S Tutorialr.com

Spotify for Developers Artists, Albums & Tracks

♦ Tutorialr.com

Get Multiple Artists

Get Spotify catalogue information for several artists based on their Spotify Ids.

GET https://api.spotify.com/v1/artists				
Header				
Authorization Valid Access Token from Spotify Accounts service				
Query Parameter				
ids Maximum of 50 comma-separated list of artist Spotify Ids				

Header	Response			
	Success			
HTTP Status 200 OK	Artists as Array of Artist Objects			
Error				
Error Code	Error Object			

Step 1





Open a <u>p</u>roject or solution

Open a local Visual Studio project or .sln file

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Then locate and select **SpotifyForDevelopers.sln** and select **Open** if you don't have this file already then please follow the previous parts of the workshop including **Getting Started**, **Authorisation Guide**, **Search & Browse**

In Windows 10 choose Start, and then from the Start

Once done, from the Get started screen for Visual

Studio 2019 select Open a project or solution

Menu find and select Visual Studio 2019







Once opened, in the **Solution Explorer** open the **Pages** section, then open the **Index.cshtml** section and select **Index.cshtml.cs**

View	Project	Build	Debug	Test	Analyze
? 0	pen				

Then from the **Menu** choose **View** and then **Open**

Step 4

In the **Code View** for **Index.cshtml.cs** below the **method** for public async Task<IActionResult> OnPostGetAllFeaturedPlaylistsAsync() { ... } enter the following **method**:

```
public async Task<IActionResult> OnPostGetMultipleArtistsAsync(string value)
{
    LoadToken();
    var values = value.Split(",").ToList();
    var results = await Api.GetMultipleArtistsAsync(values);
    if (results != null)
    {
        Results = results.Select(result => new Result()
        {
            Id = result.Id,
            Name = result.Name,
            Image = result?.Images?.FirstOrDefault()?.Url
        });
    }
    return Page();
}
```

The **method** for OnPostGetMultipleArtistsAsync is used to get **artists** by multiple **Artist Id** on Spotify with the value and populate the **property** for Results accordingly.







In the **Solution Explorer** in the **Pages** section select **Index.cshtml**

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View	Project	Build	Debug	Test	Analyze
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Then from the **Menu** choose **View** and then **Open**

Step 7

Once in the **Code View** for **Index.cshtml** above <!-- Spotify Web API App Authorisation --> enter the following:

This form will **post** to the **method** for OnPostGetMultipleArtistsAsync with the Value as the **Artist Ids** and will output to the **Results**.

Step 8

▶ Local Machine ▼





Once the **Web Application** is running and you select **Client Credentials Flow Login** and scroll down you should see something like the following:

Spotify for Developers - SpotifyF	× +			-	٥	×
\leftarrow \rightarrow \circlearrowright \land http	://localhost:44395/?handler=clientcredentials	2	4	s∕≞	C	
	Category Id Category Id Get Category Playlists	,	14	2		•
	Get Recommendation Genres Genre Get Recommendations					l
	Get All New Releases Get All Featured Playlists					
	Artist Ids Get Multiple Artists					
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Step 10

You can then enter an **Artist Id** or if multiple ones separate them with a **comma** from **Get All New Releases** and select **Get Multiple Artists** and scroll down to view **Results** like the following:

Spotify for Developers	- SpotifyF × +				-	đ	×
\leftarrow \rightarrow O	https://localhost:4	4395/?handler=GetMultipleArtists		公	r⁄=	C	
	Get Recomm	mendation Genres					
	2wV79evel 1						
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	Get Recomm	mendations					
	Get All New	v Releases					
	Get All Feat	tured Playlists					
	Artists						
	2wY79sveU	l1sp5g7SokKOil,6qqNVTkY8uBg9cP3Jd7DAH					
	Get Multiple	le Artists					
	Results						
	Image	ld	Name				
		2w/70col.l1cpEq75el//0il	Cara Smith				
		2w1755we015p5g750kK0ii	San Sinui				
		6aaNV/TkY8uBa9cP31d7DAH	Billie Filich				
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You can exit **Visual Studio 2019** by selecting the **Close** button in the top right of the **application** as that completes this part of the workshop





Spotify for Developers

Get an Artist

Get Spotify catalogue information for a single artist identified by their unique Spotify Id.

GET https://api.spotify.com/v1/artists/{id}				
Header				
Authorization Valid Access Token from Spotify Accounts service				
Path Parameter				
id Spotify Id of the artist				

Header	Response				
Success					
HTTP Status 200 OK	Artist Object				
	Error				
Error Code	Error Object				

Step 1



Open a project or solution

Open a local Visual Studio project or .sln file

If you chose to close **Visual Studio 2019** previously, in **Windows 10** choose **Start**, and then from the **Start Menu** find and select **Visual Studio 2019**

Once done, from the **Get started** screen for **Visual Studio 2019** select **Open a project or solution**

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Desktop	SpotifyForDevelopers	01/02/2020 17:18
Documents	SpotifyForDevelopers.sln	22/01/2020 19:52
Downloads		
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File nam	e: SpotifyForDevelopers slp	✓ All Project Files (* sln:* dsw:* vcw ∨
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Once opened, in the **Solution Explorer** open the **Pages** section, then open the **Index.cshtml** section and select **Index.cshtml.cs**

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View	Project	Build	Debug	Test	Analyze
? 0	pen				

Then from the Menu choose View and then Open

Step 4

In the **Code View** for **Index.cshtml.cs** below the **method** for public async Task<IActionResult> OnPostGetMultipleArtistsAsync(...) { ... } enter the following **method**:

```
public async Task<IActionResult> OnPostGetArtistAsync(string value)
{
    LoadToken();
    var result = await Api.GetArtistAsync(value);
    if (result != null)
    {
        Results = new List<Result> { new Result()
        {
            Id = result.Id,
            Name = result.Name,
            Image = result?.Images?.FirstOrDefault()?.Url
        });
    }
    return Page();
}
```

The **method** for OnPostGetArtistAsync is used to get an **artist** by **Artist Id** on Spotify with the value and populate the **property** for Results accordingly.







In the **Solution Explorer** in the **Pages** section select **Index.cshtml**

Step 6

View	Project	Build	Debug	Test	Analyze
? 0	pen				

Then from the **Menu** choose **View** and then **Open**

Step 7

Once in the **Code View** for **Index.cshtml** above <!-- Artists --> enter the following:

```
class="list-group-item">
<form asp-page-handler="GetArtist" method="post">
<input asp-for="Value" placeholder="Artist Id" class="form-control mb-2" />
<button class="btn btn-primary mb-2">
Get an Artist
</button>
</form>
```

This form will **post** to the **method** for OnPostGetArtistAsync with the Value as the **Artist Id** and will output to the **Results**.

Step 8

Local Machine





Once the Web Application is running and you select Client Credentials Flow Login and scroll down you should see something like the following:

← → O A https://localhost-44395/?handler=clientcredentials 🗚 🗲	C	
	_	
Category Id Get Category Playlists		ľ
Get Recommendation Genres		
Genre Get Recommendations		
Get All New Releases		
Get All Featured Playlists		
Artist Ids Get Multiple Artists		
Artist Id Get an Artist		
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Step 10

You can then enter an Artist Id from Get All New Releases and select Get an Artist and scroll down to view Results like the following:

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Spotify for Developers	- SpotifyF × +		– 10 X	
(→ 0	A https://localhost:443	395/?handler=GetArtist	☆ 左 💽 …	
	6qqNVTkY8u Get Recomm	Bg9cP3Jd7DAH endations		
	Get All New F	Releases		
	Get All Featur	red Playlists		
	Artists			
	6qqNVTkY8u Get Multiple	Bg9cP3Jd7DAH Artists		
	6qqNVTkY8u Get an Artist	Bg9cP3Jd7DAH		
	Results			
	Image	Id	Name	
	E	6qqNVTkY8uBg9cP3Jd7DAH	Billie Eilish	
	© 2020 - SpotifyFor	Developers - Privacy		
Step 11				
			You can stop the web application in Visual St 2019 by selecting the Stop debugging button	udio
Step 12				
			You can choose to exit Visual Studio 2019 by s	selectiı



Get an Artist's Albums

Get Spotify catalogue information about an artist's albums. Optional parameters can be specified to filter and sort the response.

GET https://api.spotify.com/v1/artists/{id}/albums					
Header					
Authorization	Valid Access Token from Spotify Accounts service				
Path Parameter					
id	Spotify ID of the artist				
Query Parameters					
include arouns	Comma-separated list of keywords that will be used to filter the response from: album,				
include_groups	single, appears_on and compilation				
market	ISO 3166-1 alpha-2 country code e.g. "GB" or "from_token" if omitted all releases for all				
market	countries will be returned which may include duplicates				
limit	Maximum number of results to return				
offset	Index of first result to return				

Header	Response					
	Success					
HTTP Status 200 OK Array of Simplified Album Objects wrapped in a Paging Object						
	Error					
Error Code	Error Object					
Step 1						
U Visu	If you chose to close Visual Studio 2019 previously, in Windows 10 choose Start , and then from the Start					

U	Visual Studio 2019
	arsigma Type here to search

Once done, from the **Get started** screen for **Visual Studio 2019** select **Open a project or solution**

Menu find and select Visual Studio 2019



Open a project or solution

Open a local Visual Studio project or .sln file

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Desktop		SpotifyForDevelopers		01/02/2020 17:18	
Documents		SpotifyForDevelopers.sln		22/01/2020 19:52	
Downloads					
👌 Music					
Nictures					
📑 Videos					
🐛 Windows (C:)					
🕩 Network					
-	Ŷ	¢			
F	ile <u>n</u> am	e: SpotifyForDevelopers.sln	~	All Project Files (*.sln;*.dsw;*.vcv	~
		Do not load p	ojects	Open Cancel	







Once opened, in the **Solution Explorer** open the **Pages** section, then open the **Index.cshtml** section and select **Index.cshtml.cs**

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View	Project	Build	Debug	Test	Analyze
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Then from the Menu choose View and then Open

Step 4

In the **Code View** for **Index.cshtml.cs** below the **method** for public async Task<IActionResult> OnPostGetArtistAsync(...) { ... } enter the following **method**:

```
public async Task<IActionResult> OnPostGetArtistAlbumsAsync(string value)
{
    LoadToken();
    var results = await Api.GetArtistAlbumsAsync(value);
    if (results?.Items != null)
    {
        Results = results.Items.Select(result => new Result()
        {
            Id = result.Id,
            Name = result.Name,
            Image = result?.Images?.FirstOrDefault()?.Url
        });
    }
    return Page();
}
```

The **method** for OnPostGetArtistAlbumsAsync is used to get the **albums** of an **artist** by **Artist Id** on Spotify with the value and populate the **property** for Results accordingly.







In the **Solution Explorer** in the **Pages** section select **Index.cshtml**

Step 6

View	Project	Build	Debug	Test	Analyze
? 0	pen				

Then from the **Menu** choose **View** and then **Open**

Step 7

Once in the **Code View** for **Index.cshtml** above <!-- Artists --> enter the following:

```
        <form asp-page-handler="GetArtistAlbums" method="post">
            <input asp-for="Value" placeholder="Artist Id" class="form-control mb-2" />
            <button class="btn btn-primary mb-2">
                 Get an Artist's Albums
                </button>
               </form>
```

This form will **post** to the **method** for OnPostGetArtistAlbumsAsync with the Value as the **Artist Id** and will output to the **Results**.

Step 8

Local Machine





Once the **Web Application** is running and you select **Client Credentials Flow Login** and scroll down you should see something like the following:

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\leftarrow \rightarrow O \triangle ht	ps://localhost:44395/?handler=clientcredentials	\$	Ý	C		
	Get Recommendation Genres					^
	Genre Get Recommendations					
	Get All New Releases					
	Get All Featured Playlists					
	Artists					
	Artist Ids Get Multiple Artists					
	Artist Id Get an Artist					l
	Artist Id Get an Artist's Albums					
©	2020 - SpotifyForDevelopers - Privacy					-

Step 10

You can then enter an **Artist Id** from **Get All New Releases** and select **Get an Artist's Albums** and scroll down to view **Results** like the following:

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\leftarrow \rightarrow 0	https://localho	st:44395/?handler=GetArtistAlbums			体	饽	C		
	Results							Î	
	Image	Id	Name						
		0S0KGZnfBGSIssfF54WSJh	WHEN WE ALL FALL ASLEEP, WHERE DO	D WE GO?					
	No.	5sXSHscDjBez8VF20cSyad	No Time To Die						
		4i3rAwPw7Ln2YrKDusaWyT	everything i wanted						
		6lMlX68jJrx67hiCqdiDvW	bad guy (with Justin Bieber)					ł	
	Acres 1	0LgnntyagLdfW5Dz2OSYHU	WHEN I WAS OLDER (Music Inspired By	r The Film ROMA)					
		0ifM8RTX9HjtCJtY9452bW	come out and play					ł	
	*	2sBB17RXTamvj7Ncps15AK	lovely (with Khalid)						
		1Z0XtKcevvITZ5ydimkYcx	bitches broken hearts						
	15	5m9IO9SriYMPpXTrVIU8P5	MyBoi (TroyBoi Remix)					*	
Step 11									
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Get an Artist's Top Tracks

Get Spotify catalogue information about an artist's top tracks by country.

GET https://api.spotify.com/v1/artists/{id}/top-tracks						
Header						
Authorization	Authorization Valid Access Token from Spotify Accounts service					
	Path Parameter					
id	Spotify Id of the artist					
Query Parameters						
market	ISO 3166-1 alpha-2 country code e.g. "GB" or "from_token"					

Header Response					
	Success				
HTTP Status 200 OK	OK Tracks as Array of up to 10 Track Objects				
	Error				
Error Code	Error Object				
Stop 1					

Step 1

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If you chose to close **Visual Studio 2019** previously, in **Windows 10** choose **Start**, and then from the **Start Menu** find and select **Visual Studio 2019**

Open a <u>p</u>roject or solution

Open a local Visual Studio project or .sln file

📢 Open Project/Solut	tion					×
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	^	Name			Date modified	
3D Objects		.vs		2	2/01/2020 19:52	
Desktop		SpotifyForDevelopers		C	1/02/2020 17:18	
Documents		SpotifyForDevelopers.sln		2	2/01/2020 19:52	
Downloads						
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Notures 🔤 Pictures						
📑 Videos						
🐛 Windows (C:)						
🥩 Network						
	~ <					>
F	ile <u>n</u> ame	SpotifyForDevelopers.sln	~	All Project Fi	les (*.sln;*.dsw;*.vcv	~
		Do not load p	rojects	Qpen	Cancel	

Once done, from the **Get started** screen for **Visual Studio 2019** select **Open a project or solution**







Once opened, in the **Solution Explorer** open the **Pages** section, then open the **Index.cshtml** section and select **Index.cshtml.cs**

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View	Project	Build	Debug	Test	Analyze
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Then from the Menu choose View and then Open

Step 4

In the **Code View** for **Index.cshtml.cs** below the **method** for public async Task<IActionResult> OnPostGetArtistAlbumsAsync(...) { ... } enter the following **method**:

```
public async Task<IActionResult> OnPostGetArtistTopTracksAsync(string value)
{
    LoadToken();
    var results = await Api.GetArtistTopTracksAsync(value, country);
    if (results != null)
    {
        Results = results.Select(result => new Result()
        {
            Id = result.Id,
            Name = result.Name,
            Image = result?.Album?.Images?.FirstOrDefault()?.Url,
            Inner = new Result()
            {
                Id = result?.Album?.Id,
                Name = result?.Album?.Name
            }
        });
    }
    return Page();
}
```

The **method** for OnPostGetArtistTopTracksAsync is used to get the top **tracks** of an **artist** by **Artist Id** on Spotify with the value and populate the **property** for Results accordingly.







In the **Solution Explorer** in the **Pages** section select **Index.cshtml**

Step 6

View	Project	Build	Debug	Test	Analyze
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Then from the Menu choose View and then Open

Step 7

Once in the **Code View** for **Index.cshtml** above <!-- Artists --> enter the following:

```
class="list-group-item">
<form asp-page-handler="GetArtistTopTracks" method="post">
<input asp-for="Value" placeholder="Artist Id" class="form-control mb-2" />
<button class="btn btn-primary mb-2">
Get an Artist's Top Tracks
</button>
</form>
```

This form will **post** to the **method** for OnPostGetArtistTopTracksAsync with the Value as the **Artist Id** and will output to the **Results**.

Step 8

Local Machine -





Once the **Web Application** is running and you select **Client Credentials Flow Login** and scroll down you should see something like the following:

Spotify for Developers - Spotify	× +			-	٥	×
\leftarrow \rightarrow O \triangle http	s://localhost:44395/?handler=clientcredentials	1	4	r¢≡	C	
	Genre Get Recommendations					
	Get All New Releases					
	Get All Featured Playlists					
	Artists					
	Artist Ids					
	Get Multiple Artists					
	Artist Id					
	Get an Artist					
	Artist Id					
	Get an Artist's Albums					
	Artist Id					
	Get an Artist's Top Tracks					
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Step 10

You can then enter an **Artist Id** from **Get All New Releases** and select **Get an Artist's Top Tracks** and scroll down to view **Results** like the following:

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Spotify for Developers -	Spotify: × +						-	0 :	×				
$\leftarrow \rightarrow \circ$	https://loca	lhost:44395/?handler=GetArtistTo	pTracks			\$	☆ (. . 5	••				
	Result	ts											
	Image	Id	Name	ld	Name								
	L	3ZCTVFBt2Brf31RLEnCkWJ	everything i wanted	4i3rAwPw7Ln2YrKDusaWyT	everything i wanted								
	-	2Fxmhks0bxGSBdJ92vM42m	bad guy	0S0KGZnfBGSIssfF54WSJh	WHEN WE ALL FALL ASLEEP, WHERE DO WE GO?								
		73SpzrcaHk0RQPFP73vqVR	No Time To Die	5sXSHscDjBez8VF20cSyad	No Time To Die								
	*	0u2P5u6lvoDfwTYjAADbn4	lovely (with Khalid)	2sBB17RXTamvj7Ncps15AK	lovely (with Khalid)								
	-	43zdsphuZLzwA9k4DJhU0I	when the party's over	0S0KGZnfBGSIssfF54WSJh	WHEN WE ALL FALL ASLEEP, WHERE DO WE GO?				Į.				
	-(Å*=	4SSnFejRGlZikf02HLewEF	bury a friend	050KGZnfBGSIssfF54WSJh	WHEN WE ALL FALL ASLEEP, WHERE DO WE GO?				l				
		6cX5gpmE7PW5FZXzAmW7vK	ocean eyes	5YCdID3eREt72ITZxNL7id	dont smile at me (Expanded Edition)				l				
	-	6CcJMwBtXBylz4zQLzFkKc	i love you	0S0KGZnfBGSIssfF54WSJh	WHEN WE ALL FALL ASLEEP, WHERE DO WE GO?				l				
		6IRdLKIyS4p7XNiP8r6rsx	all the good girls go to hell	0S0KGZnfBGSIssfF54WSJh	WHEN WE ALL FALL ASLEEP, WHERE DO WE GO?				Ŧ				
Step 11													
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Get an Artist's Related Artists

Get Spotify catalogue information about artists like a given artist. Similarity is based on analysis of the Spotify community's listening history.

GET https://api.spotify.com/v1/artists/{id}/top-tracks						
Header						
Authorization	Authorization Valid Access Token from Spotify Accounts service					
Path Parameter						
id	Spotify Id of the artist					

Header		Response					
	Su	ICCESS					
HTTP Status 200 OK	Artists	as Array of up to 20 Artist Objects					
	E	rror					
Error Code		Error Object					
Step 1	al Studio 2019	If you chose to close Visual Studio 2019 previously, in Windows 10 choose Start , and then from the Start					
H P Type here to search Menu find and select Visual Studio 2019							
ල්ඩු Open a	project or solution	Once done, from the Get started screen for Visual Studio 2019 select Open a project or solution					

Open a project or solution

Open a local Visual Studio project or .sln file

💐 Open Project/Solutio	n	×
← → • ↑ 🖡 «	Work → SpotifyForDevel ~ ひ	Search SpotifyForDevelopers
Organise • New f	older	· 🔳 🕗
🧢 This PC	^ Name	Date modified
3D Objects	.vs	22/01/2020 19:52
Desktop	SpotifyForDevelopers	01/02/2020 17:18
Documents	SpotifyForDevelopers.sln	22/01/2020 19:52
Downloads		
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Nictures		
📑 Videos		
🐛 Windows (C:)		
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File	e <u>n</u> ame: SpotifyForDevelopers.sln ~	All Project Files (*.sln;*.dsw;*.vcv ~
	Do not load projects	<u>Open</u> Cancel







Once opened, in the **Solution Explorer** open the **Pages** section, then open the **Index.cshtml** section and select **Index.cshtml.cs**

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View	Project	Build	Debug	Test	Analyze
? 0	pen				

Then from the **Menu** choose **View** and then **Open**

Step 4

In the **Code View** for **Index.cshtml.cs** below the **method** for public async Task<IActionResult> OnPostGetArtistTopTracksAsync(...) { ... } enter the following **method**:

```
public async Task<IActionResult> OnPostGetArtistRelatedArtistsAsync(string value)
{
    LoadToken();
    var results = await Api.GetArtistRelatedArtistsAsync(value);
    if (results != null)
    {
        Results = results.Select(result => new Result()
        {
            Id = result.Id,
            Name = result.Name,
            Image = result?.Images?.FirstOrDefault()?.Url
        });
    }
    return Page();
}
```

The **method** for OnPostGetArtistRelatedArtistsAsync is used to get the related **artists** of an **artist** by **Artist Id** on Spotify with the value and populate the **property** for Results accordingly.







In the **Solution Explorer** in the **Pages** section select **Index.cshtml**

Step 6

View	Project	Build	Debug	Test	Analyze
? 0	pen				

Then from the **Menu** choose **View** and then **Open**

Step 7

Once in the **Code View** for **Index.cshtml** above <!-- Artists --> enter the following:

```
class="list-group-item">
<form asp-page-handler="GetArtistRelatedArtists" method="post">
<input asp-for="Value" placeholder="Artist Id" class="form-control mb-2" />
<button class="btn btn-primary mb-2">
Get an Artist's Related Artists
</button>
</form>
```

This form will **post** to the **method** for OnPostGetArtistRelatedArtistsAsync with the Value as the **Artist Id** and will output to the **Results**.

Step 8

🕨 Local Machine 🔻





Once the **Web Application** is running and you select **Client Credentials Flow Login** and scroll down you should see something like the following:

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\leftrightarrow \rightarrow O \triangle https://localhost.44395/?handler=clientcredentials		☆≡	C	
Get All New Releases				^
Get All Featured Playlists				
Artists				
Artist Ids				
Get Multiple Artists				
Artist Id				
Get an Artist				
Artist Id				
Get an Artist's Albums				
Artist Id				
Get an Artist's Top Tracks				
Artist Id				
Get an Artist's Related Artists				
				4
© 2020 - SpotifyForDevelopers - Privacy				

Step 10

You can then enter an **Artist Id** from **Get All New Releases** and select **Get an Artist's Related Artists** and scroll down to view **Results** like the following:

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	Results			•
	Image	Id	Name	
	3	6beUvFUlKliUYJdLOXNj9C	King Princess	
		163tK9Wjr9P9DmM0AVK7lm	Lorde	
	1	63yrD80RY3RNEM2YDpUpO8	Melanie Martinez	
		3WGpXCJ9YhhfX11TToZcXP	Troye Sivan	
	1	26VFTg2z8YR0cCuwLzESi2	Halsey	
	N.	1o2NpYGqHiCq7FoiYdyd1x	Bea Miller	
		6KImCVD70vtloJWnq6nGn3	Harry Styles	
		2wUjUUtkb5lvLKcGKsKqsR	Alessia Cara	
		4GvEc3ANtPPjt1ZJIIr5ZI	Bazzi	
Step 11				
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		×	You can choose to exit Visu the Close button in the top that completes this part of	ual Studio 2019 by selectin o right of the application as the workshop

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Get Multiple Albums

Get Spotify catalogue information for several albums based on their Spotify Ids.

GET https://api.spotify.com/v1/albums		
Header		
Authorization	Valid Access Token from Spotify Accounts service	
Query Parameter		
ids	Maximum of 20 comma-separated list of album Spotify Ids	
market ISO 3166-1 alpha-2 country code or "from_token" Provide to apply Track Relinking.		

Response
Success
Albums as Array of Album Objects
Error
Error Object

Step 1



If you chose to close **Visual Studio 2019** previously, in **Windows 10** choose **Start**, and then from the **Start Menu** find and select **Visual Studio 2019**

Once done, from the **Get started** screen for **Visual Studio 2019** select **Open a project or solution**

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File <u>n</u>	ame: SpotifyForDevelopers.sln ~ All P	roject Files (*.sln;*.dsw;*.vcv \vee
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Open a project or solution

Open a local Visual Studio project or .sln file







Once opened, in the **Solution Explorer** open the **Pages** section, then open the **Index.cshtml** section and select **Index.cshtml.cs**

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Then from the **Menu** choose **View** and then **Open**

Step 4

In the **Code View** for **Index.cshtml.cs** below the **method** for public async Task<IActionResult> OnPostGetArtistRelatedArtistsAsync(...) { ... } enter the following **method**:

```
public async Task<IActionResult> OnPostGetMultipleAlbumsAsync(string value)
{
    LoadToken();
    var values = value.Split(",").ToList();
    var results = await Api.GetMultipleAlbumsAsync(values);
    if (results != null)
    {
        Results = results.Select(result => new Result()
        {
            Id = result.Id,
            Name = result.Name,
            Image = result?.Images?.FirstOrDefault()?.Url
        });
    }
    return Page();
}
```

The **method** for OnPostGetMultipleAlbumsAsync is used to get **albums** by multiple **Album Id** on Spotify with the value and populate the **property** for Results accordingly.







In the **Solution Explorer** in the **Pages** section select **Index.cshtml**

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View	Project	Build	Debug	Test	Analyze
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Then from the **Menu** choose **View** and then **Open**

Step 7

Once in the **Code View** for **Index.cshtml** above <!-- Spotify Web API App Authorisation --> enter the following:

This form will **post** to the **method** for OnPostGetMultipleAlbumsAsync with the Value as the **Album Ids** and will output to the **Results**.

Step 8

🕨 Local Machine 🔻





Once the **Web Application** is running and you select **Client Credentials Flow Login** and scroll down you should see something like the following:

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\leftrightarrow \rightarrow O \triangle https://localhost:44395/?handler=clientcredentials	A	☆≡	C	
Artist Ids Get Multiple Artists				Î
Artist Id Get an Artist				
Artist Id Get an Artist's Albums				
Artist Id Get an Artist's Top Tracks				
Artist Id Get an Artist's Related Artists				l
Albums				
Album Ids Get Multiple Albums				
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Step 10

You can then enter an **Album Id** or if multiple ones separate them with a **comma** from **Get All New Releases** and select **Get Multiple Albums** and scroll down to view **Results** like the following:

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	Get an Artist'	s Top Tracks				
	5sXSHscDjBe:	z8VF20cSyad,31qVWUdRrlb8thMvts0yYL				
	Get an Artist'	s Related Artists				
	Albums					
	5sXSHscDjBe	z8VF20cSyad,31qVWUdRrlb8thMvts0yYL				
	Get Multiple	Albums				
	Results					
	Image	ld	Name			
	The off	5sXSHscDjBez8VF20cSyad	No Time To Die			
		31qVWUdRrlb8thMvts0yYL	The Slow Rush			
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Step 12						

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You can choose to exit **Visual Studio 2019** by selecting the **Close** button in the top right of the **application** as that completes this part of the workshop





Spotify for Developers

Get an Album

Get Spotify catalogue information for a single album identified by its unique Spotify Id.

GET https://api.spotify.com/v1/albums/{id}		
Header		
Authorization	Valid Access Token from Spotify Accounts service	
Path Parameter		
id	Spotify Id of the album	
market	ISO 3166-1 alpha-2 country code e.g. "GB"	

Header	Response
	Success
HTTP Status 200 OK	Album Object
	Error
Error Code	Error Object

Step 1



If you chose to close **Visual Studio 2019** previously, in **Windows 10** choose **Start**, and then from the **Start Menu** find and select **Visual Studio 2019**

Once done, from the **Get started** screen for **Visual Studio 2019** select **Open a project or solution**

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Open a project or solution

Open a local Visual Studio project or .sln file







Once opened, in the **Solution Explorer** open the **Pages** section, then open the **Index.cshtml** section and select **Index.cshtml.cs**

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Then from the Menu choose View and then Open

Step 4

In the **Code View** for **Index.cshtml.cs** below the **method** for public async Task<IActionResult> OnPostGetMultipleAlbumsAsync(...) { ... } enter the following **method**:

```
public async Task<IActionResult> OnPostGetAlbumAsync(string value)
{
    LoadToken();
    var result = await Api.GetAlbumAsync(value);
    if (result != null)
    {
        Results = new List<Result> { new Result()
        {
            Id = result.Id,
            Name = result.Name,
            Image = result?.Images?.FirstOrDefault()?.Url,
            Inner = new Result()
            {
                Id = result?.Artists?.FirstOrDefault()?.Id,
                Name = result?.Artists?.FirstOrDefault()?.Name
            }
        }};
    }
    return Page();
}
```

The **method** for OnPostGetAlbumAsync is used to get an **album** by **Album Id** on Spotify with the value and populate the **property** for Results accordingly.







In the **Solution Explorer** in the **Pages** section select **Index.cshtml**

Step 6

View	Project	Build	Debug	Test	Analyze
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Then from the Menu choose View and then Open

Step 7

Once in the **Code View** for **Index.cshtml** above <!-- Albums --> enter the following:

```
class="list-group-item">
<form asp-page-handler="GetAlbum" method="post">
<input asp-for="Value" placeholder="Album Id" class="form-control mb-2" />
<button class="btn btn-primary mb-2">
Get an Album
</button>
</form>
```

This form will **post** to the **method** for OnPostGetAlbumAsync with the Value as the **Album Id** and will output to the **Results**.

Step 8

Local Machine





Once the **Web Application** is running and you select **Client Credentials Flow Login** and scroll down you should see something like the following:

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Artist Id Get an Artist				
Artist Id Get an Artist's Albums				
Artist Id Get an Artist's Top Tracks				
Artist Id Get an Artist's Related Artists				
Albums				
Album ids Get Multiple Albums				
Album Id Get an Album				
© 2020 - SpotifyForDevelopers - Privacy				

Step 10

You can then enter an **Album Id** from **Get All New Releases** and select **Get an Album** and scroll down to view **Results** like the following:



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Get an Album's Tracks

Get Spotify catalogue information about an album's tracks. Optional parameters can be used to limit the number of tracks returned.

GET https://api.spotify.com/v1/albums/{id}/tracks				
Header				
Authorization	Valid Access Token from Spotify Accounts service			
Path Parameter				
id	Spotify Id of the album			
Query Parameters				
limit	Maximum number of results to return			
offset	Index of first result to return			
market	ISO 3166-1 alpha-2 country code e.g. "GB" or "from_token". Provide to apply Track Relinking			

Header	Response
	Success
HTTP Status 200 OK	Array of Simplified Track Objects wrapped in a Paging Object
	Error
Error Code	Error Object
Step 1	

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Open a project or solution

Open a local Visual Studio project or .sln file

If you chose to close Visual Studio 2019 previously, in Windows 10 choose Start, and then from the Start Menu find and select Visual Studio 2019

Once done, from the Get started screen for Visual Studio 2019 select Open a project or solution

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Desktop	SpotifyForDevelopers	01/02/2020 17:18
Documents	SpotifyForDevelopers.sln	22/01/2020 19:52
Downloads		
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File <u>n</u> an	e: SpotifyForDevelopers.sln > Do not load projects	All Project Files (*.sln;*.dsw;*.vcv ~ Open Cancel







Once opened, in the **Solution Explorer** open the **Pages** section, then open the **Index.cshtml** section and select **Index.cshtml.cs**

Step 3

View	Project	Build	Debug	Test	Analyze
? 0	pen				

Then from the Menu choose View and then Open

Step 4

In the **Code View** for **Index.cshtml.cs** below the **method** for public async Task<IActionResult> OnPostGetAlbumAsync(...) { ... } enter the following **method**:

```
public async Task<IActionResult> OnPostGetAlbumTracksAsync(string value)
{
    LoadToken();
    var results = await Api.GetAlbumTracksAsync(value, country);
    if (results?.Items != null)
    {
        Results = results.Items.Select(result => new Result()
        {
            Id = result.Id,
            Name = result.Name,
            Image = result?.Album?.Images?.FirstOrDefault()?.Url,
            Inner = new Result()
            {
                Id = result?.Artists?.FirstOrDefault()?.Id,
                Name = result?.Artists?.FirstOrDefault()?.Name
            }
        });
    }
    return Page();
}
```

The **method** for OnPostGetAlbumTracksAsync is used to get the **tracks** of an **album** by **Album Id** on Spotify with the value and populate the **property** for Results accordingly.







In the **Solution Explorer** in the **Pages** section select **Index.cshtml**

Step 6

View	Project	Build	Debug	Test	Analyze
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Then from the **Menu** choose **View** and then **Open**

Step 7

Once in the **Code View** for **Index.cshtml** above <!-- Albums --> enter the following:

```
class="list-group-item">
<form asp-page-handler="GetAlbumTracks" method="post">
<input asp-for="Value" placeholder="Album Id" class="form-control mb-2" />
<button class="btn btn-primary mb-2">
Get an Album's Tracks
</button>
</form>
```

This form will **post** to the **method** for OnPostGetAlbumTracksAsync with the Value as the **Album Id** and will output to the **Results**.

Step 8

🕨 Local Machine 🔻





Once the **Web Application** is running and you select **Client Credentials Flow Login** and scroll down you should see something like the following:

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← → ♡ A	https://localhost:44395/?handler=clientcredentials	ф.	r∕≡	C	
	Artist Id Get an Artist's Albums				•
	Artist Id Get an Artist's Top Tracks				
	Artist Id Get an Artist's Related Artists				
	Albums				
	Album Ids Get Multiple Albums				
	Album Id Get an Album				
	Album Id Get an Album's Tracks				
	© 2020 - SpotifyForDevelopers - Privacy				

Step 10

You can then enter an **Album Id** from **Get All New Releases** and select **Get an Album's Tracks** and scroll down to view **Results** like the following:



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You can choose to exit **Visual Studio 2019** by selecting the **Close** button in the top right of the **application** as that completes this part of the workshop





Get Multiple Tracks

Get Spotify catalogue information for multiple tracks based on their Spotify Ids.

GET https://api.spotify.com/v1/tracks			
Header			
Authorization	Valid Access Token from Spotify Accounts service		
Query Parameter			
ids	Maximum of 50 comma-separated list of track Spotify Ids		
market	ISO 3166-1 alpha-2 country code e.g. "GB". Provide to apply Track Relinking		

Header	Response		
	Success		
HTTP Status 200 OK	Tracks as Array of Track Objects		
Error			
Error Code	Error Object		

Step 1



If you chose to close **Visual Studio 2019** previously, in **Windows 10** choose **Start**, and then from the **Start Menu** find and select **Visual Studio 2019**

Once done, from the **Get started** screen for **Visual Studio 2019** select **Open a project or solution**

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Documents	SpotifyForDevelopers.sln	22/01/2020 19:52
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File	ame: SpotifyForDevelopers.sln ~ All	Project Files (*.sln;*.dsw;*.vcv ~
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Open a project or solution

Open a local Visual Studio project or .sln file







Once opened, in the **Solution Explorer** open the **Pages** section, then open the **Index.cshtml** section and select **Index.cshtml.cs**

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View	Project	Build	Debug	Test	Analyze
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Then from the Menu choose View and then Open

Step 4

In the **Code View** for **Index.cshtml.cs** below the **method** for public async Task<IActionResult> OnPostGetAlbumTracksAsync(...) { ... } enter the following **method**:

```
public async Task<IActionResult> OnPostGetSeveralTracksAsync(string value)
{
    LoadToken();
    var values = value.Split(",").ToList();
    var results = await Api.GetSeveralTracksAsync(values);
    if (results != null)
    {
        Results = results.Select(result => new Result()
        {
            Id = result.Id,
            Name = result.Name,
            Image = result?.Album?.Images?.FirstOrDefault()?.Url
        });
    }
    return Page();
}
```

The **method** for OnPostGetSeveralTracksAsync is used to get **tracks** by multiple **Track Ids** on Spotify with the value and populate the **property** for Results accordingly.







In the **Solution Explorer** in the **Pages** section select **Index.cshtml**

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View	Project	Build	Debug	Test	Analyze
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Then from the **Menu** choose **View** and then **Open**

Step 7

Once in the **Code View** for **Index.cshtml** above <!-- Spotify Web API App Authorisation --> enter the following:

This form will **post** to the **method** for OnPostGetSeveralTracksAsync with the Value as the **Track Ids** and will output to the **Results**.

Step 8

Local Machine





Once the **Web Application** is running and you select **Client Credentials Flow Login** and scroll down you should see something like the following:

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	Get an Artist's Top Tracks Artist Id Get an Artist's Related Artists				ŕ
	Albums				
	Album Ids				
	Get Multiple Albums				
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	Get an Album				
	Album Id				
	Get an Album's Tracks				ł
	Tracks				
	Track lds				
	Get Multiple Tracks				
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Step 10

You can then enter an **Album Id** from **Get All New Releases** select **Get an Album's Tracks** and copy some **Track Ids** to use and select **Get Multiple Tracks** and scroll down to view **Results** like the following:

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j l≧ Spatify for Developer ← → Ŭ	A https://localhost.443 Get Multiple / SYdibPenANM Get an Album	95/?handler=GetSeveralTracks		- a × ☆ ☆ € …	
	SYdibPenANM Get an Album Tracks SYdibPenANM Get Multiple T	EMZ2NtG840v,3gYveYzeG2u9I7dDhTfBsJ EMZ2NtG840v,3gYveYzeG2u9I7dDhTfBsJ facks			
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Step 12					
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Spotify for Developers

Get a Track

Get Spotify catalogue information for a single track identified by its unique Spotify Id.

	GET https://api.spotify.com/v1/tracks/{id}		
Header			
Authorization	Valid Access Token from Spotify Accounts service		
	Path Parameter		
id	Spotify Id of the track		
market	ISO 3166-1 alpha-2 country code e.g. "GB". Provide to apply Track Relinking		

Header	Response
	Success
HTTP Status 200 OK	Track Object
	Error
Error Code	Error Object

Step 1



If you chose to close **Visual Studio 2019** previously, in **Windows 10** choose **Start**, and then from the **Start Menu** find and select **Visual Studio 2019**

Once done, from the **Get started** screen for **Visual Studio 2019** select **Open a project or solution**

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Documents	SpotifyForDevelopers.sln	22/01/2020 19:52
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🚆 Videos		
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🔮 Network 🗸	<	
File <u>n</u> a	me: SpotifyForDevelopers.sln	All Project Files (*.sln;*.dsw;*.vcw ~
	Do not load projects	Qpen Cancel

Open a project or solution

Open a local Visual Studio project or .sln file







Once opened, in the **Solution Explorer** open the **Pages** section, then open the **Index.cshtml** section and select **Index.cshtml.cs**

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View	Project	Build	Debug	Test	Analyze
? 0	pen				

Then from the Menu choose View and then Open

Step 4

In the **Code View** for **Index.cshtml.cs** below the **method** for public async Task<IActionResult> OnPostGetSeveralTracksAsync(...) { ... } enter the following **method**:

```
public async Task<IActionResult> OnPostGetTrackAsync(string value)
{
    LoadToken();
    var result = await Api.GetTrackAsync(value);
    if (result != null)
    {
        Results = new List<Result> { new Result()
        {
            Id = result.Id,
            Name = result.Name,
            Image = result?.Album?.Images?.FirstOrDefault()?.Url,
            Inner = new Result()
            {
                Id = result?.Artists?.FirstOrDefault()?.Id,
                Name = result?.Artists?.FirstOrDefault()?.Name
            }
        }};
    }
    return Page();
}
```

The **method** for OnPostGetTrackAsync is used to get a **track** by **Track Id** on Spotify with the value and populate the **property** for Results accordingly.







In the **Solution Explorer** in the **Pages** section select **Index.cshtml**

Step 6

View	Project	Build	Debug	Test	Analyze
? 0	pen				

Then from the **Menu** choose **View** and then **Open**

Step 7

Once in the **Code View** for **Index.cshtml** above <!-- Tracks --> enter the following:

This form will **post** to the **method** for OnPostGetTrackAsync with the Value as the **Track Id** and will output to the **Results**.

Step 8

🕨 Local Machine 🔻





Once the **Web Application** is running and you select **Client Credentials Flow Login** and scroll down you should see something like the following:

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	Get an Artist's Related Artists				
	Albums				
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	Album Id				
	Get an Album				
	Album Id				
	Get an Album's Tracks				
	Tracks				
	Track Ids				
	Get Multiple Tracks				
	Track Id				
	Get a Track				
	© 2020 - SpotifyForDevelopers - Privacy				

Step 10

You can then enter an **Album Id** from **Get All New Releases** select **Get an Album's Tracks** and copy a **Track Id** to use and select **Get a Track** and scroll down to view **Results** like the following:

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	3gYveY	zeG2u9I7dDhTfBsJ						
	Get an a	Album's Tracks						
	Tracks							
	3gYveY	zeG2u9I7dDhTfBsJ						
	Get Mu	Itiple Tracks						
	3gYveY Get a Tr	zeG2u9I7dDhTfBsJ						
	Results							
	Image	ld	Name	Id	Name			
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	© 2020 - Spot	ifyForDevelopers - Privacy					,	
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				You can 2019 by	n stop the web ap y selecting the St	oplicatic op debu	on in Visual Studio Igging button	
Step 12								
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Get Audio Features for Several Tracks

Get audio feature information for a single track identified by its unique Spotify Id.

https://api.spotify.com/v1/audio-features			
Header			
Authorization	Authorization Valid Access Token from Spotify Accounts service		
Path Parameter			
ids Maximum of 100 comma-separated list of track Spotify Ids			

Header	Response			
	Success			
HTTP Status 200 OK	Audio Features with Array of Audio Features Object			
	Error			
Error Code	Error Object			
HTTP Status 200 OK Error Code	Audio Features with Array of Audio Features Object Error Error Object			

Step 1





Open a <u>p</u>roject or solution

Open a local Visual Studio project or .sln file

Open Project/Solution		×
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SThis PC	Name	Date modified
3D Objects	.vs	22/01/2020 19:52
Desktop	SpotifyForDevelopers	01/02/2020 17:18
Documents	SpotifyForDevelopers.sln	22/01/2020 19:52
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File <u>n</u> a	me: SpotifyForDevelopers.sln v All	Project Files (*.sln;*.dsw;*.vcv ~
	Do not load projects	Qpen Cancel

Then locate and select **SpotifyForDevelopers.sln** and select **Open** if you don't have this file already then please follow the previous parts of the workshop including **Getting Started**, **Authorisation Guide**, **Search & Browse** and **Artists**, **Albums & Tracks**

If you chose to close Visual Studio 2019 previously, in

Windows 10 choose Start, and then from the Start

Once done, from the Get started screen for Visual

Studio 2019 select Open a project or solution

Menu find and select Visual Studio 2019







Once opened, in the **Solution Explorer** open the **Pages** section, then open the **Index.cshtml** section and select **Index.cshtml.cs**

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View	Project	Build	Debug	Test	Analyze
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Then from the Menu choose View and then Open

Step 4

In the **Code View** for **Index.cshtml.cs** below the **method** for public async Task<IActionResult> OnPostGetTrackAsync(...) { ... } enter the following **method**:

```
public async Task<IActionResult> OnPostGetAudioFeaturesForSeveralTracksAsync(string value)
{
    LoadToken();
    var values = value.Split(",").ToList();
    var results = await Api.GetSeveralTracksAudioFeaturesAsync(values);
    if (results != null)
    {
        Results = results.Select(result => new Result()
        {
            Name = System.Text.Json.JsonSerializer.Serialize(result,
                new System.Text.Json.JsonSerializerOptions()
                { WriteIndented = true })
        });
    }
    return Page();
}
```

The **method** for OnPostGetAudioFeaturesForSeveralTracksAsync is used to get **audio features** for **tracks** by multiple **Track Ids** on Spotify with the value and populate the **property** for Results accordingly.







In the **Solution Explorer** in the **Pages** section select **Index.cshtml**

Step 6

View	Project	Build	Debug	Test	Analyze
? 0	pen				

Then from the Menu choose View and then Open

Step 7

Once in the **Code View** for **Index.cshtml** above <!-- Tracks --> enter the following:

```
class="list-group-item">
<form asp-page-handler="GetAudioFeaturesForSeveralTracks" method="post">
<input asp-for="Value" placeholder="Track Ids" class="form-control mb-2" />
<button class="btn btn-primary mb-2">
Get Audio Features for Several Tracks
</button>
</form>
```

This form will **post** to the **method** for GetAudioFeaturesForSeveralTracks with the Value as the **Track Ids** and will output to the **Results**.

Step 8

🕨 Local Machine 🔻





Once the **Web Application** is running and you select **Client Credentials Flow Login** and scroll down you should see something like the following:

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	Album Ids Get Multiple Albums				
	Album Id Get an Album				
	Album Id Get an Album's Tracks				
	Tracks				
	Track Ids Get Multiple Tracks				
	Track Id Get a Track				
	Track lds Get Audio Features for Several Tracks				
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Step 10

You can then enter an **Album Id** from **Get All New Releases** select **Get an Album's Tracks** and copy some **Track Ids** to use and select **Get Audio Features for Several Tracks** and scroll down to view **Results** like the following:

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$\leftarrow \rightarrow \circ$	https://localhost:44395/?handler=GetAudioFeaturesForSeveralTracks		竛	¢≡	C		
	Tracks						
	5YdibPcnANMEMZ2NtG840v,3gYveYzeG2u9I7dDhTfBsJ						
	Get Multiple Tracks						
	5YdibPcnANMEMZ2NtG840v;3gYveYzeG2u9I7dDhTfBsJ						
	SYdibPcnANMEMZ2Nt6840v.3gYveYzeG2u9I7dDhTf8sJ						
	Results						
	Name						
	("Acousticness": 0.0582, "AnalysisUrl": "https://api.spotify.com/v1/audio-a "Energy": 0.744, "Instrumentalness": 0.00106, "Key": 8, "Liveness": 0.0304, "TimeSignature": 4, "TrackHref": "https://api.spotify.com/v1/tracks/5YdibPc "Name": null, "Type": "audio_features", "Href": null, "ExternalUrls": null, "Ur	nalysis/SYdibPcnANMEMZ2NtG840v", "Danceability": 0.869, "Duration": 255000, Loudness": -6.637, "Mode": 1, "Speechiness": 0.0647, "Tempo": 101.985, :nANMEMZ2NtG840v", "Valence": 0.831, "Id": "SYdibPcnANMEMZ2NtG840v", i": "spotify:track:SYdibPcnANMEMZ2NtG840v", "Error": null }					
	("Acousticness": 0.0464, "AnalysisUrl": "https://api.spotify.com/v1/audio- "Energy": 0.677, "Instrumentalness": 1.88E-05, "Key": 5, "Liveness": 0.0811, "TimeSignature": 4, "TrackHreft": "https://api.spotify.com/v1/tracks/3gYvef null, "Type": "audio_features", "Hreft: null, "ExternalUrls": null, "Un": "spotif	nalysis/3gYveYzeG2u917dDhTfBsI", "Danceability": 0.78, "Duration": 300040, "Loudness": -6.354, "Mode": 1, "Speechiness": 0.0437, "Tempo": 103.984, zeG2u917dDhTfBsI", "Valence": 0.932, "Id": "3gYveYzeG2u917dDhTfBsI", "Name": jytrack3gYveYzeG2u917dDhTfBsI", "Erron": null)					
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		that completes this p	bart	of	the	e w	orkshop



Get Audio Features for a Track

Get audio feature information for a single track identified by its unique Spotify Id.

GET https://api.spotify.com/v1/audio-features/{id}				
Header				
Authorization Valid Access Token from Spotify Accounts service				
Path Parameter				
id Spotify Id of the track				

Header	Response				
Success					
HTTP Status 200 OK	Audio Features Object				
	Error				
Error Code	Error Object				

Step 1



Open a project or solution

Open a local Visual Studio project or .sln file

If you chose to close **Visual Studio 2019** previously, in **Windows 10** choose **Start**, and then from the **Start Menu** find and select **Visual Studio 2019**

Once done, from the **Get started** screen for **Visual Studio 2019** select **Open a project or solution**

🔀 Open Project/Solution					×
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3D Objects	.vs		22/0	1/2020 19:52	
Desktop	SpotifyForDevelopers		01/0	2/2020 17:18	
Documents	SpotifyForDevelopers.sln		22/0	1/2020 19:52	
Downloads					
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File <u>n</u> ame	: SpotifyForDevelopers.sln	~ All	Project Files (*.sln;*.dsw;*.vcv	\sim
	Do not load project	s	Qpen	Cancel	







Once opened, in the **Solution Explorer** open the **Pages** section, then open the **Index.cshtml** section and select **Index.cshtml.cs**

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View	Project	Build	Debug	Test	Analyze
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Then from the **Menu** choose **View** and then **Open**

Step 4

In the **Code View** for **Index.cshtml.cs** below the **method** for public async Task<IActionResult> OnPostGetAudioFeaturesForSeveralTracksAsync(...) { ... } enter the following **method**:

The **method** for OnPostGetAudioFeaturesForTrackAsync is used to get **audio features** for **track** by **Track Id** on Spotify with the value and populate the **property** for Results accordingly.







In the **Solution Explorer** in the **Pages** section select **Index.cshtml**

Step 6

View	Project	Build	Debug	Test	Analyze
? 0	pen				

Then from the **Menu** choose **View** and then **Open**

Step 7

Once in the **Code View** for **Index.cshtml** above <!-- Tracks --> enter the following:

```
class="list-group-item">
<form asp-page-handler="GetAudioFeaturesForTrack" method="post">
<input asp-for="Value" placeholder="Track Id" class="form-control mb-2" />
<button class="btn btn-primary mb-2">
Get Audio Features for a Track
</button>
</form>
```

This form will **post** to the **method** for OnPostGetAudioFeaturesForTrackAsync with the Value as **Track Id** and will output to the **Results**.

Step 8

🕨 Local Machine 🔻





Once the **Web Application** is running and you select **Client Credentials Flow Login** and scroll down you should see something like the following:

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Album Id Get an Album				•
Album Id Get an Album's Tracks				
Tracks				
Track Ids Get Multiple Tracks				
Track ld Get a Track				
Track Ids Get Audio Features for Several Tracks				ł
Track Id Get Audio Features for a Track				
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Step 10

You can then enter an **Album Id** from **Get All New Releases** select **Get an Album's Tracks** and copy a **Track Id** to use and select **Get Audio Features for a Track** and scroll down to view **Results** like the following:

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	Tracks					Î	
	3gYveYzeG2u9I7dDhTfBsJ						
	Get Multiple Tracks						
	3gYveYzeG2u9I7dDhTfBsJ						
	Get a Track						
	3gYveYzeG2u9I7dDhTfBsJ						
	Get Audio Peaturies for Several Tracks						
	3gYveYzeG2u9I7dDhTfBsJ Get Audio Features for a Track						
	Results						
	Name						
	{ "Acousticness"; 0.0464, "AnalysisUrl"; "https://api.spotify.com/v1/audio-analysis/3gYveYzeG2u9I7dDh1 "Energy": 0.677, "Instrumentalness": 1.88E-05, "Key": 5, "Liveness": 0.0811, "Loudness": -6.354, "Mode": "TimeSignature": 4, "TrackHref": "https://api.spotify.com/v1/tracks/3gYveYzeG2u9I7dDhTBsJ", "Valence null, "Type": "audio_features", "Href": null, "ExternalUrls": null, "Un": "spotify.track3gYveYzeG2u9I7dDhT	[fBsJ", "Danceability": 0.78, "Duration": 300040, 1, "Speechiness": 0.0437, "Tempo": 103.984, ": 0.932, "Id": "3gYveYzeG2u9I7dDhTfBsJ", "Name": TBsJ", "Error": null }				l	
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		You can choose to ex	cit V	′isι	ıal	Stuc	lio 2019

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You can choose to exit **Visual Studio 2019** by selecting the **Close** button in the top right of the **application** as that completes this part of the workshop





Get Audio Analysis for a Track

Get a detailed audio analysis for a single track identified by its unique Spotify Id.

GET https://api.spotify.com/v1/audio-analysis/{id}				
Header				
Authorization	Valid Access Token from Spotify Accounts service			
Path Parameter				
id	Spotify Id of the track			

Header	Response				
Success					
HTTP Status 200 OK	Audio Analysis Object				
Error					
Error Code	Error Object				

Step 1



Open a project or solution

Open a local Visual Studio project or .sln file



Once done, from the **Get started** screen for **Visual Studio 2019** select **Open a project or solution**

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	· . (2)
Name	Date modified
.vs	22/01/2020 19:52
SpotifyForDevelopers	01/02/2020 17:18
SpotifyForDevelopers.sln	22/01/2020 19:52
c	>
e: SpotifyForDevelopers.sln ~	All Project Files (*.sln;*.dsw;*.vcv ~
Do not load projects	Qpen Cancel
	SpotifyForDevel O Name Ns SpotifyForDevelopers SpotifyForDevelopers.sln Do not load projects







Once opened, in the **Solution Explorer** open the **Pages** section, then open the **Index.cshtml** section and select **Index.cshtml.cs**

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View	Project	Build	Debug	Test	Analyze
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Then from the **Menu** choose **View** and then **Open**

Step 4

In the **Code View** for **Index.cshtml.cs** below the **method** for public async Task<IActionResult> OnPostGetAudioFeaturesForTrackAsync(...) { ... } enter the following **method**:

The **method** for OnPostGetTrackAudioAnalysisAsync is used to get **audio analysis** for **track** by **Track Id** on Spotify with the value and populate the **property** for Results accordingly.







In the **Solution Explorer** in the **Pages** section select **Index.cshtml**

Step 6

View	Project	Build	Debug	Test	Analyze
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Then from the **Menu** choose **View** and then **Open**

Step 7

Once in the **Code View** for **Index.cshtml** above <!-- Tracks --> enter the following:

```
class="list-group-item">
        <form asp-page-handler="GetTrackAudioAnalysis" method="post">
        <input asp-for="Value" placeholder="Track Id" class="form-control mb-2" />
        <button class="btn btn-primary mb-2">
        Get Audio Analysis for a Track
        </button>
        </form>
```

This form will **post** to the **method** for GetTrackAudioAnalysis with the Value as **Track Id** and will output to the **Results**.

Step 8

Local Machine





Once the **Web Application** is running and you select **Client Credentials Flow Login** and scroll down you should see something like the following:

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	Album Id Get an Album's Tracks				•
	Tracks				
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	Get Multiple Tracks				
	Track Id				
	Get a Track				
	Track Ids				
	Get Audio Features for Several Tracks				
	Track Id				
	Get Audio Features for a Track				
	Track Id Get Audio Analysis for a Track				
	© 2020 - SpotifyForDevelopers - Privacy				

Step 10

You can then enter an **Album Id** from **Get All New Releases** select **Get an Album's Tracks** and copy a **Track Id** to use and select **Get Audio Analysis for a Track** and scroll down to view **Results** like the following:

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Spotify for Developers



