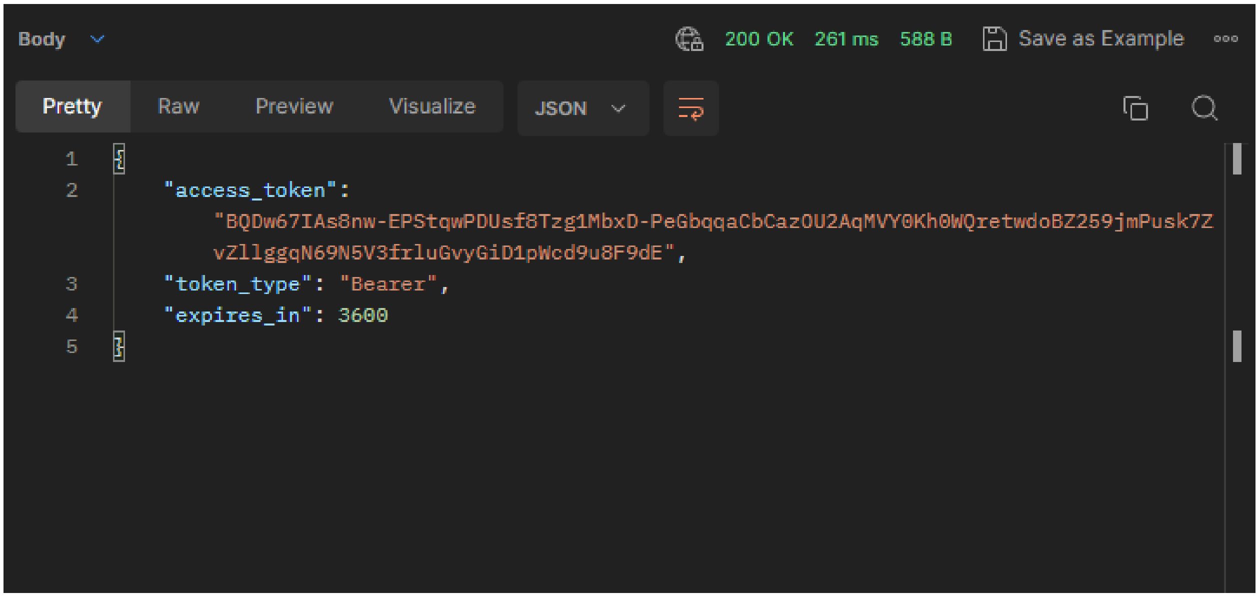


POST https://accounts.spotify.com/api/token

x-www-form-urlencoded

	Key	Value	Description
☑	grant_type	client_credentials	
☑	client_id	{{client_id}}	
☑	client_secret	{{client_secret}}	
	Key	Value	Description

Request response

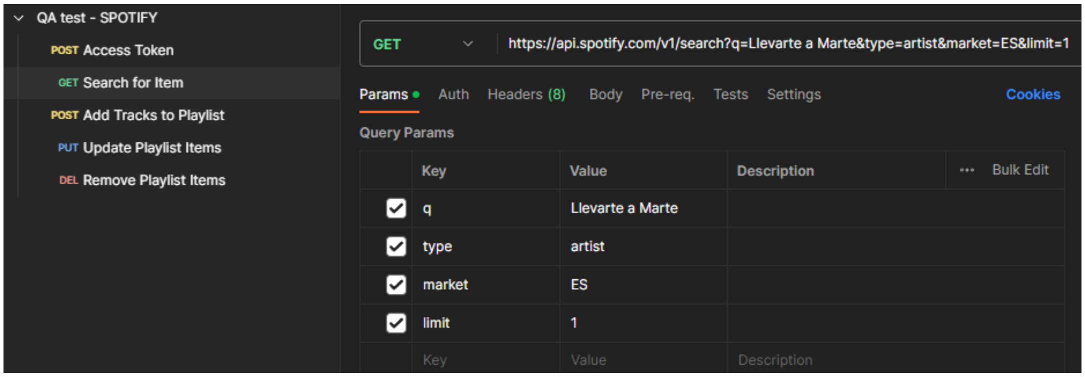


200 OK 261 ms 588 B

```
{
    "access_token":
        "BQDw67IAs8nw-EPStqwPDUsf8Tzg1MbxD-PeGbqqaCbCazOU2AqMVY0Kh0WQretwdoBZ259jmPusk7Z
        vZllggqN69N5V3frluGvyGiD1pWcd9u8F9dE",
    "token_type": "Bearer",
    "expires_in": 3600
}
```

TC: Validate search item (album, playlist, artist, track, show, episode) through specific params. ID: 111030

Evidence

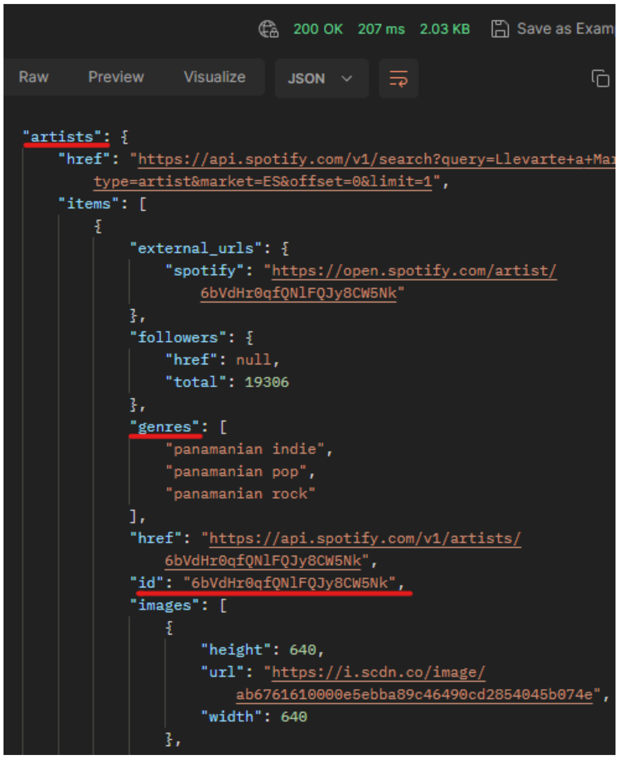


GET https://api.spotify.com/v1/search?q=Llevarte a Marte&type=artist&market=ES&limit=1

Query Params

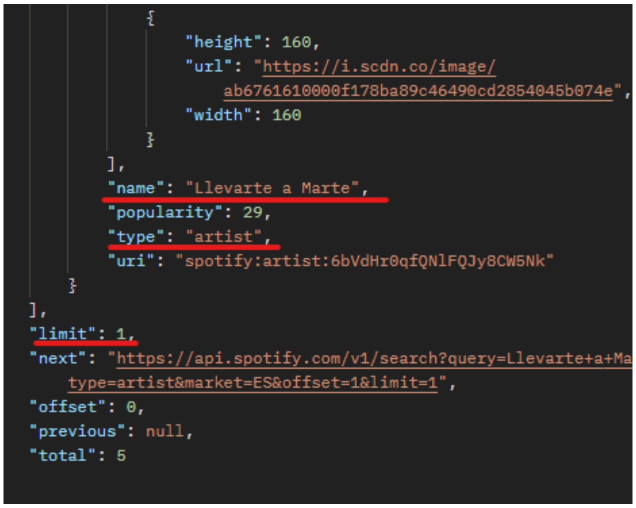
	Key	Value	Description
☑	q	Llevarte a Marte	
☑	type	artist	
☑	market	ES	
☑	limit	1	
	Key	Value	Description

Request response



```
200 OK   207 ms   2.03 KB
```

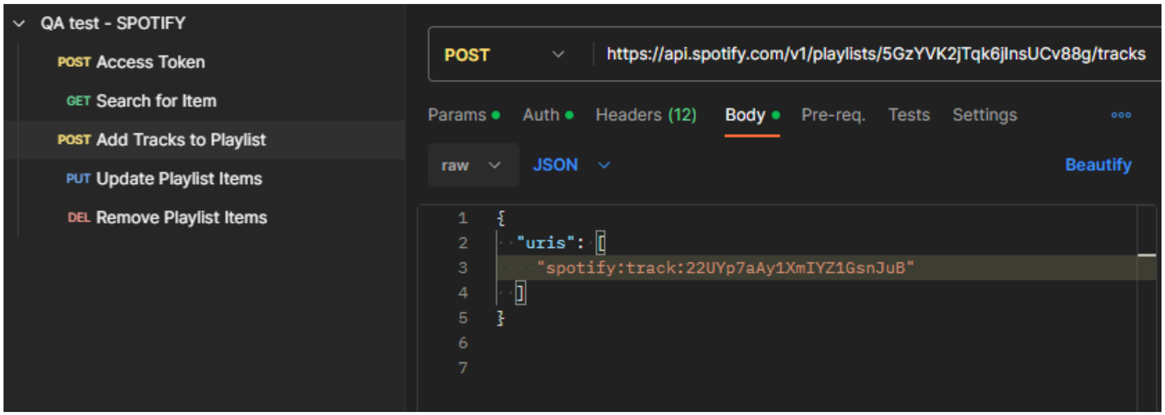
```
"artists": {
    "href": "https://api.spotify.com/v1/search?query=Llevarte+a+Mar
        type=artist&market=ES&offset=0&limit=1",
    "items": [
        {
            "external_urls": {
                "spotify": "https://open.spotify.com/artist/
                    6bVdHr0qfQNlFQJy8CW5Nk"
            },
            "followers": {
                "href": null,
                "total": 19306
            },
            "genres": [
                "panamanian indie",
                "panamanian pop",
                "panamanian rock"
            ],
            "href": "https://api.spotify.com/v1/artists/
                6bVdHr0qfQNlFQJy8CW5Nk",
            "id": "6bVdHr0qfQNlFQJy8CW5Nk",
            "images": [
                {
                    "height": 640,
                    "url": "https://i.scdn.co/image/
                        ab6761610000e5ebba89c46490cd2854045b074e",
                    "width": 640
                },
```



```
                {
                    "height": 160,
                    "url": "https://i.scdn.co/image/
                        ab6761610000f178ba89c46490cd2854045b074e",
                    "width": 160
                }
            ],
            "name": "Llevarte a Marte",
            "popularity": 29,
            "type": "artist",
            "uri": "spotify:artist:6bVdHr0qfQNlFQJy8CW5Nk"
        }
    ],
    "limit": 1,
    "next": "https://api.spotify.com/v1/search?query=Llevarte+a+Ma
        type=artist&market=ES&offset=1&limit=1",
    "offset": 0,
    "previous": null,
    "total": 5
```

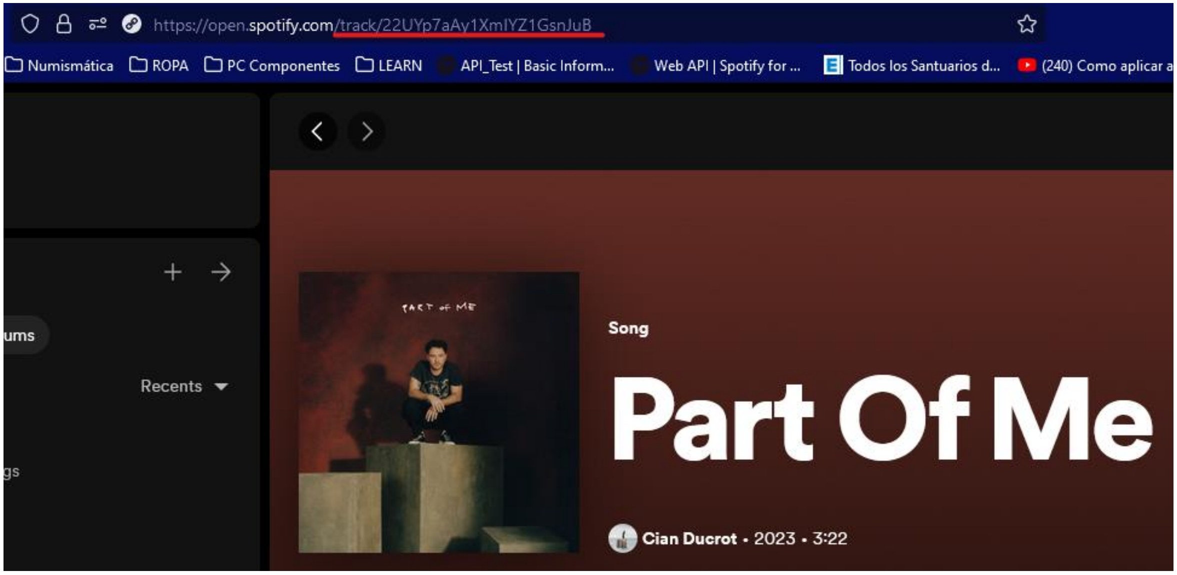
TC: Validate being able to add tracks to an existing playlist with permissions. ID: 121030

Evidence

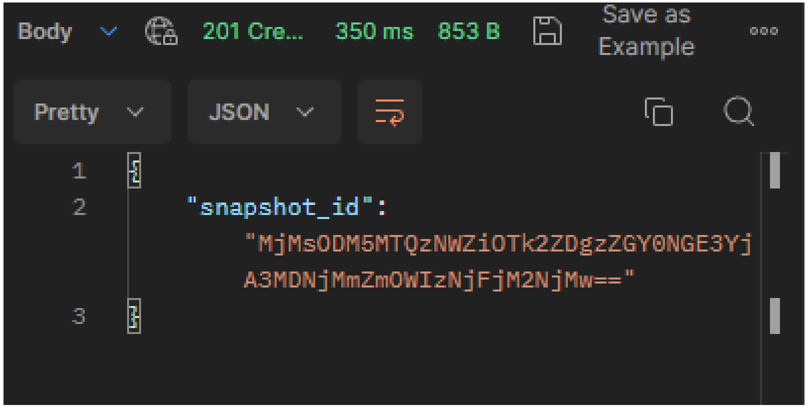


POST https://api.spotify.com/v1/playlists/5GzYVK2jTqk6jlnsUCv88g/tracks

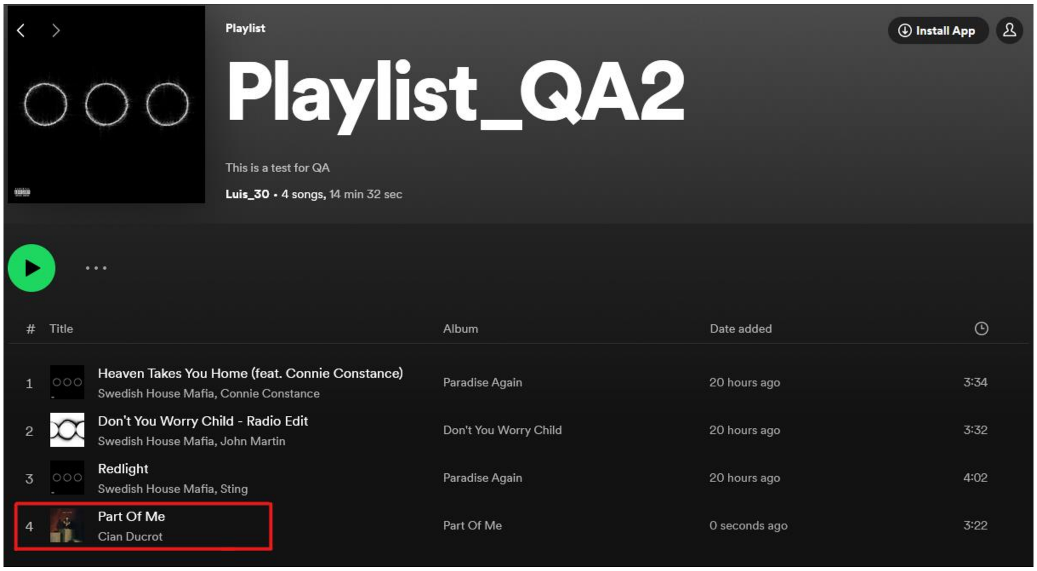
```
{
  "uris": [
    "spotify:track:22UYp7aAy1XmIYZ1GsnJuB"
  ]
}
```


https://open.spotify.com/track/22UYp7aAy1XmIYZ1GsnJuB
Numismática
ROPA
PC Componentes
LEARN
API_Test | Basic Inform...
Web API | Spotify for ...
Todos los Santuarios d...
(240) Como aplicar a
ums
Recents
gs
PART OF ME
Song
Part Of Me
Cian Ducrot • 2023 • 3:22

Request response



```
{
    "snapshot_id":
        "MjMsODM5MTQzNWZiOTk2ZDgzZGY0NGE3Yj
        A3MDNjMmZmOWIzNjFjM2NjMw=="
}
```



Playlist

Playlist_QA2

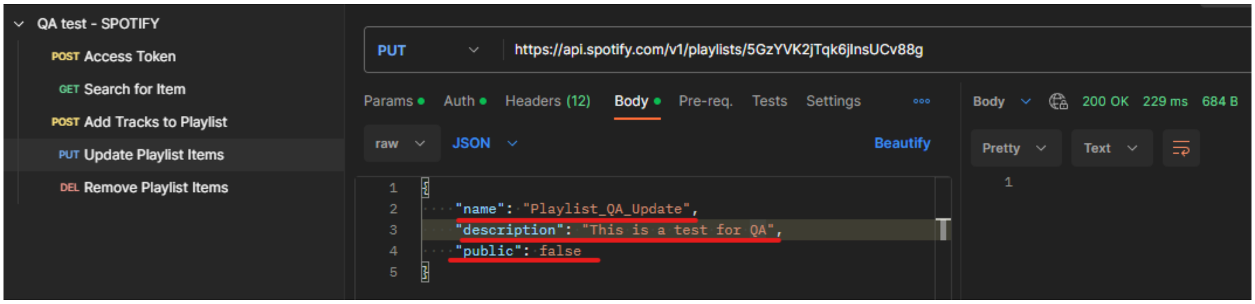
This is a test for QA

Luis_30 • 4 songs, 14 min 32 sec

#	Title	Album	Date added	🕒
1	Heaven Takes You Home (feat. Connie Constance) Swedish House Mafia, Connie Constance	Paradise Again	20 hours ago	3:34
2	Don't You Worry Child - Radio Edit Swedish House Mafia, John Martin	Don't You Worry Child	20 hours ago	3:32
3	Redlight Swedish House Mafia, Sting	Paradise Again	20 hours ago	4:02
4	Part Of Me Cian Ducrot	Part Of Me	0 seconds ago	3:22

TC: Validate that the name and description of the playlist are updated. ID: 131030

Evidence

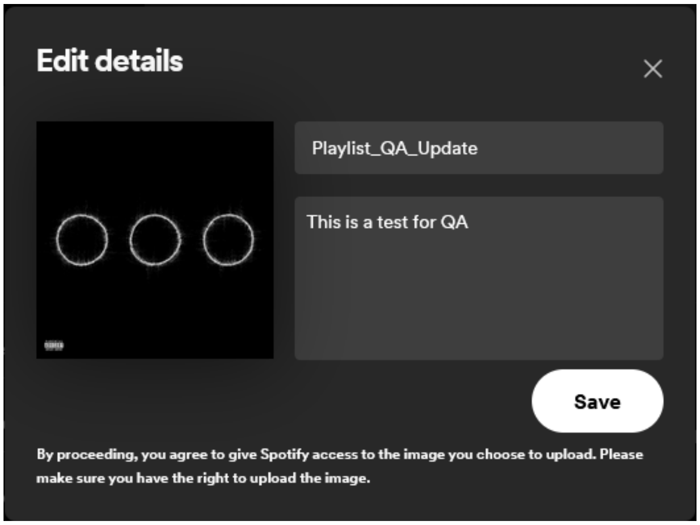


PUT https://api.spotify.com/v1/playlists/5GzYVK2jTqk6jlnsUCv88g

200 OK 229 ms 684 B

```
{
    "name": "Playlist_QA_Update",
    "description": "This is a test for QA",
    "public": false
}
```

Request response



Edit details

Playlist_QA_Update

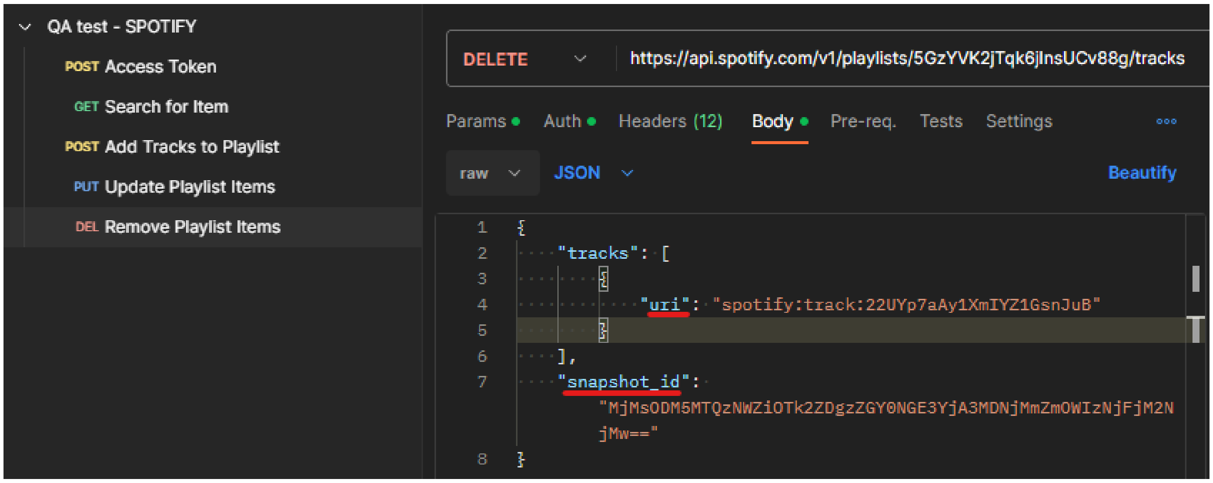
This is a test for QA

By proceeding, you agree to give Spotify access to the image you choose to upload. Please make sure you have the right to upload the image.

TC: Validate that tracks can be deleted from the playlist. ID: 141030

Evidence:

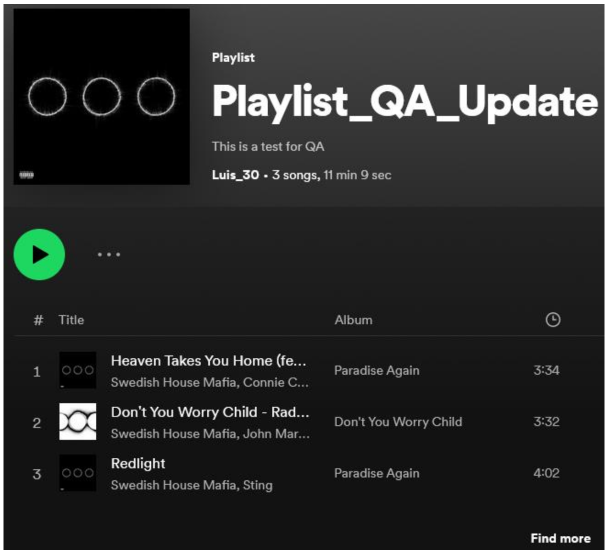
Use the same track_id and also the snapshot_id generated in "Add tracks to playlist".



DELETE https://api.spotify.com/v1/playlists/5GzYVK2jTqk6jlnsUCv88g/tracks

```
{
    "tracks": [
        {
            "uri": "spotify:track:22UYp7aAy1XmIYZ1GsnJuB"
        }
    ],
    "snapshot_id":
        "MjMsODM5MTQzNWZiOTk2ZDgzZGY0NGE3YjA3MDNjMmZmOWIzNjFjM2N
        jMw=="
}
```

Request response


Playlist

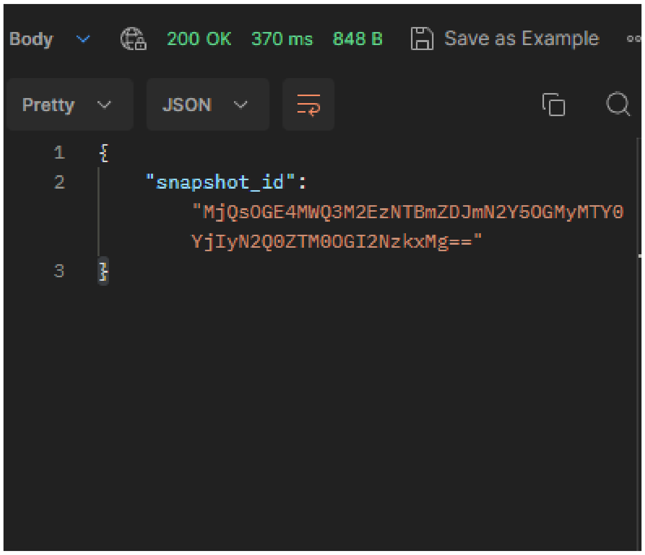
Playlist_QA_Update

This is a test for QA

Luis_30 • 3 songs, 11 min 9 sec

#	Title	Album	◷
1	Heaven Takes You Home (fe... Swedish House Mafia, Connie C...	Paradise Again	3:34
2	Don't You Worry Child - Rad... Swedish House Mafia, John Mar...	Don't You Worry Child	3:32
3	Redlight Swedish House Mafia, Sting	Paradise Again	4:02

Find more



200 OK 370 ms 848 B

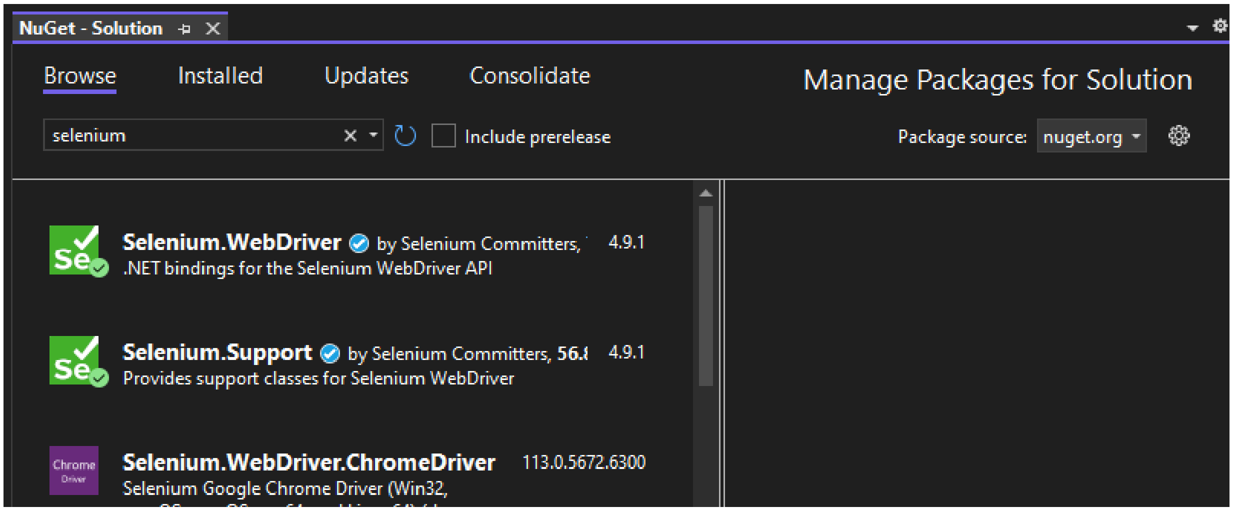
```
{
    "snapshot_id":
        "MjQsOGE4MWQ3M2EzNTBmZDJmN2Y5OGMyMTY0
        YjIyN2Q0ZTM0OGI2NzkxMg=="
}
```

Automated Test QA – NBA.COM

TestCase	Steps	Functionality	Results	Outcome	Test Case ID	Configuration
Validate each redirection of each team in the “Team” tab	• Select the “Team” section and select one. • Select the full Schedule option. • Select different types of option through the calendar filter.	Search Team	It is expected to correctly search for the team schedule through the filter	PASSED	218716	Breakpoint: L, M Browser: Chrme Operating System: Windows 11
Validate the search for a player in the “Player” tab	• Select the “Player” section. • Select different types of option through the player filter and select one. • Enter the player page.	Search Players	It is expected to correctly search for the player through the filter	PASSED	228716	Breakpoint: L, M Browser: Chrme Operating System: Windows 11
Validate purchase of an item in the “Store”	• Select the Store option. • Select a specific section “Jerseys.” • Select different options through the filter and select one item. • Select size and quantity. • Click on “Add to Cart”	Purchase	The purchase filters are expected to work correctly and choose an item, when adding it and going to the checkout it should be loading because it detects the robot.	PASSED	238716	Breakpoint: L, M Browser: Chrme Operating System: Windows 11
Validate SignUp	• Go to the login page. • Click on "Don't have an NBA ID?" • Fill in the user information correctly. • Select a preference for a team and finish the flow	Sign up	The user is expected to register, enter their information, and create it, then select their team preferences and finish the flow.	PASSED	248716	Breakpoint: L, M Browser: Chrme Operating System: Windows 11
Validate SignIn and edit information	• Go to the login page. • Enter email and password and sign in. • Go to user profile. • Edit the general information	Sign in	You are expected to login successfully and edit the general information correctly.	PASSED	258716	Breakpoint: L, M Browser: Chrme Operating System: Windows 11

Wiki

Para hacer las pruebas correspondientes debemos instalar correctamente Selenium en Visual Studio, mediante NuGet.

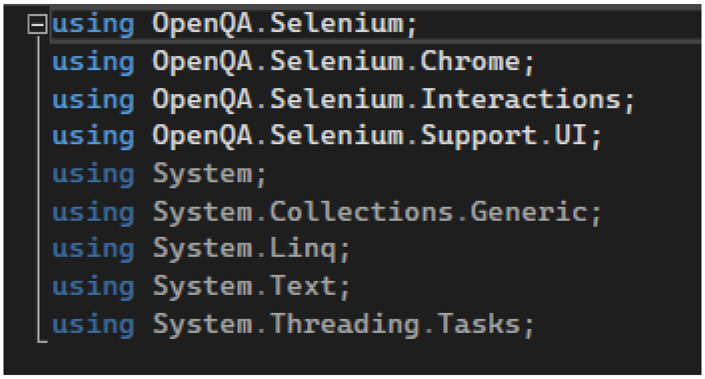


Selenium.WebDriver by Selenium Committers, 4.9.1
.NET bindings for the Selenium WebDriver API

Selenium.Support by Selenium Committers, 56.! 4.9.1
Provides support classes for Selenium WebDriver

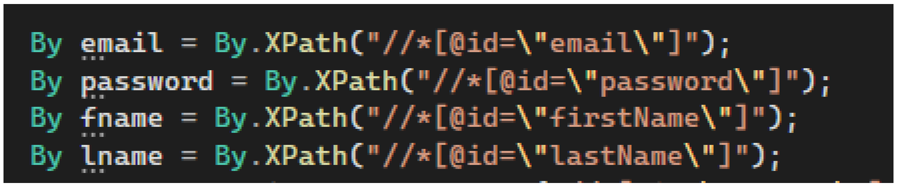
Selenium.WebDriver.ChromeDriver 113.0.5672.6300
Selenium Google Chrome Driver (Win32,

Different libraries will be used for testing.



```
using OpenQA.Selenium;
using OpenQA.Selenium.Chrome;
using OpenQA.Selenium.Interactions;
using OpenQA.Selenium.Support.UI;
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
```

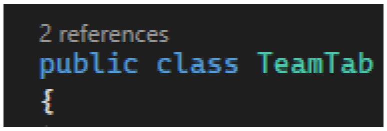
Most of the elements are referenced by XPath for more precision when calling it.



```
By email = By.XPath("//*[@id=\"email\"]");
By password = By.XPath("//*[@id=\"password\"]");
By fname = By.XPath("//*[@id=\"firstName\"]");
By lname = By.XPath("//*[@id=\"lastName\"]");
```

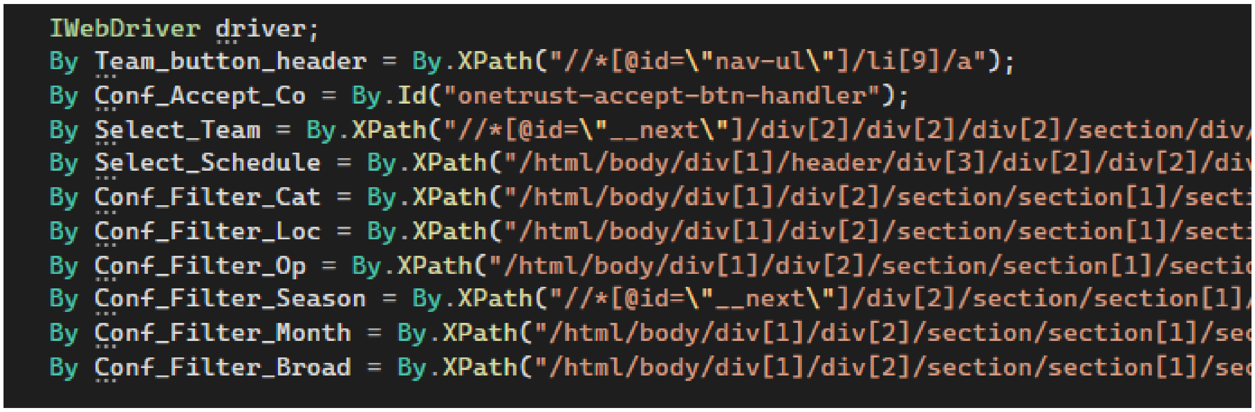
TC: Validate each redirection of each team in the “Team” tab ID: 218716

Class that represents the page to test



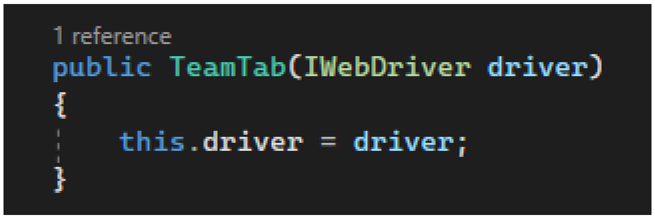
```
2 references
public class TeamTab
{
```

Page elements



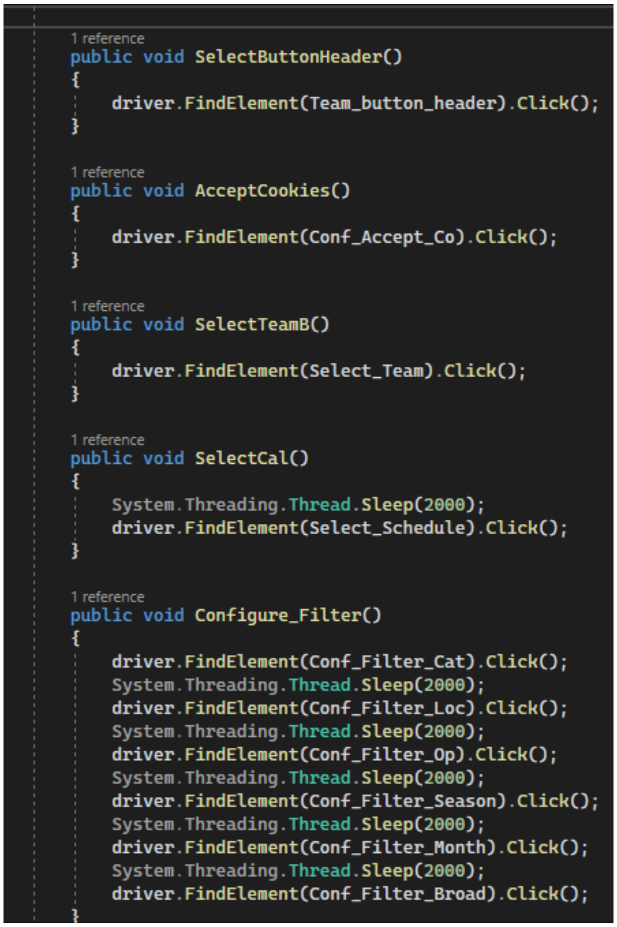
```
IWebDriver driver;
By Team_button_header = By.XPath("//*[@id=\"nav-ul\"]/li[9]/a");
By Conf_Accept_Co = By.Id("onetrust-accept-btn-handler");
By Select_Team = By.XPath("//*[@id=\"__next\"]/div[2]/div[2]/div[2]/section/div
By Select_Schedule = By.XPath("/html/body/div[1]/header/div[3]/div[2]/div[2]/di
By Conf_Filter_Cat = By.XPath("/html/body/div[1]/div[2]/section/section[1]/sect
By Conf_Filter_Loc = By.XPath("/html/body/div[1]/div[2]/section/section[1]/sect
By Conf_Filter_Op = By.XPath("/html/body/div[1]/div[2]/section/section[1]/secti
By Conf_Filter_Season = By.XPath("//*[@id=\"__next\"]/div[2]/section/section[1]
By Conf_Filter_Month = By.XPath("/html/body/div[1]/div[2]/section/section[1]/se
By Conf_Filter_Broad = By.XPath("/html/body/div[1]/div[2]/section/section[1]/se
```

Constructor



```
1 reference
public TeamTab(IWebDriver driver)
{
    this.driver = driver;
}
```

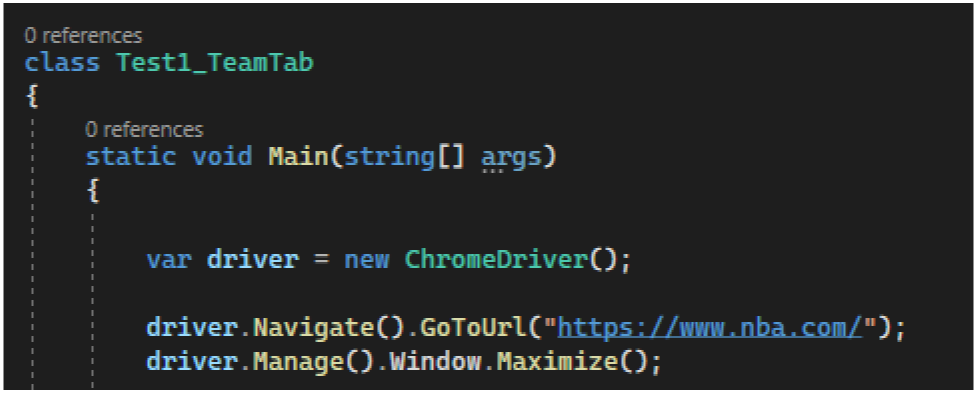
Methods



```
1 reference
public void SelectButtonHeader()
{
    driver.FindElement(Team_button_header).Click();
}

1 reference
public void AcceptCookies()
{
    driver.FindElement(Conf_Accept_Co).Click();
}

1 reference
public void SelectTeamB()
{
    driver.FindElement(Select_Team).Click();
}

1 reference
public void SelectCal()
{
    System.Threading.Thread.Sleep(2000);
    driver.FindElement(Select_Schedule).Click();
}

1 reference
public void Configure_Filter()
{
    driver.FindElement(Conf_Filter_Cat).Click();
    System.Threading.Thread.Sleep(2000);
    driver.FindElement(Conf_Filter_Loc).Click();
    System.Threading.Thread.Sleep(2000);
    driver.FindElement(Conf_Filter_Op).Click();
    System.Threading.Thread.Sleep(2000);
    driver.FindElement(Conf_Filter_Season).Click();
    System.Threading.Thread.Sleep(2000);
    driver.FindElement(Conf_Filter_Month).Click();
    System.Threading.Thread.Sleep(2000);
    driver.FindElement(Conf_Filter_Broad).Click();
}
```

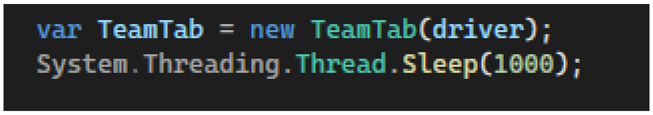
Selenium driver configuration

The NBA website opens



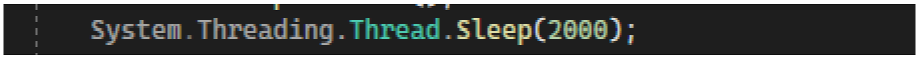
```
0 references
class Test1_TeamTab
{
    0 references
    static void Main(string[] args)
    {

        var driver = new ChromeDriver();

        driver.Navigate().GoToUrl("https://www.nba.com/");
        driver.Manage().Window.Maximize();
```

create the home page instance.

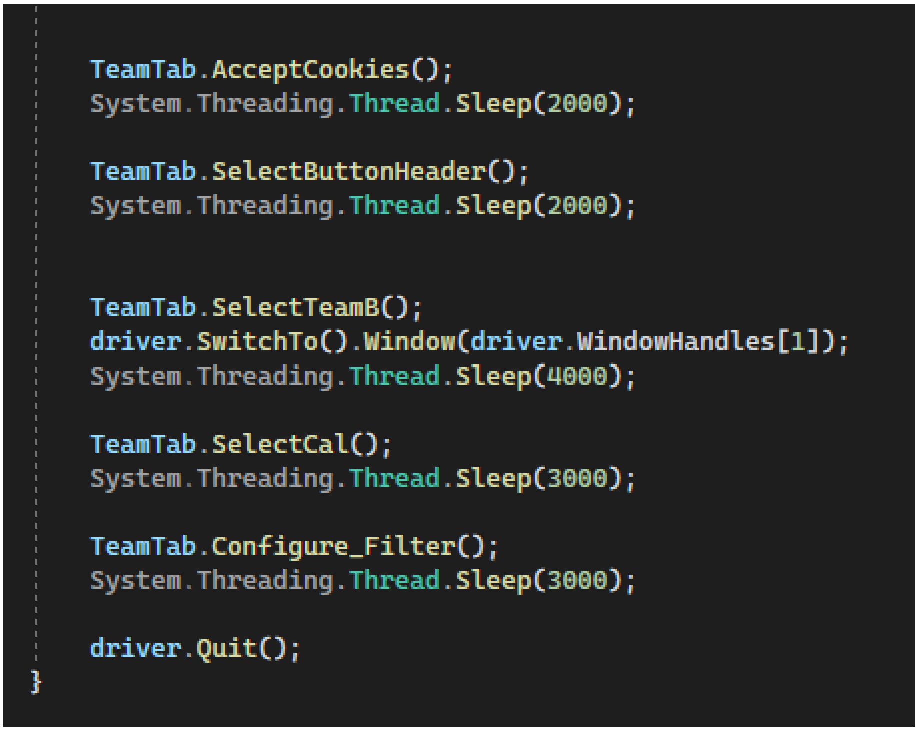


```
var TeamTab = new TeamTab(driver);
System.Threading.Thread.Sleep(1000);
```

I show the transition of the test where a line is introduced between the method so that each step has a pause, and we can better see the step by step.

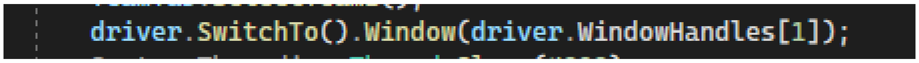


```
    System.Threading.Thread.Sleep(2000);
```



```


    TeamTab.AcceptCookies();
    System.Threading.Thread.Sleep(2000);

    TeamTab.SelectButtonHeader();
    System.Threading.Thread.Sleep(2000);


    TeamTab.SelectTeamB();
    driver.SwitchTo().Window(driver.WindowHandles[1]);
    System.Threading.Thread.Sleep(4000);

    TeamTab.SelectCal();
    System.Threading.Thread.Sleep(3000);

    TeamTab.Configure_Filter();
    System.Threading.Thread.Sleep(3000);

    driver.Quit();
}
```

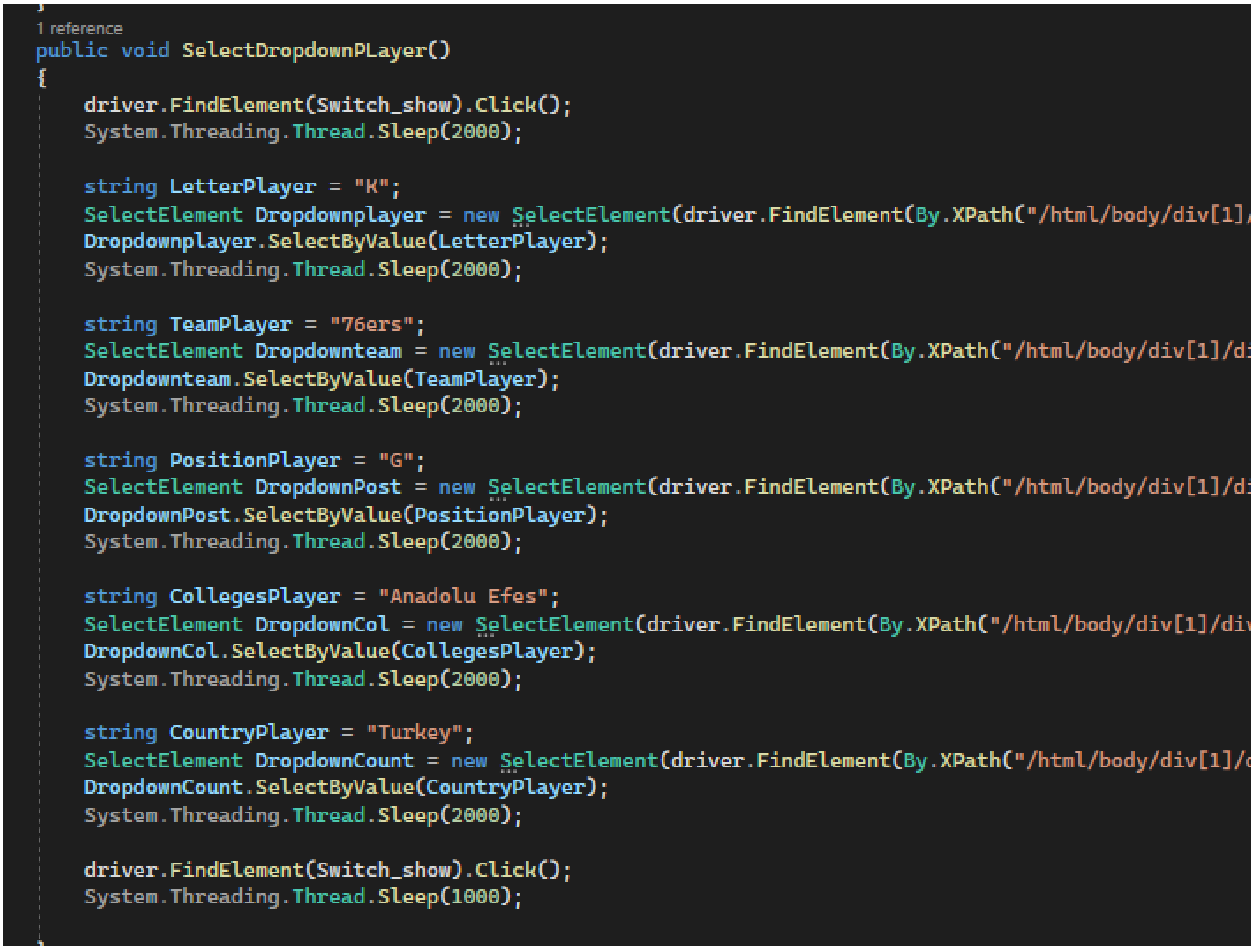
A component is added where the robot changes focus to continue the test in the other tab.



```
    driver.SwitchTo().Window(driver.WindowHandles[1]);
```

TC: Validate the search for a player in the “Player” tab ID: 228716

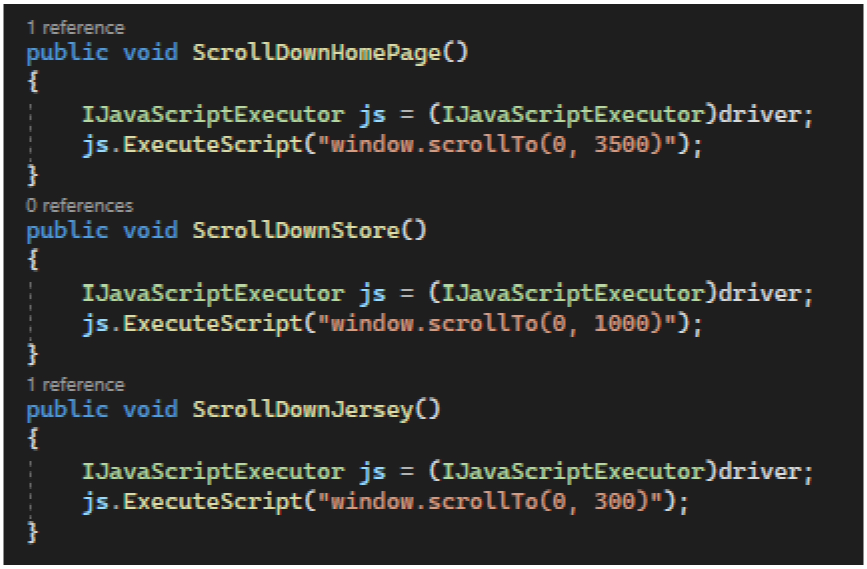
This method is highlighted where an element is searched within a dropdown looking for it by value or text.



```
}
1 reference
public void SelectDropdownPLayer()
{
    driver.FindElement(Switch_show).Click();
    System.Threading.Thread.Sleep(2000);

    string LetterPlayer = "K";
    SelectElement Dropdownplayer = new SelectElement(driver.FindElement(By.XPath("/html/body/div[1]/
    Dropdownplayer.SelectByValue(LetterPlayer);
    System.Threading.Thread.Sleep(2000);

    string TeamPlayer = "76ers";
    SelectElement Dropdownteam = new SelectElement(driver.FindElement(By.XPath("/html/body/div[1]/di
    Dropdownteam.SelectByValue(TeamPlayer);
    System.Threading.Thread.Sleep(2000);

    string PositionPlayer = "G";
    SelectElement DropdownPost = new SelectElement(driver.FindElement(By.XPath("/html/body/div[1]/di
    DropdownPost.SelectByValue(PositionPlayer);
    System.Threading.Thread.Sleep(2000);

    string CollegesPlayer = "Anadolu Efes";
    SelectElement DropdownCol = new SelectElement(driver.FindElement(By.XPath("/html/body/div[1]/div
    DropdownCol.SelectByValue(CollegesPlayer);
    System.Threading.Thread.Sleep(2000);

    string CountryPlayer = "Turkey";
    SelectElement DropdownCount = new SelectElement(driver.FindElement(By.XPath("/html/body/div[1]/
    DropdownCount.SelectByValue(CountryPlayer);
    System.Threading.Thread.Sleep(2000);

    driver.FindElement(Switch_show).Click();
    System.Threading.Thread.Sleep(1000);

}
```

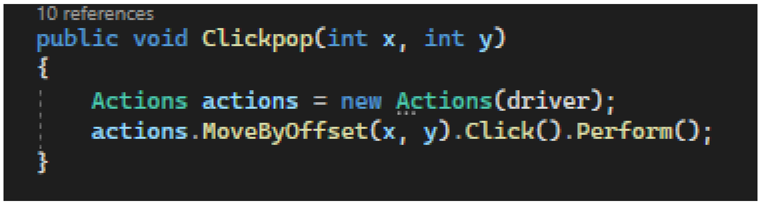
TC: Validate purchase of an item in the “Store”ID: 238716

These methods are highlighted because they are used to scroll the page when the test is running so that the elements can be seen correctly



```
1 reference
public void ScrollDownHomePage()
{
    IJavaScriptExecutor js = (IJavaScriptExecutor)driver;
    js.ExecuteScript("window.scrollTo(0, 3500)");
}
0 references
public void ScrollDownStore()
{
    IJavaScriptExecutor js = (IJavaScriptExecutor)driver;
    js.ExecuteScript("window.scrollTo(0, 1000)");
}
1 reference
public void ScrollDownJersey()
{
    IJavaScriptExecutor js = (IJavaScriptExecutor)driver;
    js.ExecuteScript("window.scrollTo(0, 300)");
}
```

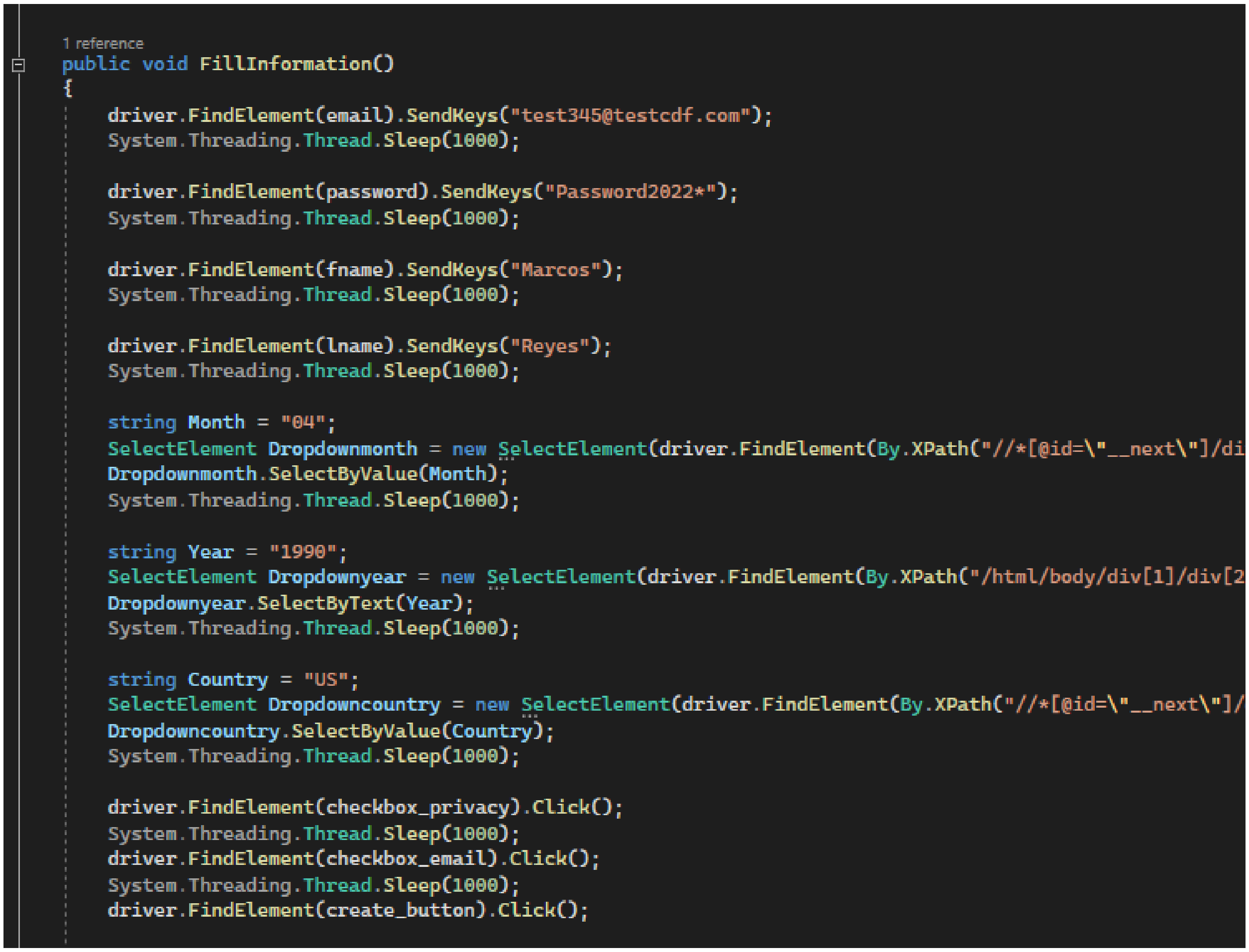
This method helped me close pop ups in the purchase flow.



```
10 references
public void Clickpop(int x, int y)
{
    Actions actions = new Actions(driver);
    actions.MoveByOffset(x, y).Click().Perform();
}
```

TC: Validate SignUp ID: 248716

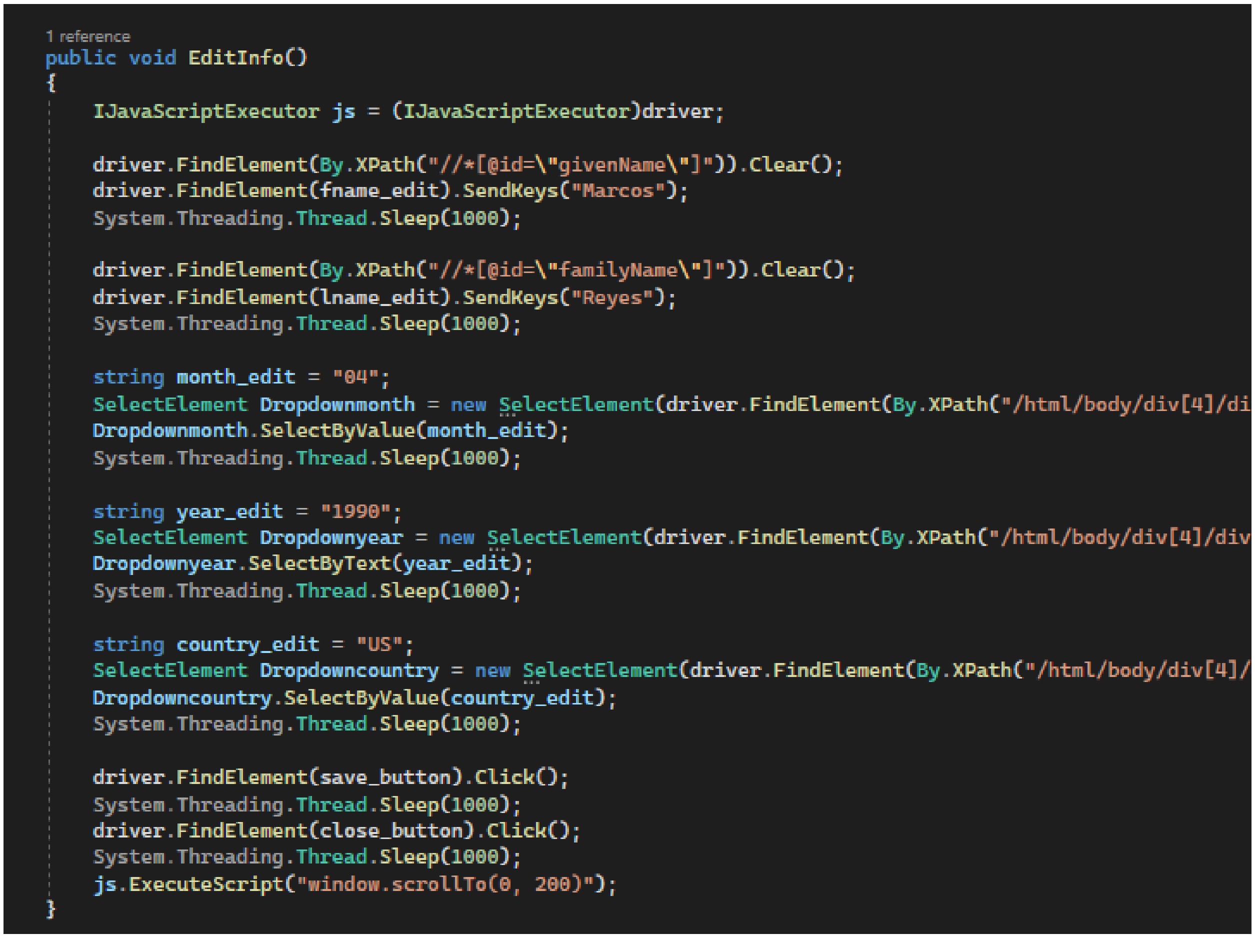
This method is in charge of filling out the SignUp form.



```
1 reference
public void FillInformation()
{
    driver.FindElement(email).SendKeys("test345@testcdf.com");
    System.Threading.Thread.Sleep(1000);

    driver.FindElement(password).SendKeys("Password2022*");
    System.Threading.Thread.Sleep(1000);

    driver.FindElement(fname).SendKeys("Marcos");
    System.Threading.Thread.Sleep(1000);

    driver.FindElement(lname).SendKeys("Reyes");
    System.Threading.Thread.Sleep(1000);

    string Month = "04";
    SelectElement Dropdownmonth = new SelectElement(driver.FindElement(By.XPath("//*[@id=\"__next\"]/di
    Dropdownmonth.SelectByValue(Month);
    System.Threading.Thread.Sleep(1000);

    string Year = "1990";
    SelectElement Dropdownyear = new SelectElement(driver.FindElement(By.XPath("/html/body/div[1]/div[2
    Dropdownyear.SelectByText(Year);
    System.Threading.Thread.Sleep(1000);

    string Country = "US";
    SelectElement Dropdowncountry = new SelectElement(driver.FindElement(By.XPath("//*[@id=\"__next\"]/
    Dropdowncountry.SelectByValue(Country);
    System.Threading.Thread.Sleep(1000);

    driver.FindElement(checkbox_privacy).Click();
    System.Threading.Thread.Sleep(1000);
    driver.FindElement(checkbox_email).Click();
    System.Threading.Thread.Sleep(1000);
    driver.FindElement(create_button).Click();
```

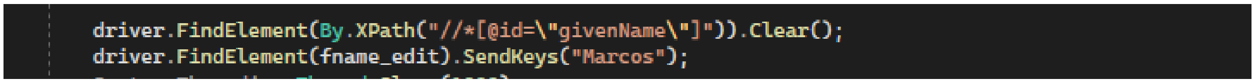
TC: Validate SignIn and edit information ID: 258716

This method edits the user information



```
1 reference
public void EditInfo()
{
    IJavaScriptExecutor js = (IJavaScriptExecutor)driver;

    driver.FindElement(By.XPath("//*[@id=\"givenName\"]")).Clear();
    driver.FindElement(fname_edit).SendKeys("Marcos");
    System.Threading.Thread.Sleep(1000);

    driver.FindElement(By.XPath("//*[@id=\"familyName\"]")).Clear();
    driver.FindElement(lname_edit).SendKeys("Reyes");
    System.Threading.Thread.Sleep(1000);

    string month_edit = "04";
    SelectElement Dropdownmonth = new SelectElement(driver.FindElement(By.XPath("/html/body/div[4]/di
    Dropdownmonth.SelectByValue(month_edit);
    System.Threading.Thread.Sleep(1000);

    string year_edit = "1990";
    SelectElement Dropdownyear = new SelectElement(driver.FindElement(By.XPath("/html/body/div[4]/div
    Dropdownyear.SelectByText(year_edit);
    System.Threading.Thread.Sleep(1000);

    string country_edit = "US";
    SelectElement Dropdowncountry = new SelectElement(driver.FindElement(By.XPath("/html/body/div[4]/
    Dropdowncountry.SelectByValue(country_edit);
    System.Threading.Thread.Sleep(1000);

    driver.FindElement(save_button).Click();
    System.Threading.Thread.Sleep(1000);
    driver.FindElement(close_button).Click();
    System.Threading.Thread.Sleep(1000);
    js.ExecuteScript("window.scrollTo(0, 200)");
}
```

These two lines are important, since the first one deletes everything in the field and the second one introduces the text.



```
    driver.FindElement(By.XPath("//*[@id=\"givenName\"]")).Clear();
    driver.FindElement(fname_edit).SendKeys("Marcos");
```