Practical Tasks

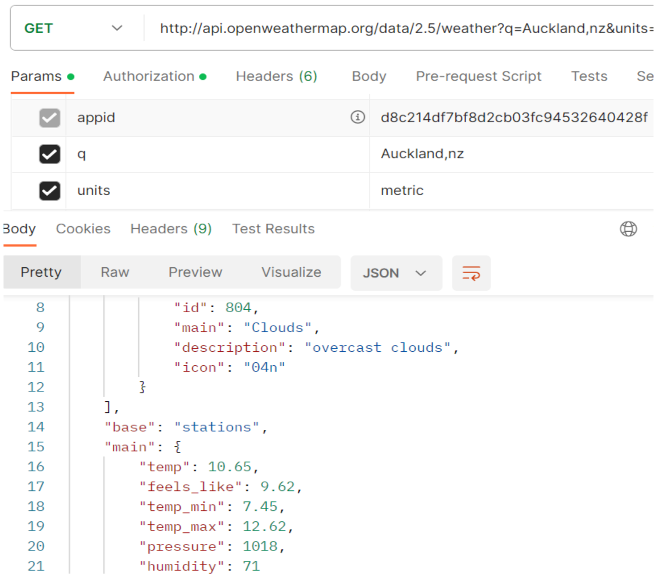
IT6038 Web Services Practical Tasks Ciar Smythe (20210993)

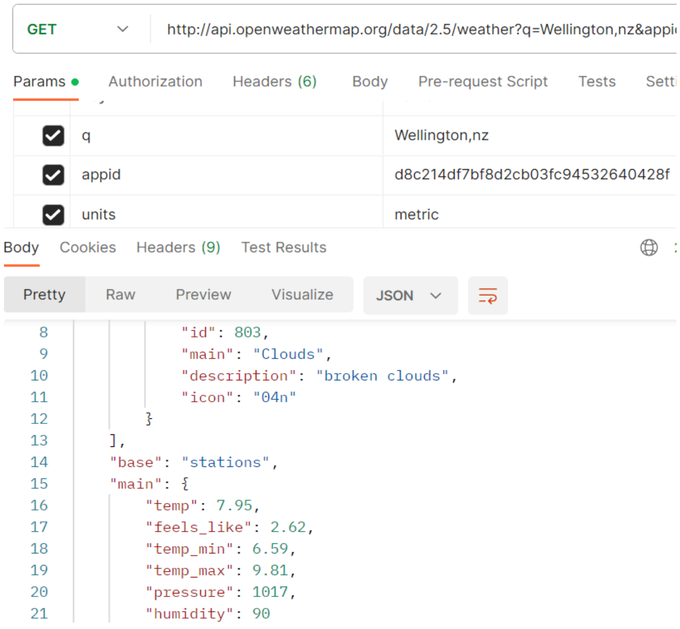
Part A:

Task 1: Using Postman to connect to Weather API

1. Get weather description and minimum and maximum temperature in Celsius

City	Weather Description	Min. Temp	Max. Temp	Screenshot

Auckland	Overcast Clouds	7.45 C	12.62 C	
				GET http://api.openweathermap.org/data/2.5/weather?q=Auckland,nz&units=
				 Params ● Authorization ● Headers (6) Body Pre-request Script Tests Se
				☑ appid d8c214df7bf8d2cb03fc94532640428f
				☑ q Auckland,nz
				☑ units metric
				 Body Cookies Headers (9) Test Results Pretty Raw Preview Visualize JSON
				"id": 804,
				"main": "Clouds",
				"description": "overcast clouds",
				"icon": "04n"
				}
				],
				"base": "stations",
				"main": {
				"temp": 10.65,
				"feels_like": 9.62,
				"temp_min": 7.45,
				"temp_max": 12.62,
				"pressure": 1018,
				"humidity": 71

Wellington	Broken Clouds	6.59 C	9.81 C	
				GET http://api.openweathermap.org/data/2.5/weather?q=Wellington,nz&appi
				 Params ● Authorization Headers (6) Body Pre-request Script Tests Sett
				☑ q Wellington,nz
				☑ appid d8c214df7bf8d2cb03fc94532640428f
				☑ units metric
				 Body Cookies Headers (9) Test Results Pretty Raw Preview Visualize JSON
				"id": 803,
				"main": "Clouds",
				"description": "broken clouds",
				"icon": "04n"
				}
				],
				"base": "stations",
				"main": {
				"temp": 7.95,
				"feels_like": 2.62,
				"temp_min": 6.59,
				"temp_max": 9.81,
				"pressure": 1017,
				"humidity": 90

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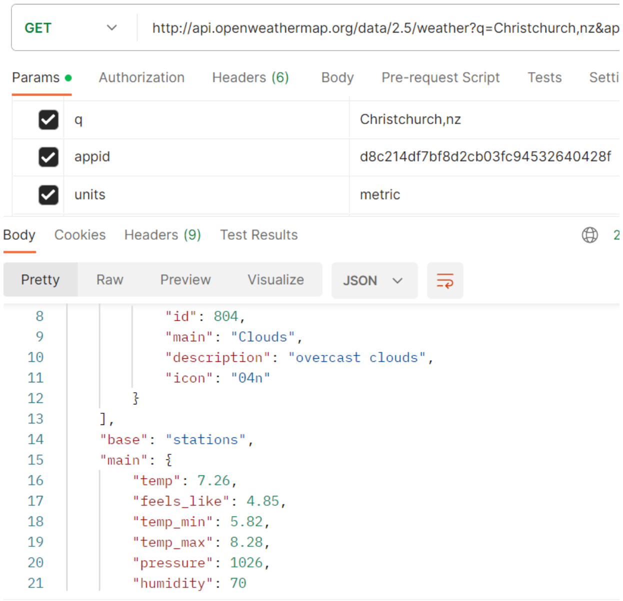
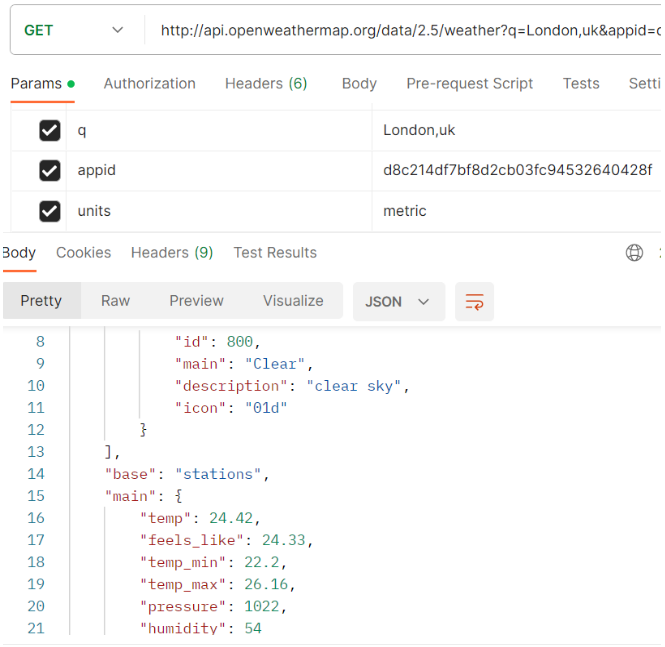
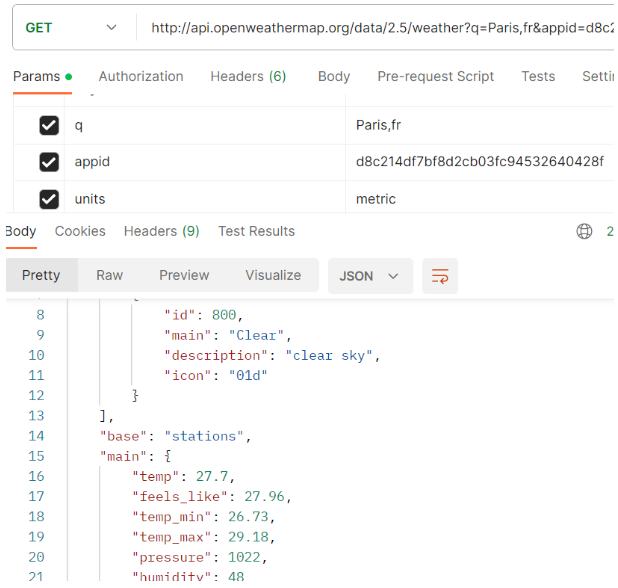
Christchurch	Overcast Clouds	5.82 C	8.28 C	
				GET http://api.openweathermap.org/data/2.5/weather?q=Christchurch,nz&ap
				Params Authorization Headers (6) Body Pre-request Script Tests Setti
				☑ q Christchurch,nz
				☑ appid d8c214df7bf8d2cb03fc94532640428f
				☑ units metric
				Body Cookies Headers (9) Test Results 2
				Pretty Raw Preview Visualize JSON
				"id": 804,
				"main": "Clouds",
				"description": "overcast clouds",
				"icon": "04n"
				}
				],
				"base": "stations",
				"main": {
				"temp": 7.26,
				"feels_like": 4.85,
				"temp_min": 5.82,
				"temp_max": 8.28,
				"pressure": 1026,
				"humidity": 70

London	Clear Sky	22.2 C	26.16 C	
				GET http://api.openweathermap.org/data/2.5/weather?q=London,uk&appid=c
				Params Authorization Headers (6) Body Pre-request Script Tests Setti
				☑ q London,uk
				☑ appid d8c214df7bf8d2cb03fc94532640428f
				☑ units metric
				Body Cookies Headers (9) Test Results
				Pretty Raw Preview Visualize JSON
				"id": 800,
				"main": "Clear",
				"description": "clear sky",
				"icon": "01d"
				}
				],
				"base": "stations",
				"main": {
				"temp": 24.42,
				"feels_like": 24.33,
				"temp_min": 22.2,
				"temp_max": 26.16,
				"pressure": 1022,
				"humidity": 54

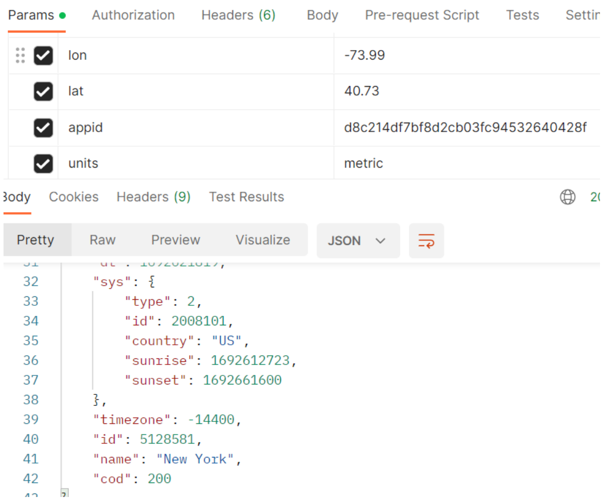
Paris	Clear Sky	26.73 C	29.18 C	

http://api.openweathermap.org/data/2.5/weather?q=Paris,fr&appid=d8c2

☑ q	Paris,fr
☑ appid	d8c214df7bf8d2cb03fc94532640428f
☑ units	metric

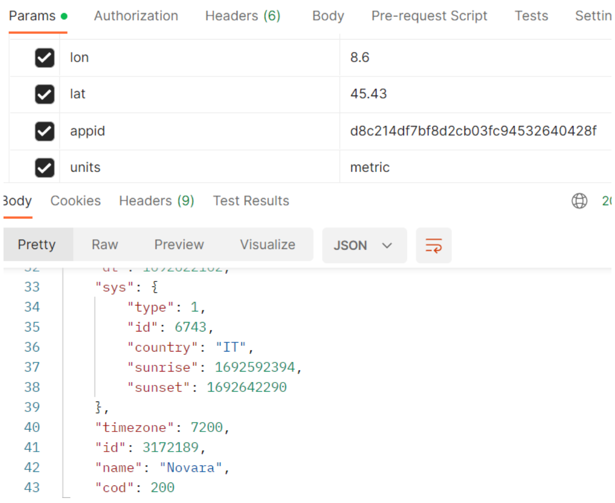
```
            "id": 800,
            "main": "Clear",
            "description": "clear sky",
            "icon": "01d"
        }
    ],
    "base": "stations",
    "main": {
        "temp": 27.7,
        "feels_like": 27.96,
        "temp_min": 26.73,
        "temp_max": 29.18,
        "pressure": 1022,
        "humidity": 48
```

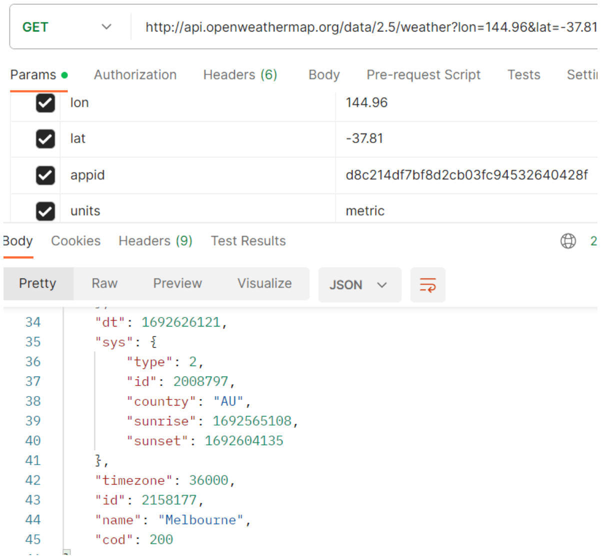
2. Get city name, weather description and minimum and maximum temperature in Celsius

Longitude / Latitude	City Name	Weather Description	Min. Temp	Max. Temp	Screenshot
-73.99 / 40.73	New York, US	Broken Clouds	21.5 C	25.62 C	

☑ lon	-73.99
☑ lat	40.73
☑ appid	d8c214df7bf8d2cb03fc94532640428f
☑ units	metric

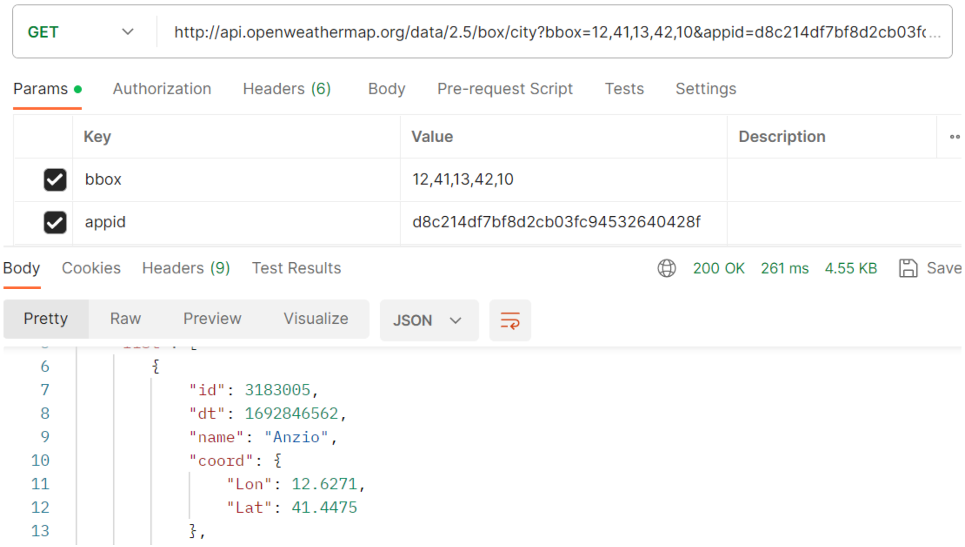
```
    "sys": {
        "type": 2,
        "id": 2008101,
        "country": "US",
        "sunrise": 1692612723,
        "sunset": 1692661600
    },
    "timezone": -14400,
    "id": 5128581,
    "name": "New York",
    "cod": 200
}
```

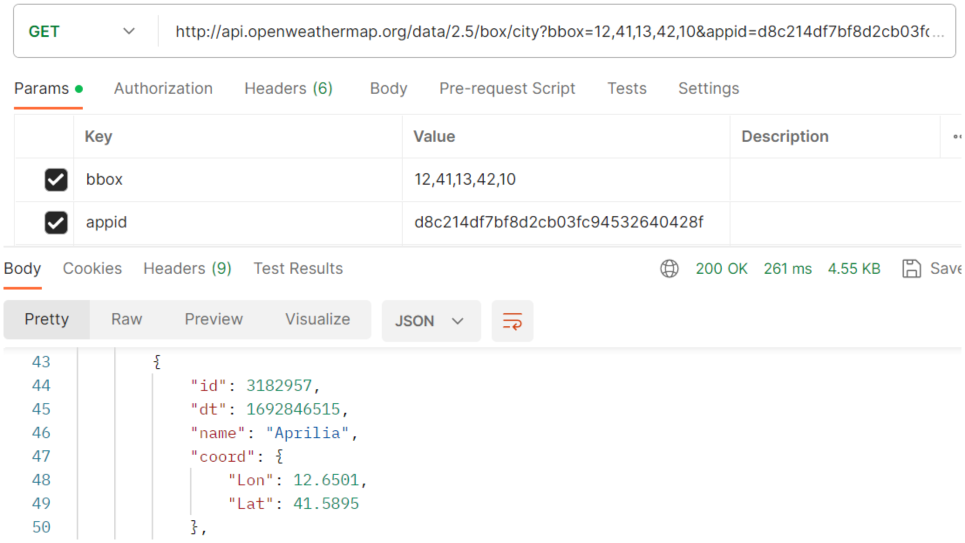
8.6 / 45.43	Novara, Italy	Clear Sky	33.75 C	36.14 C	Params ● Authorization Headers (6) Body Pre-request Script Tests Settin
					☑ lon 8.6
					☑ lat 45.43
					☑ appid d8c214df7bf8d2cb03fc94532640428f
					☑ units metric
					Body Cookies Headers (9) Test Results
					Pretty Raw Preview Visualize JSON
					`"sys": {`
					`"type": 1,`
					`"id": 6743,`
					`"country": "IT",`
					`"sunrise": 1692592394,`
					`"sunset": 1692642290`
					`},`
					`"timezone": 7200,`
					`"id": 3172189,`
					`"name": "Novara",`
					`"cod": 200`

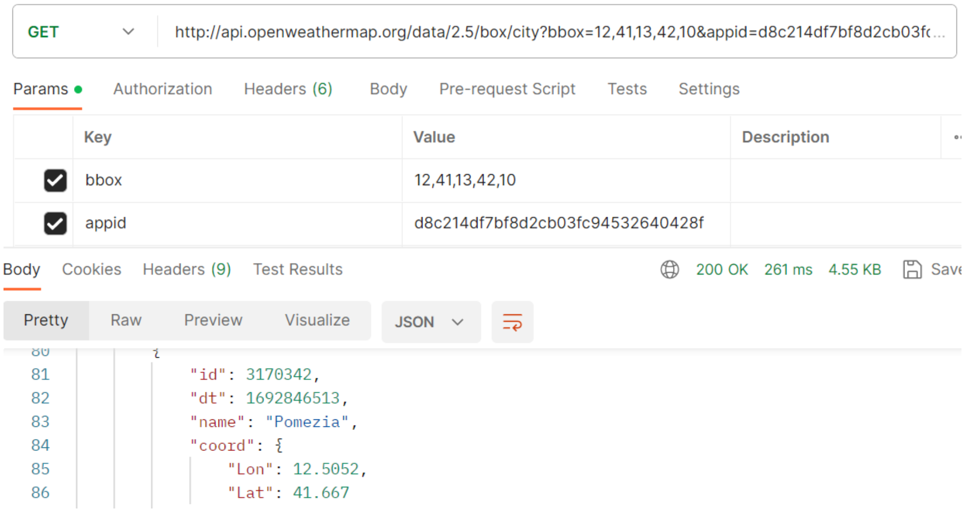
144.96 / -37.81	Melbourne, Aus	Light Rain	13.3 C	14.95 C	GET http://api.openweathermap.org/data/2.5/weather?lon=144.96&lat=-37.81
					Params ● Authorization Headers (6) Body Pre-request Script Tests Setti
					☑ lon 144.96
					☑ lat -37.81
					☑ appid d8c214df7bf8d2cb03fc94532640428f
					☑ units metric
					Body Cookies Headers (9) Test Results
					Pretty Raw Preview Visualize JSON
					`"dt": 1692626121,`
					`"sys": {`
					`"type": 2,`
					`"id": 2008797,`
					`"country": "AU",`
					`"sunrise": 1692565108,`
					`"sunset": 1692604135`
					`},`
					`"timezone": 36000,`
					`"id": 2158177,`
					`"name": "Melbourne",`
					`"cod": 200`

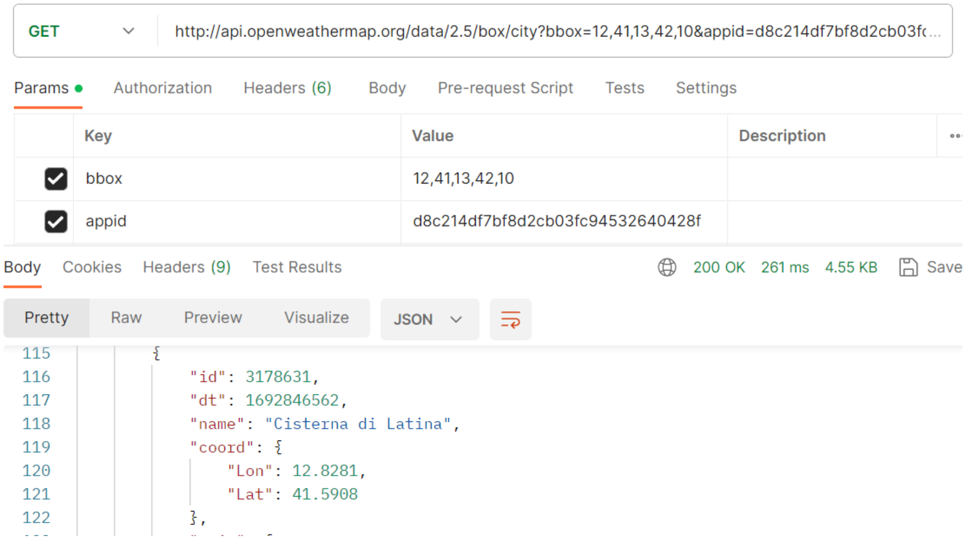
3. List cities and their coordinates within the following box:
   - Longitude: from 12 to 13
   - Latitude: from 41 to 42
   - Zoom: 10

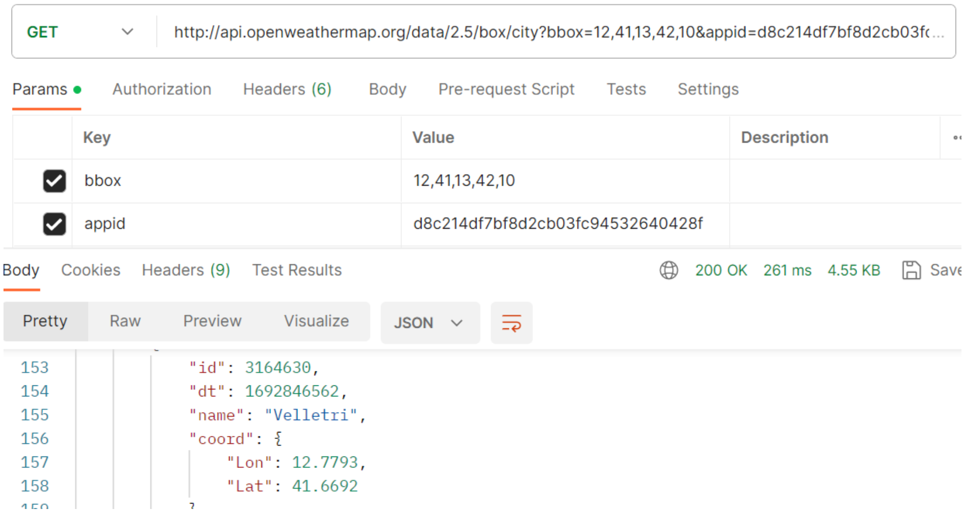
City	Longitude	Latitude	Screenshot

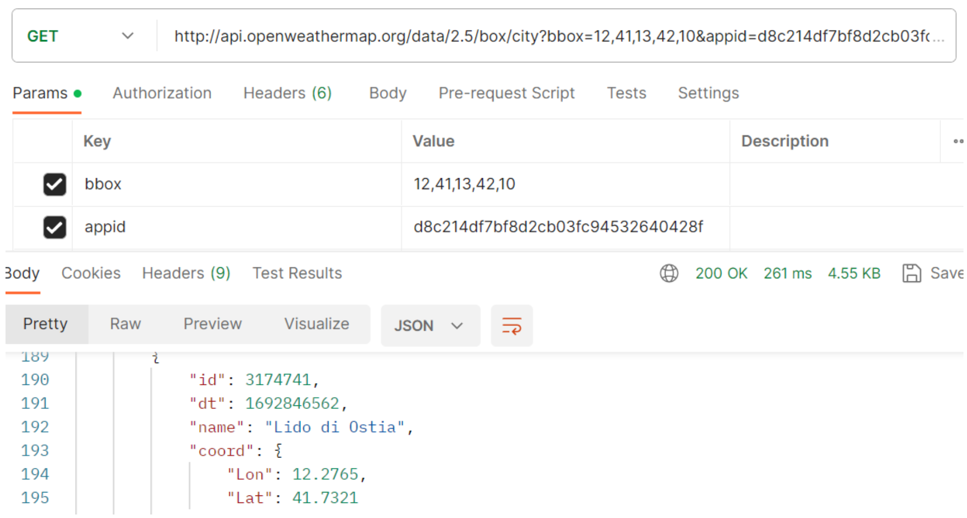
Anzio	12.6271	41.4475	
			GET http://api.openweathermap.org/data/2.5/box/city?bbox=12,41,13,42,10&appid=d8c214df7bf8d2cb03fc...
			Params ● Authorization Headers (6) Body Pre-request Script Tests Settings
			Key Value Description
			☑ bbox 12,41,13,42,10
			☑ appid d8c214df7bf8d2cb03fc94532640428f
			Body Cookies Headers (9) Test Results 200 OK 261 ms 4.55 KB Save
			Pretty Raw Preview Visualize JSON
			{
			"id": 3183005,
			"dt": 1692846562,
			"name": "Anzio",
			"coord": {
			"Lon": 12.6271,
			"Lat": 41.4475
			},

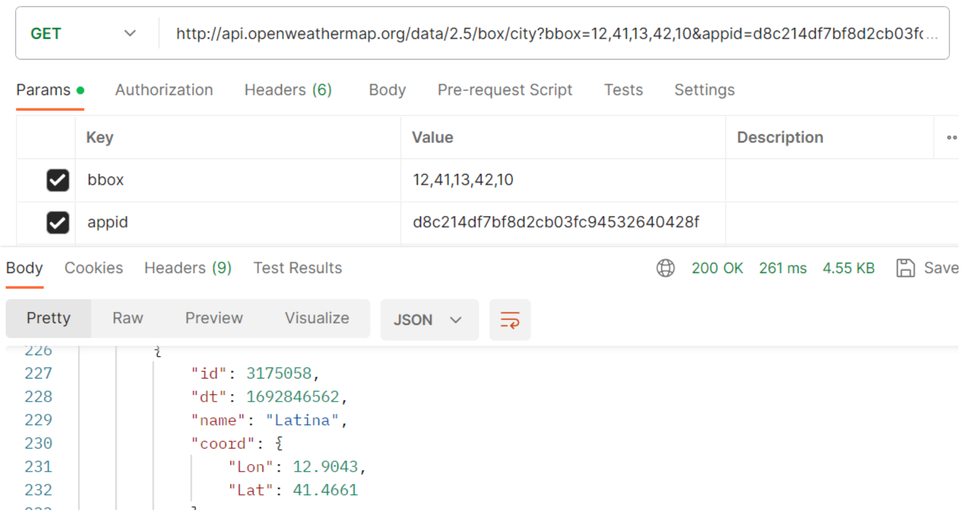
Aprilia	12.6501	41.5895	
			GET http://api.openweathermap.org/data/2.5/box/city?bbox=12,41,13,42,10&appid=d8c214df7bf8d2cb03fc...
			Params ● Authorization Headers (6) Body Pre-request Script Tests Settings
			Key Value Description
			☑ bbox 12,41,13,42,10
			☑ appid d8c214df7bf8d2cb03fc94532640428f
			Body Cookies Headers (9) Test Results 200 OK 261 ms 4.55 KB Save
			Pretty Raw Preview Visualize JSON
			{
			"id": 3182957,
			"dt": 1692846515,
			"name": "Aprilia",
			"coord": {
			"Lon": 12.6501,
			"Lat": 41.5895
			},

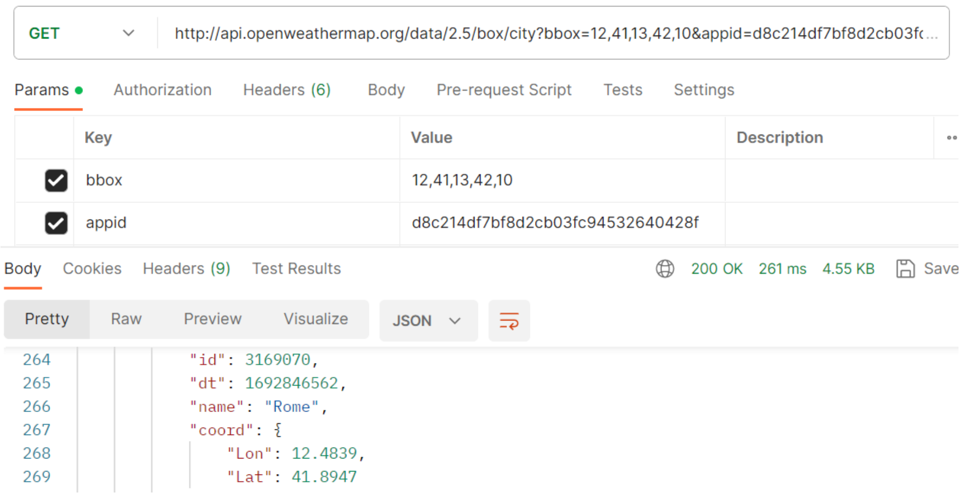
Pomezia	12.5052	41.667	
			GET http://api.openweathermap.org/data/2.5/box/city?bbox=12,41,13,42,10&appid=d8c214df7bf8d2cb03fc…
			Params ● Authorization Headers (6) Body Pre-request Script Tests Settings
			Key Value Description
			☑ bbox 12,41,13,42,10
			☑ appid d8c214df7bf8d2cb03fc94532640428f
			Body Cookies Headers (9) Test Results 200 OK 261 ms 4.55 KB Save
			Pretty Raw Preview Visualize JSON
			`{`
			`"id": 3170342,`
			`"dt": 1692846513,`
			`"name": "Pomezia",`
			`"coord": {`
			`"Lon": 12.5052,`
			`"Lat": 41.667`

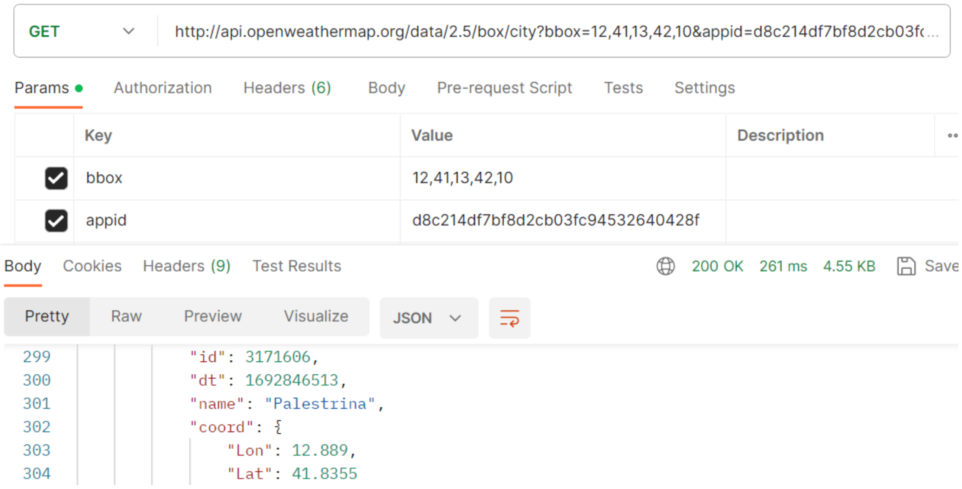
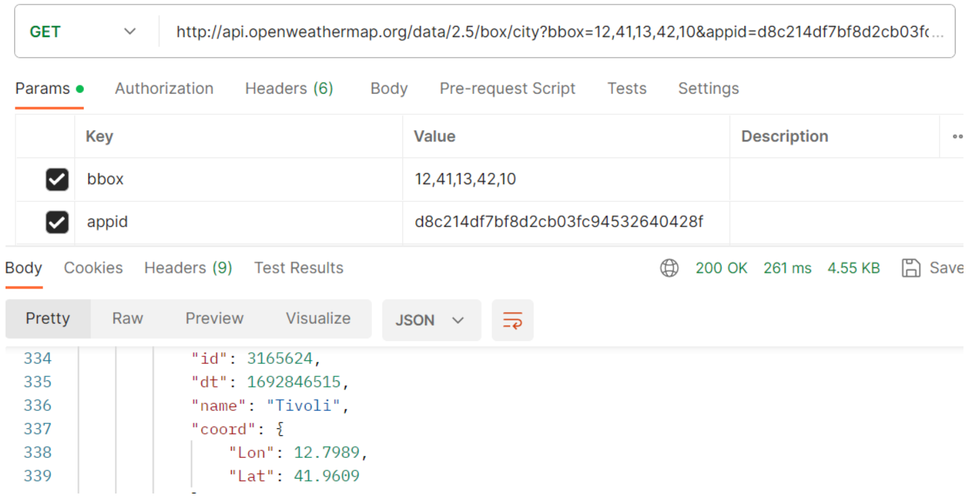
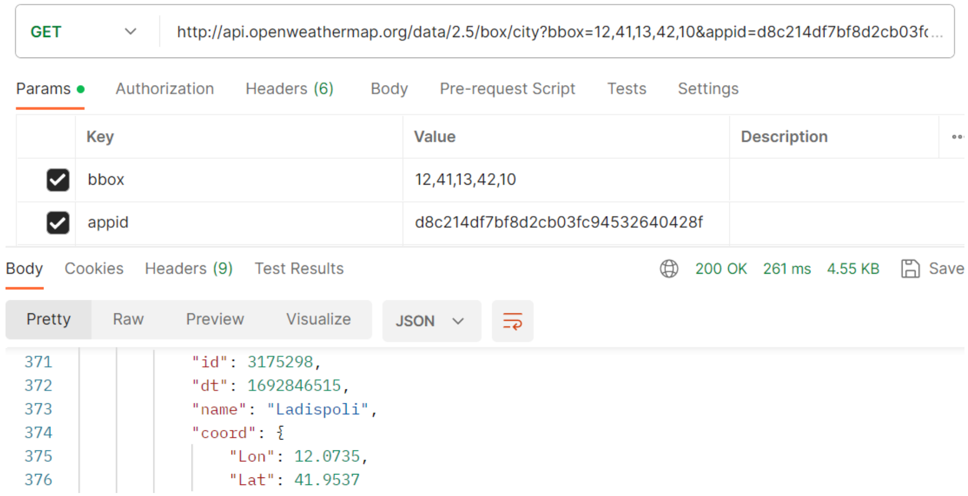
Cisterna di Latina	12.8281	41.5908	
			GET http://api.openweathermap.org/data/2.5/box/city?bbox=12,41,13,42,10&appid=d8c214df7bf8d2cb03fc…
			Params ● Authorization Headers (6) Body Pre-request Script Tests Settings
			Key Value Description
			☑ bbox 12,41,13,42,10
			☑ appid d8c214df7bf8d2cb03fc94532640428f
			Body Cookies Headers (9) Test Results 200 OK 261 ms 4.55 KB Save
			Pretty Raw Preview Visualize JSON
			`{`
			`"id": 3178631,`
			`"dt": 1692846562,`
			`"name": "Cisterna di Latina",`
			`"coord": {`
			`"Lon": 12.8281,`
			`"Lat": 41.5908`
			`},`

Velletri	12.7793	41.6692	
			GET http://api.openweathermap.org/data/2.5/box/city?bbox=12,41,13,42,10&appid=d8c214df7bf8d2cb03fc…
			Params ● Authorization Headers (6) Body Pre-request Script Tests Settings
			Key Value Description
			☑ bbox 12,41,13,42,10
			☑ appid d8c214df7bf8d2cb03fc94532640428f
			Body Cookies Headers (9) Test Results 200 OK 261 ms 4.55 KB Save
			Pretty Raw Preview Visualize JSON
			`"id": 3164630,`
			`"dt": 1692846562,`
			`"name": "Velletri",`
			`"coord": {`
			`"Lon": 12.7793,`
			`"Lat": 41.6692`

Lido di Ostia	12.2765	41.7321	
			GET http://api.openweathermap.org/data/2.5/box/city?bbox=12,41,13,42,10&appid=d8c214df7bf8d2cb03fc...
			Params ● Authorization Headers (6) Body Pre-request Script Tests Settings
			Key / Value / Description
			☑ bbox 12,41,13,42,10
			☑ appid d8c214df7bf8d2cb03fc94532640428f
			Body Cookies Headers (9) Test Results 200 OK 261 ms 4.55 KB Save
			Pretty Raw Preview Visualize JSON
			{
			"id": 3174741,
			"dt": 1692846562,
			"name": "Lido di Ostia",
			"coord": {
			"Lon": 12.2765,
			"Lat": 41.7321

Latina	12.9043	41.4661	
			GET http://api.openweathermap.org/data/2.5/box/city?bbox=12,41,13,42,10&appid=d8c214df7bf8d2cb03fc...
			Params ● Authorization Headers (6) Body Pre-request Script Tests Settings
			Key / Value / Description
			☑ bbox 12,41,13,42,10
			☑ appid d8c214df7bf8d2cb03fc94532640428f
			Body Cookies Headers (9) Test Results 200 OK 261 ms 4.55 KB Save
			Pretty Raw Preview Visualize JSON
			{
			"id": 3175058,
			"dt": 1692846562,
			"name": "Latina",
			"coord": {
			"Lon": 12.9043,
			"Lat": 41.4661

Rome	12.4839	41.8947	 GET http://api.openweathermap.org/data/2.5/box/city?bbox=12,41,13,42,10&appid=d8c214df7bf8d2cb03fc... Params ● Authorization Headers (6) Body Pre-request Script Tests Settings Key / Value / Description ☑ bbox 12,41,13,42,10 ☑ appid d8c214df7bf8d2cb03fc94532640428f Body Cookies Headers (9) Test Results 200 OK 261 ms 4.55 KB Save Pretty Raw Preview Visualize JSON "id": 3169070, "dt": 1692846562, "name": "Rome", "coord": { "Lon": 12.4839, "Lat": 41.8947

Palestrina	12.889	41.8355	
Tivoli	12.7989	41.9609	
Ladispoli	12.0735	41.9537	

Palestrina:

GET http://api.openweathermap.org/data/2.5/box/city?bbox=12,41,13,42,10&appid=d8c214df7bf8d2cb03fc...

Params ● Authorization Headers (6) Body Pre-request Script Tests Settings

	Key	Value	Description
☑	bbox	12,41,13,42,10	
☑	appid	d8c214df7bf8d2cb03fc94532640428f	

Body Cookies Headers (9) Test Results

200 OK 261 ms 4.55 KB

Save
Pretty Raw Preview Visualize JSON

```
                "id": 3171606,
                "dt": 1692846513,
                "name": "Palestrina",
                "coord": {
                    "Lon": 12.889,
                    "Lat": 41.8355
```

Tivoli:

GET http://api.openweathermap.org/data/2.5/box/city?bbox=12,41,13,42,10&appid=d8c214df7bf8d2cb03fc...

Params ● Authorization Headers (6) Body Pre-request Script Tests Settings

	Key	Value	Description
☑	bbox	12,41,13,42,10	
☑	appid	d8c214df7bf8d2cb03fc94532640428f	

200 OK 261 ms 4.55 KB

```
                "id": 3165624,
                "dt": 1692846515,
                "name": "Tivoli",
                "coord": {
                    "Lon": 12.7989,
                    "Lat": 41.9609
```

Ladispoli:

GET http://api.openweathermap.org/data/2.5/box/city?bbox=12,41,13,42,10&appid=d8c214df7bf8d2cb03fc...

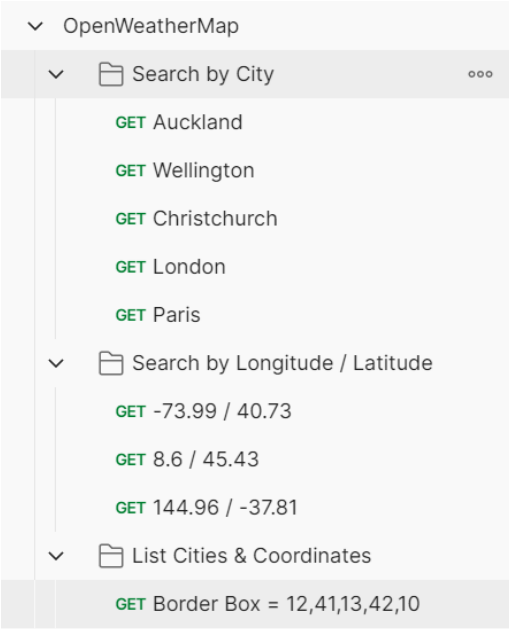
Params ● Authorization Headers (6) Body Pre-request Script Tests Settings

	Key	Value	Description
☑	bbox	12,41,13,42,10	
☑	appid	d8c214df7bf8d2cb03fc94532640428f	

200 OK 261 ms 4.55 KB

```
                "id": 3175298,
                "dt": 1692846515,
                "name": "Ladispoli",
                "coord": {
                    "Lon": 12.0735,
                    "Lat": 41.9537
```

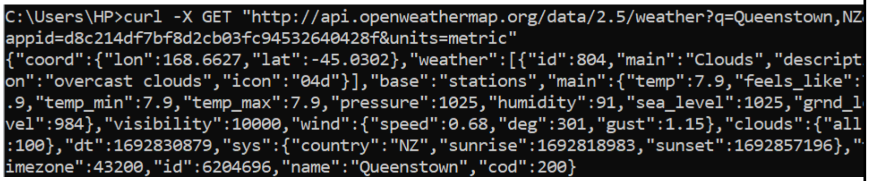
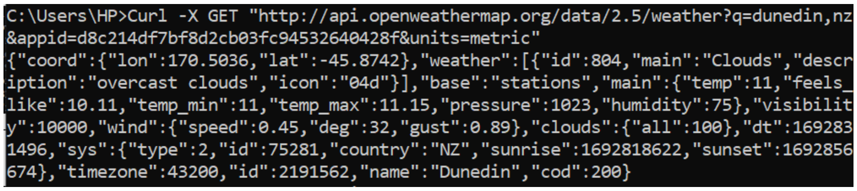
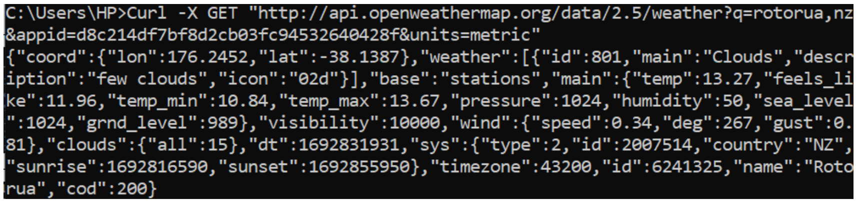
Collection Screenshot:

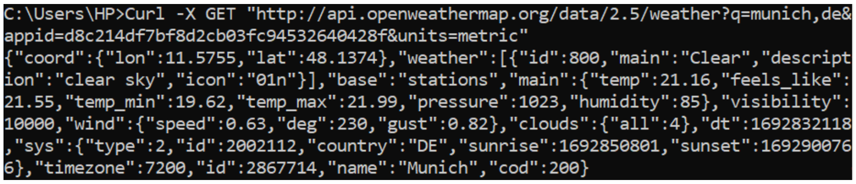
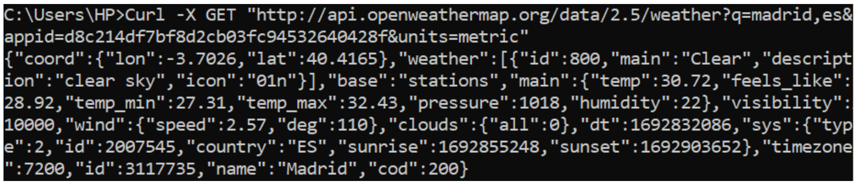


- OpenWeatherMap
  - Search by City
    - GET Auckland
    - GET Wellington
    - GET Christchurch
    - GET London
    - GET Paris
  - Search by Longitude / Latitude
    - GET -73.99 / 40.73
    - GET 8.6 / 45.43
    - GET 144.96 / -37.81
  - List Cities & Coordinates
    - GET Border Box = 12,41,13,42,10

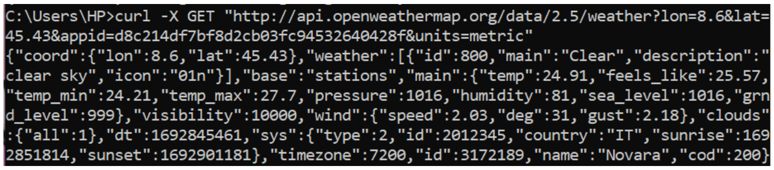
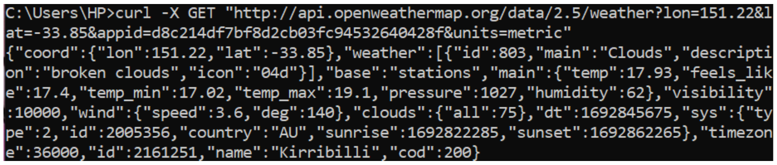
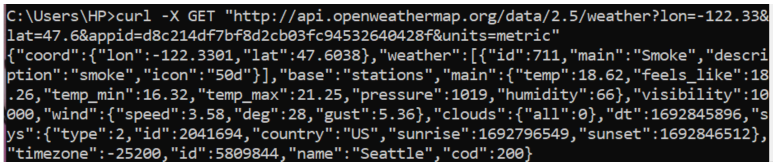
Task 2: Using cURL command line tool to connect to RESTful API

1. Get weather description and minimum and maximum temperature in Celsius

City	Weather Description	Min. Temp	Max. Temp	Screenshot
Queenstown	Overcast Clouds	7.9 C	7.9 C	 C:\Users\HP>curl -X GET "http://api.openweathermap.org/data/2.5/weather?q=Queenstown,NZ appid=d8c214df7bf8d2cb03fc94532640428f&units=metric" {"coord":{"lon":168.6627,"lat":-45.0302},"weather":[{"id":804,"main":"Clouds","descript on":"overcast clouds","icon":"04d"}],"base":"stations","main":{"temp":7.9,"feels_like": .9,"temp_min":7.9,"temp_max":7.9,"pressure":1025,"humidity":91,"sea_level":1025,"grnd_l vel":984},"visibility":10000,"wind":{"speed":0.68,"deg":301,"gust":1.15},"clouds":{"all :100},"dt":1692830879,"sys":{"country":"NZ","sunrise":1692818983,"sunset":1692857196}," imezone":43200,"id":6204696,"name":"Queenstown","cod":200}
Dunedin	Overcast Clouds	11 C	11.15 C	 C:\Users\HP>Curl -X GET "http://api.openweathermap.org/data/2.5/weather?q=dunedin,nz &appid=d8c214df7bf8d2cb03fc94532640428f&units=metric" {"coord":{"lon":170.5036,"lat":-45.8742},"weather":[{"id":804,"main":"Clouds","descr iption":"overcast clouds","icon":"04d"}],"base":"stations","main":{"temp":11,"feels_ like":10.11,"temp_min":11,"temp_max":11.15,"pressure":1023,"humidity":75},"visibilit y":10000,"wind":{"speed":0.45,"deg":32,"gust":0.89},"clouds":{"all":100},"dt":169283 1496,"sys":{"type":2,"id":75281,"country":"NZ","sunrise":1692818622,"sunset":1692856 674},"timezone":43200,"id":2191562,"name":"Dunedin","cod":200}
Rotorua	Few Clouds	10.84 C	13.67 C	 C:\Users\HP>Curl -X GET "http://api.openweathermap.org/data/2.5/weather?q=rotorua,nz &appid=d8c214df7bf8d2cb03fc94532640428f&units=metric" {"coord":{"lon":176.2452,"lat":-38.1387},"weather":[{"id":801,"main":"Clouds","descr iption":"few clouds","icon":"02d"}],"base":"stations","main":{"temp":13.27,"feels_li ke":11.96,"temp_min":10.84,"temp_max":13.67,"pressure":1024,"humidity":50,"sea_level ":1024,"grnd_level":989},"visibility":10000,"wind":{"speed":0.34,"deg":267,"gust":0. 81},"clouds":{"all":15},"dt":1692831931,"sys":{"type":2,"id":2007514,"country":"NZ", "sunrise":1692816590,"sunset":1692855950},"timezone":43200,"id":6241325,"name":"Roto rua","cod":200}

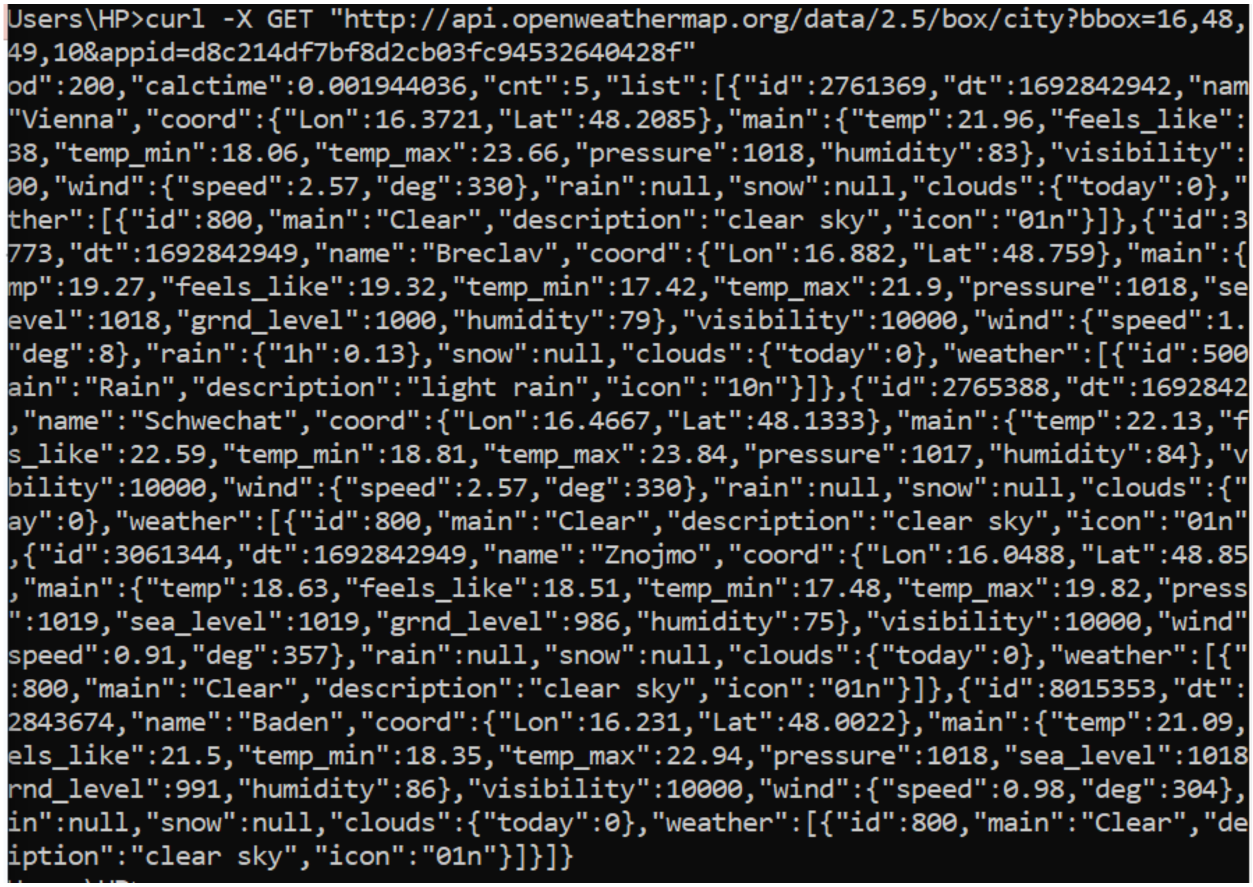
Munich	Clear Sky	19.62 C	21.99 C	 C:\Users\HP>Curl -X GET "http://api.openweathermap.org/data/2.5/weather?q=munich,de& appid=d8c214df7bf8d2cb03fc94532640428f&units=metric" {"coord":{"lon":11.5755,"lat":48.1374},"weather":[{"id":800,"main":"Clear","descript ion":"clear sky","icon":"01n"}],"base":"stations","main":{"temp":21.16,"feels_like": 21.55,"temp_min":19.62,"temp_max":21.99,"pressure":1023,"humidity":85},"visibility": 10000,"wind":{"speed":0.63,"deg":230,"gust":0.82},"clouds":{"all":4},"dt":1692832118 ,"sys":{"type":2,"id":2002112,"country":"DE","sunrise":1692850801,"sunset":169290076 6},"timezone":7200,"id":2867714,"name":"Munich","cod":200}
Madrid	Clear Sky	27.31 C	32.43 C	 C:\Users\HP>Curl -X GET "http://api.openweathermap.org/data/2.5/weather?q=madrid,es& appid=d8c214df7bf8d2cb03fc94532640428f&units=metric" {"coord":{"lon":-3.7026,"lat":40.4165},"weather":[{"id":800,"main":"Clear","descript ion":"clear sky","icon":"01n"}],"base":"stations","main":{"temp":30.72,"feels_like": 28.92,"temp_min":27.31,"temp_max":32.43,"pressure":1018,"humidity":22},"visibility": 10000,"wind":{"speed":2.57,"deg":110},"clouds":{"all":0},"dt":1692832086,"sys":{"typ e":2,"id":2007545,"country":"ES","sunrise":1692855248,"sunset":1692903652},"timezone ":7200,"id":3117735,"name":"Madrid","cod":200}

2. Get city name, weather description and minimum and maximum temperature in Celsius

Longitude / Latitude	City Name	Weather Description	Min. Temp	Max. Temp	Screenshot
8.6 / 45.43	Novara, IT	Clear Sky	24.21 C	27.7 C	 C:\Users\HP>curl -X GET "http://api.openweathermap.org/data/2.5/weather?lon=8.6&lat= 45.43&appid=d8c214df7bf8d2cb03fc94532640428f&units=metric" {"coord":{"lon":8.6,"lat":45.43},"weather":[{"id":800,"main":"Clear","description":" clear sky","icon":"01n"}],"base":"stations","main":{"temp":24.91,"feels_like":25.57, "temp_min":24.21,"temp_max":27.7,"pressure":1016,"humidity":81,"sea_level":1016,"grn d_level":999},"visibility":10000,"wind":{"speed":2.03,"deg":31,"gust":2.18},"clouds" :{"all":1},"dt":1692845461,"sys":{"type":2,"id":2012345,"country":"IT","sunrise":169 2851814,"sunset":1692901181},"timezone":7200,"id":3172189,"name":"Novara","cod":200}
151.22 / -33.85	Kirribilli, AU	Broken Clouds	17.02 C	19.1 C	 C:\Users\HP>curl -X GET "http://api.openweathermap.org/data/2.5/weather?lon=151.22&l at=-33.85&appid=d8c214df7bf8d2cb03fc94532640428f&units=metric" {"coord":{"lon":151.22,"lat":-33.85},"weather":[{"id":803,"main":"Clouds","descripti on":"broken clouds","icon":"04d"}],"base":"stations","main":{"temp":17.93,"feels_lik e":17.4,"temp_min":17.02,"temp_max":19.1,"pressure":1027,"humidity":62},"visibility" :10000,"wind":{"speed":3.6,"deg":140},"clouds":{"all":75},"dt":1692845675,"sys":{"ty pe":2,"id":2005356,"country":"AU","sunrise":1692822285,"sunset":1692862265},"timezon e":36000,"id":2161251,"name":"Kirribilli","cod":200}
-122.33 / 47.6	Seattle, US	Smoke	16.32 C	21.25 C	 C:\Users\HP>curl -X GET "http://api.openweathermap.org/data/2.5/weather?lon=-122.33& lat=47.6&appid=d8c214df7bf8d2cb03fc94532640428f&units=metric" {"coord":{"lon":-122.3301,"lat":47.6038},"weather":[{"id":711,"main":"Smoke","descri ption":"smoke","icon":"50d"}],"base":"stations","main":{"temp":18.62,"feels_like":18 .26,"temp_min":16.32,"temp_max":21.25,"pressure":1019,"humidity":66},"visibility":10 000,"wind":{"speed":3.58,"deg":28,"gust":5.36},"clouds":{"all":0},"dt":1692845896,"s ys":{"type":2,"id":2041694,"country":"US","sunrise":1692796549,"sunset":1692846512}, "timezone":-25200,"id":5809844,"name":"Seattle","cod":200}

3. List cities and their coordinates within the following box:
    - Longitude: from 16 to 17
    - Latitude: from 48 to 49
    - Zoom: 10

City	Longitude	Latitude
Vienna	16.3721	48.2085
Breclav	16.882	48.759
Schwechat	16.4667	48.1333
Znojmo	16.0488	48.85
Baden	16.231	48.0022



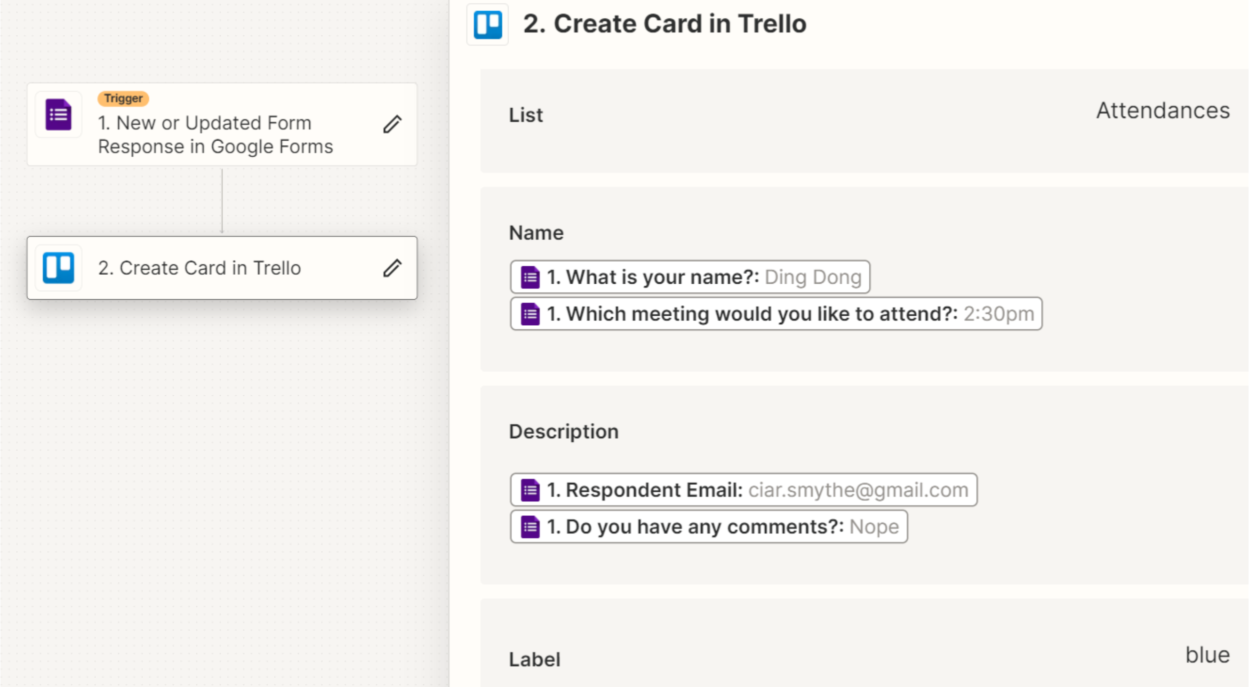
```
Users\HP>curl -X GET "http://api.openweathermap.org/data/2.5/box/city?bbox=16,48,
49,10&appid=d8c214df7bf8d2cb03fc94532640428f"
od":200,"calctime":0.001944036,"cnt":5,"list":[{"id":2761369,"dt":1692842942,"nam
"Vienna","coord":{"Lon":16.3721,"Lat":48.2085},"main":{"temp":21.96,"feels_like":
38,"temp_min":18.06,"temp_max":23.66,"pressure":1018,"humidity":83},"visibility":
00,"wind":{"speed":2.57,"deg":330},"rain":null,"snow":null,"clouds":{"today":0},"
ther":[{"id":800,"main":"Clear","description":"clear sky","icon":"01n"}]},{"id":3
773,"dt":1692842949,"name":"Breclav","coord":{"Lon":16.882,"Lat":48.759},"main":{
mp":19.27,"feels_like":19.32,"temp_min":17.42,"temp_max":21.9,"pressure":1018,"se
evel":1018,"grnd_level":1000,"humidity":79},"visibility":10000,"wind":{"speed":1.
"deg":8},"rain":{"1h":0.13},"snow":null,"clouds":{"today":0},"weather":[{"id":500
ain":"Rain","description":"light rain","icon":"10n"}]},{"id":2765388,"dt":1692842
,"name":"Schwechat","coord":{"Lon":16.4667,"Lat":48.1333},"main":{"temp":22.13,"f
s_like":22.59,"temp_min":18.81,"temp_max":23.84,"pressure":1017,"humidity":84},"v
bility":10000,"wind":{"speed":2.57,"deg":330},"rain":null,"snow":null,"clouds":{"
ay":0},"weather":[{"id":800,"main":"Clear","description":"clear sky","icon":"01n"
,{"id":3061344,"dt":1692842949,"name":"Znojmo","coord":{"Lon":16.0488,"Lat":48.85
,"main":{"temp":18.63,"feels_like":18.51,"temp_min":17.48,"temp_max":19.82,"press
":1019,"sea_level":1019,"grnd_level":986,"humidity":75},"visibility":10000,"wind"
speed":0.91,"deg":357},"rain":null,"snow":null,"clouds":{"today":0},"weather":[{"
:800,"main":"Clear","description":"clear sky","icon":"01n"}]},{"id":8015353,"dt":
2843674,"name":"Baden","coord":{"Lon":16.231,"Lat":48.0022},"main":{"temp":21.09,
els_like":21.5,"temp_min":18.35,"temp_max":22.94,"pressure":1018,"sea_level":1018
rnd_level":991,"humidity":86},"visibility":10000,"wind":{"speed":0.98,"deg":304},
in":null,"snow":null,"clouds":{"today":0},"weather":[{"id":800,"main":"Clear","de
iption":"clear sky","icon":"01n"}]}]}
```

Task 3: Creating Webhooks

1. Recording RSVP’s

When a new event response is submitted through Google Forms, the Team Meetings Trello board should be updated with the new card listing the person's name and any comments they provided.

Zapier evidence:



Trigger

1. New or Updated Form Response in Google Forms

2. Create Card in Trello

2. Create Card in Trello

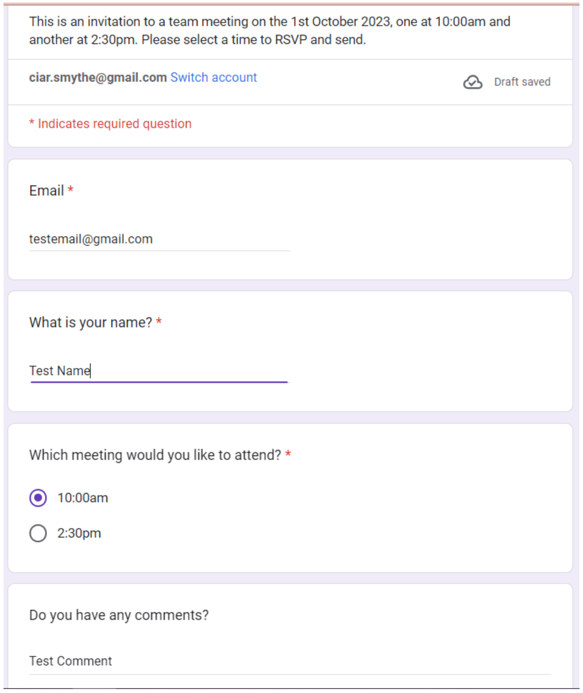
List: Attendances

Name:
1. What is your name?: Ding Dong
1. Which meeting would you like to attend?: 2:30pm

Description:
1. Respondent Email: ciar.smythe@gmail.com
1. Do you have any comments?: Nope

Label: blue

Tested this twice; the first test was using the Zapier testing tool before publishing, and the second test was post-publishing the zap. Here are screenshots as evidence of it after publishing. A later updated version fixed the lack of spaces between data inputs.



This is an invitation to a team meeting on the 1st October 2023, one at 10:00am and another at 2:30pm. Please select a time to RSVP and send.

ciar.smythe@gmail.com Switch account

Draft saved

* Indicates required question

Email *

testemail@gmail.com

What is your name? *

Test Name

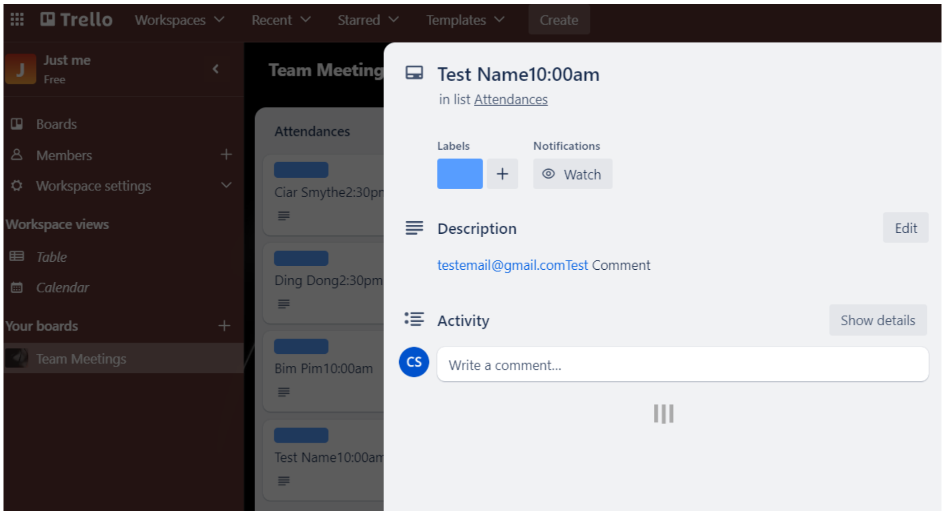
Which meeting would you like to attend? *

● 10:00am

○ 2:30pm

Do you have any comments?

Test Comment



Attendances

Ciar Smythe2:30pm

Ding Dong2:30pm

Bim Pim10:00am

Test Name10:00am

Test Name10:00am

in list Attendances

Labels

Notifications

Watch

Description

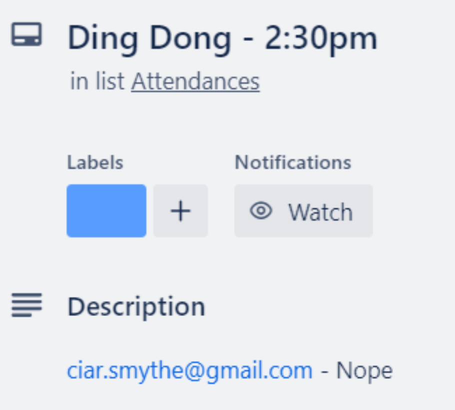
Edit

testemail@gmail.comTest Comment

Activity

Show details

Write a comment...



Ding Dong - 2:30pm

in list Attendances

Labels

Notifications

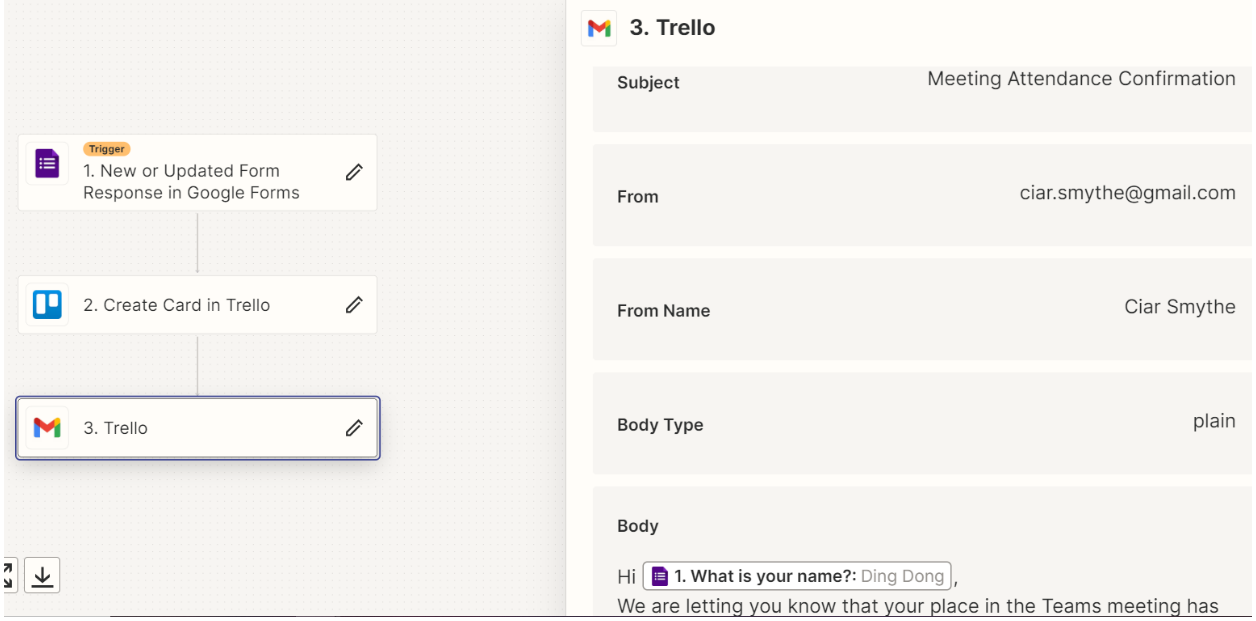
Watch

Description

ciar.smythe@gmail.com - Nope

2. Confirming Emails

When the new card is added in the Team Meetings Trello board, the confirmation email should be generated and stored in Drafts. Use your name in the From Name and the email subject of Meeting Attendance Confirmation. Use the person's name in the email body and add appropriate text confirming their meeting attendance.



3. Trello

Subject: Meeting Attendance Confirmation

From: ciar.smythe@gmail.com

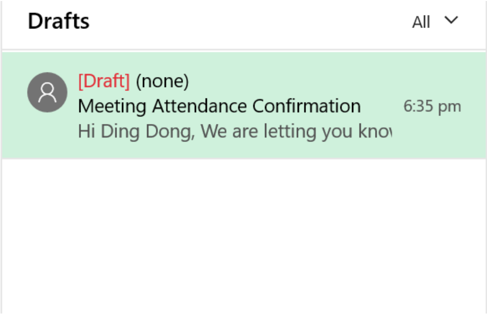
From Name: Ciar Smythe

Body Type: plain

Body

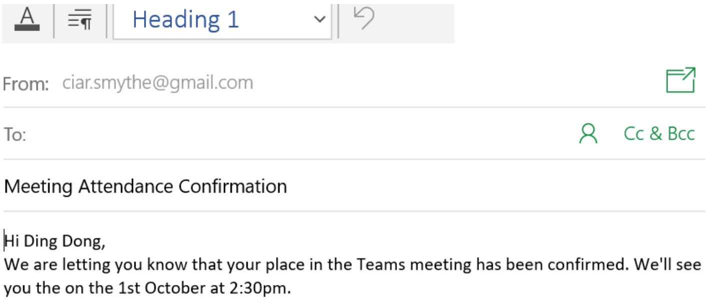
Hi 1. What is your name?: Ding Dong,
We are letting you know that your place in the Teams meeting has

Test draft email triggered:



Drafts All

[Draft] (none)
Meeting Attendance Confirmation 6:35 pm
Hi Ding Dong, We are letting you knov



From: ciar.smythe@gmail.com

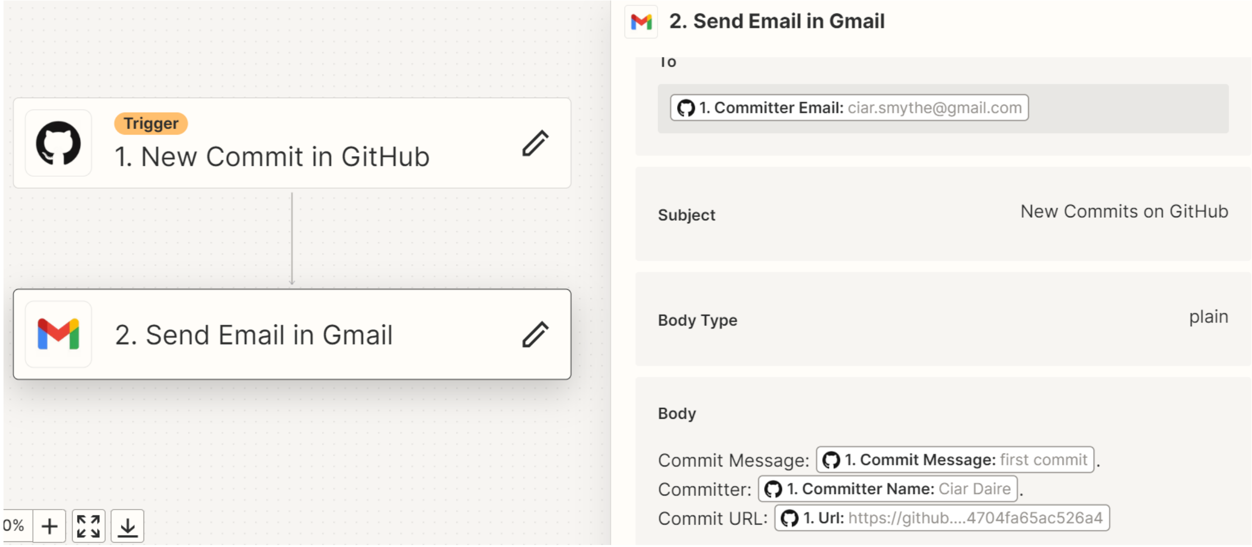
To: Cc & Bcc

Meeting Attendance Confirmation

Hi Ding Dong,
We are letting you know that your place in the Teams meeting has been confirmed. We'll see you the on the 1st October at 2:30pm.

3. Notifying of GitHub Commits

With each new commit to a specific repository in GitHub, an email sent to your email address advising of the commit happened.



To: 1. Committer Email: ciar.smythe@gmail.com

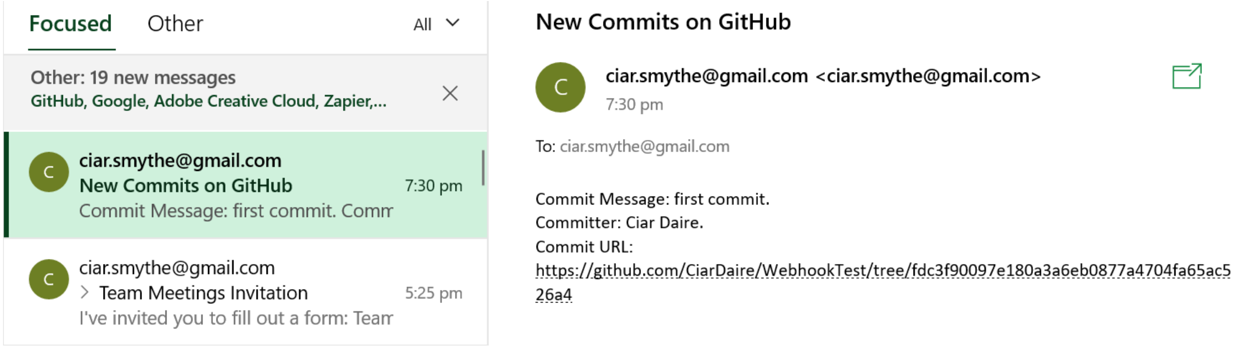
Subject: New Commits on GitHub

Body Type: plain

Body

Commit Message: 1. Commit Message: first commit.
Committer: 1. Committer Name: Ciar Daire.
Commit URL: 1. Url: https://github....4704fa65ac526a4

Test email received:



New Commits on GitHub

ciar.smythe@gmail.com <ciar.smythe@gmail.com>
7:30 pm

To: ciar.smythe@gmail.com

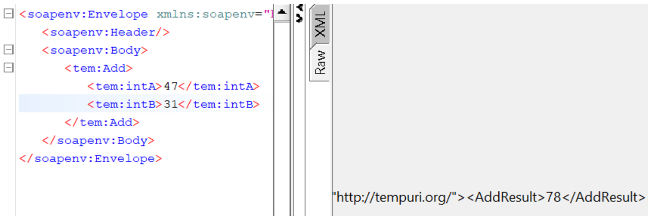
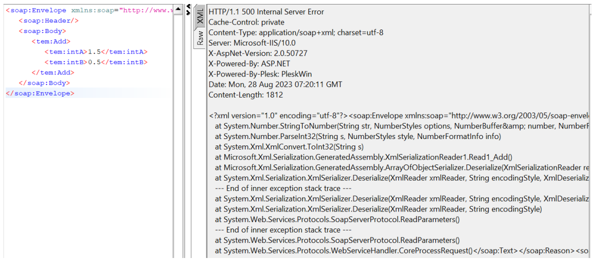
Commit Message: first commit.
Committer: Ciar Daire.
Commit URL:
https://github.com/CiarDaire/WebhookTest/tree/fdc3f90097e180a3a6eb0877a4704fa65ac526a4

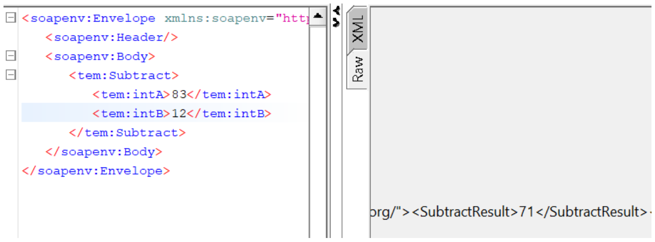
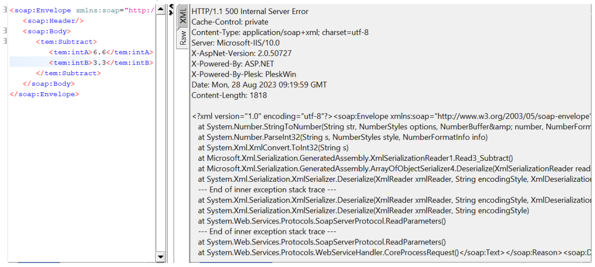
Task 4: Connecting to a SOAP API with SOAPUI

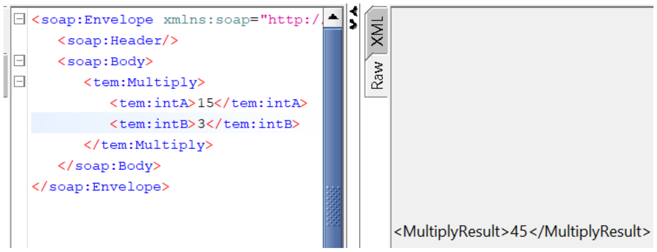
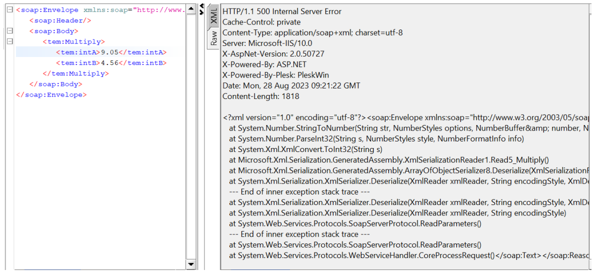
Perform addition, subtraction, multiplication and division operations between 2 integers and 2 floats per task.

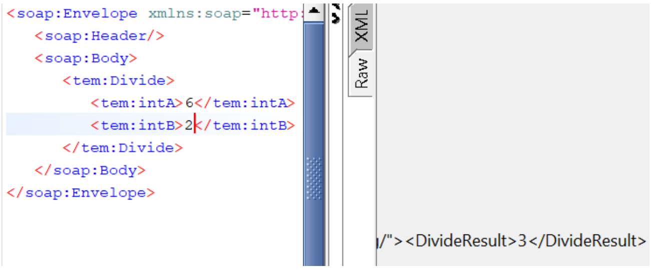
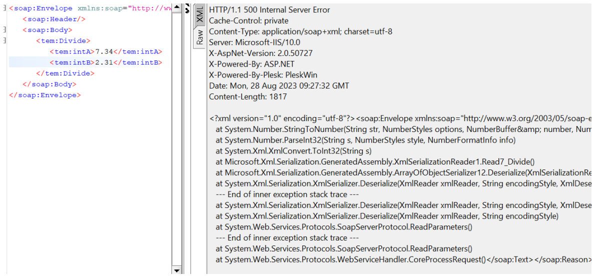
- The Soap API Calculator throws errors for every float integer input, and seems to have rounded up previous test response answers for the division operation to the closest integer.

Operation	Integers	Floats
Addition	intA = 47 | intB = 31 | result = 78	intA = 1.5 | intB = 0.5 | result = 500 Internal Service Error. System.FormatException: Input string was not in a correct format

<table>
<tr>
<td></td>
<td>
&lt;soapenv:Envelope xmlns:soapenv="
  &lt;soapenv:Header/&gt;
  &lt;soapenv:Body&gt;
    &lt;tem:Add&gt;
      &lt;tem:intA&gt;47&lt;/tem:intA&gt;
      &lt;tem:intB&gt;31&lt;/tem:intB&gt;
    &lt;/tem:Add&gt;
  &lt;/soapenv:Body&gt;
&lt;/soapenv:Envelope&gt;
"http://tempuri.org/"&gt;&lt;AddResult&gt;78&lt;/AddResult&gt;</td>
<td>
&lt;soap:Envelope xmlns:soap="http://www.
  &lt;soap:Header/&gt;
  &lt;soap:Body&gt;
    &lt;tem:Add&gt;
      &lt;tem:intA&gt;1.5&lt;/tem:intA&gt;
      &lt;tem:intB&gt;0.5&lt;/tem:intB&gt;
    &lt;/tem:Add&gt;
  &lt;/soap:Body&gt;
&lt;/soap:Envelope&gt;
HTTP/1.1 500 Internal Server Error
Cache-Control: private
Content-Type: application/soap+xml; charset=utf-8
Server: Microsoft-IIS/10.0
X-AspNet-Version: 2.0.50727
X-Powered-By: ASP.NET
X-Powered-By-Plesk: PleskWin
Date: Mon, 28 Aug 2023 07:20:11 GMT
Content-Length: 1812

<?xml version="1.0" encoding="utf-8"?><soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envel
  at System.Number.StringToNumber(String str, NumberStyles options, NumberBuffer&amp; number, NumberF
  at System.Number.ParseInt32(String s, NumberStyles style, NumberFormatInfo info)
  at System.Xml.XmlConvert.ToInt32(String s)
  at Microsoft.Xml.Serialization.GeneratedAssembly.XmlSerializationReader1.Read1_Add()
  at Microsoft.Xml.Serialization.GeneratedAssembly.ArrayOfObjectSerializer.Deserialize(XmlSerializationReader re
  at System.Xml.Serialization.XmlSerializer.Deserialize(XmlReader xmlReader, String encodingStyle, XmlDeserializ
  --- End of inner exception stack trace ---
  at System.Xml.Serialization.XmlSerializer.Deserialize(XmlReader xmlReader, String encodingStyle, XmlDeserializ
  at System.Xml.Serialization.XmlSerializer.Deserialize(XmlReader xmlReader, String encodingStyle)
  at System.Web.Services.Protocols.SoapServerProtocol.ReadParameters()
  --- End of inner exception stack trace ---
  at System.Web.Services.Protocols.SoapServerProtocol.ReadParameters()
  at System.Web.Services.Protocols.WebServiceHandler.CoreProcessRequest()&lt;/soap:Text&gt;&lt;/soap:Reason&gt;&lt;so</td>
</tr>
<tr>
<td>Subtraction</td>
<td>intA = 83 | intB = 12 | result = 71

&lt;soapenv:Envelope xmlns:soapenv="htt
  &lt;soapenv:Header/&gt;
  &lt;soapenv:Body&gt;
    &lt;tem:Subtract&gt;
      &lt;tem:intA&gt;83&lt;/tem:intA&gt;
      &lt;tem:intB&gt;12&lt;/tem:intB&gt;
    &lt;/tem:Subtract&gt;
  &lt;/soapenv:Body&gt;
&lt;/soapenv:Envelope&gt;
org/"&gt;&lt;SubtractResult&gt;71&lt;/SubtractResult&gt;</td>
<td>intA = 6.6 | intB = 3.3 | result = 500 Internal Service Error. System.FormatException: Input string was not in a correct format

&lt;soap:Envelope xmlns:soap="http:/
  &lt;soap:Header/&gt;
  &lt;soap:Body&gt;
    &lt;tem:Subtract&gt;
      &lt;tem:intA&gt;6.6&lt;/tem:intA&gt;
      &lt;tem:intB&gt;3.3&lt;/tem:intB>
    </tem:Subtract>
  </soap:Body>
</soap:Envelope>
HTTP/1.1 500 Internal Server Error
Cache-Control: private
Content-Type: application/soap+xml; charset=utf-8
Server: Microsoft-IIS/10.0
X-AspNet-Version: 2.0.50727
X-Powered-By: ASP.NET
X-Powered-By-Plesk: PleskWin
Date: Mon, 28 Aug 2023 09:19:59 GMT
Content-Length: 1818

<?xml version="1.0" encoding="utf-8"?><soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope"
  at System.Number.StringToNumber(String str, NumberStyles options, NumberBuffer&amp; number, NumberForm
  at System.Number.ParseInt32(String s, NumberStyles style, NumberFormatInfo info)
  at System.Xml.XmlConvert.ToInt32(String s)
  at Microsoft.Xml.Serialization.GeneratedAssembly.XmlSerializationReader1.Read3_Subtract()
  at Microsoft.Xml.Serialization.GeneratedAssembly.ArrayOfObjectSerializer4.Deserialize(XmlSerializationReader read
  at System.Xml.Serialization.XmlSerializer.Deserialize(XmlReader xmlReader, String encodingStyle, XmlDeserializatio
  --- End of inner exception stack trace ---
  at System.Xml.Serialization.XmlSerializer.Deserialize(XmlReader xmlReader, String encodingStyle, XmlDeserializatio
  at System.Xml.Serialization.XmlSerializer.Deserialize(XmlReader xmlReader, String encodingStyle)
  at System.Web.Services.Protocols.SoapServerProtocol.ReadParameters()
  --- End of inner exception stack trace ---
  at System.Web.Services.Protocols.SoapServerProtocol.ReadParameters()
  at System.Web.Services.Protocols.WebServiceHandler.CoreProcessRequest()&lt;/soap:Text&gt;&lt;/soap:Reason&gt;&lt;soap:D</td>
</tr>
<tr>
<td>Multiplication</td>
<td>intA = 15 | intB = 3 | result = 45

&lt;soap:Envelope xmlns:soap="http:/
  &lt;soap:Header/&gt;
  &lt;soap:Body&gt;
    &lt;tem:Multiply&gt;
      &lt;tem:intA&gt;15&lt;/tem:intA&gt;
      &lt;tem:intB&gt;3&lt;/tem:intB&gt;
    &lt;/tem:Multiply&gt;
  &lt;/soap:Body&gt;
&lt;/soap:Envelope&gt;
&lt;MultiplyResult&gt;45&lt;/MultiplyResult&gt;</td>
<td>intA = 4.56 | intB = 9.05 | result = 500 Internal Service Error. System.FormatException: Input string was not in a correct format

&lt;soap:Envelope xmlns:soap="http://www.
  &lt;soap:Header/&gt;
  &lt;soap:Body&gt;
    &lt;tem:Multiply&gt;
      &lt;tem:intA&gt;9.05&lt;/tem:intA&gt;
      &lt;tem:intB&gt;4.56</tem:intB>
    </tem:Multiply>
  </soap:Body>
</soap:Envelope>
HTTP/1.1 500 Internal Server Error
Cache-Control: private
Content-Type: application/soap+xml; charset=utf-8
Server: Microsoft-IIS/10.0
X-AspNet-Version: 2.0.50727
X-Powered-By: ASP.NET
X-Powered-By-Plesk: PleskWin
Date: Mon, 28 Aug 2023 09:21:22 GMT
Content-Length: 1818

<?xml version="1.0" encoding="utf-8"?><soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soa
  at System.Number.StringToNumber(String str, NumberStyles options, NumberBuffer&amp; number, N
  at System.Number.ParseInt32(String s, NumberStyles style, NumberFormatInfo info)
  at System.Xml.XmlConvert.ToInt32(String s)
  at Microsoft.Xml.Serialization.GeneratedAssembly.XmlSerializationReader1.Read5_Multiply()
  at Microsoft.Xml.Serialization.GeneratedAssembly.ArrayOfObjectSerializer8.Deserialize(XmlSerialization
  at System.Xml.Serialization.XmlSerializer.Deserialize(XmlReader xmlReader, String encodingStyle, XmlD
  --- End of inner exception stack trace ---
  at System.Xml.Serialization.XmlSerializer.Deserialize(XmlReader xmlReader, String encodingStyle, XmlD
  at System.Xml.Serialization.XmlSerializer.Deserialize(XmlReader xmlReader, String encodingStyle)
  at System.Web.Services.Protocols.SoapServerProtocol.ReadParameters()
  --- End of inner exception stack trace ---
  at System.Web.Services.Protocols.SoapServerProtocol.ReadParameters()
  at System.Web.Services.Protocols.WebServiceHandler.CoreProcessRequest()&lt;/soap:Text&gt;&lt;/soap:Reasc</td>
</tr>
<tr>
<td>Division</td>
<td>intA = 6 | intB = 2 | result = 3

&lt;soap:Envelope xmlns:soap="http:
  &lt;soap:Header/&gt;
  &lt;soap:Body&gt;
    &lt;tem:Divide&gt;
      &lt;tem:intA&gt;6&lt;/tem:intA&gt;
      &lt;tem:intB&gt;2&lt;/tem:intB&gt;
    &lt;/tem:Divide&gt;
  &lt;/soap:Body&gt;
&lt;/soap:Envelope&gt;
/"&gt;&lt;DivideResult&gt;3&lt;/DivideResult&gt;</td>
<td>intA = 7.34 | intB = 2.31 | result = 500 Internal Service Error. System.FormatException: Input string was not in a correct format

&lt;soap:Envelope xmlns:soap="http://ww
  &lt;soap:Header/&gt;
  &lt;soap:Body&gt;
    &lt;tem:Divide&gt;
      &lt;tem:intA&gt;7.34&lt;/tem:intA&gt;
      &lt;tem:intB&gt;2.31</tem:intB>
    </tem:Divide>
  </soap:Body>
</soap:Envelope>
HTTP/1.1 500 Internal Server Error
Cache-Control: private
Content-Type: application/soap+xml; charset=utf-8
Server: Microsoft-IIS/10.0
X-AspNet-Version: 2.0.50727
X-Powered-By: ASP.NET
X-Powered-By-Plesk: PleskWin
Date: Mon, 28 Aug 2023 09:27:32 GMT
Content-Length: 1817

<?xml version="1.0" encoding="utf-8"?><soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-e
  at System.Number.StringToNumber(String str, NumberStyles options, NumberBuffer&amp; number, Num
  at System.Number.ParseInt32(String s, NumberStyles style, NumberFormatInfo info)
  at System.Xml.XmlConvert.ToInt32(String s)
  at Microsoft.Xml.Serialization.GeneratedAssembly.XmlSerializationReader1.Read7_Divide()
  at Microsoft.Xml.Serialization.GeneratedAssembly.ArrayOfObjectSerializer12.Deserialize(XmlSerializationRe
  at System.Xml.Serialization.XmlSerializer.Deserialize(XmlReader xmlReader, String encodingStyle, XmlDese
  --- End of inner exception stack trace ---
  at System.Xml.Serialization.XmlSerializer.Deserialize(XmlReader xmlReader, String encodingStyle, XmlDese
  at System.Xml.Serialization.XmlSerializer.Deserialize(XmlReader xmlReader, String encodingStyle)
  at System.Web.Services.Protocols.SoapServerProtocol.ReadParameters()
  --- End of inner exception stack trace ---
  at System.Web.Services.Protocols.SoapServerProtocol.ReadParameters()
  at System.Web.Services.Protocols.WebServiceHandler.CoreProcessRequest()&lt;/soap:Text&gt;&lt;/soap:Reason&gt;</td>
</tr>
</table>

Part B:

Task 1: Planning the Music Hub API

API Requests:

1. Three requests for getting information about multiple objects:
   1.1. View all artists
   1.2. View all albums
   1.3. View all songs
2. Three requests for getting information about a specific object:
   2.1. View an artist (using id)
   2.2. View an album (using id)
   2.3. View a song (using id)
3. Two requests for deleting object based on specific parameter:
   3.1. Delete song by id
   3.2. Delete album by id
4. Two requests for updating object based on specific parameter:
   4.1. Update album information by id
   4.2. Update artist information by id

Who will be using the API?

Given that the API will include music from all genres, I expect our main user base to simply be people who enjoy music of any and all variety. This could include users of any age, gender, and race. However, as we are working within a limited scope, our API will only use English for the functionality, and hence likely only appeal to users who understand English.

What benefits will the API offer to its users?

Users will be able to quickly find the information they want about specific artists, albums, and songs. They will also be able to quickly update and delete most of these entries. The API makes it quick, simple, and easy to use via Postmate.

What are the actions that you would need the API to accomplish?

Users need to be able to view the information for every artist, album, and song (all together, and individually). Furthermore, they will be able to update the information of a specific artist or album, and can delete any album or song. Id’s will be used as they

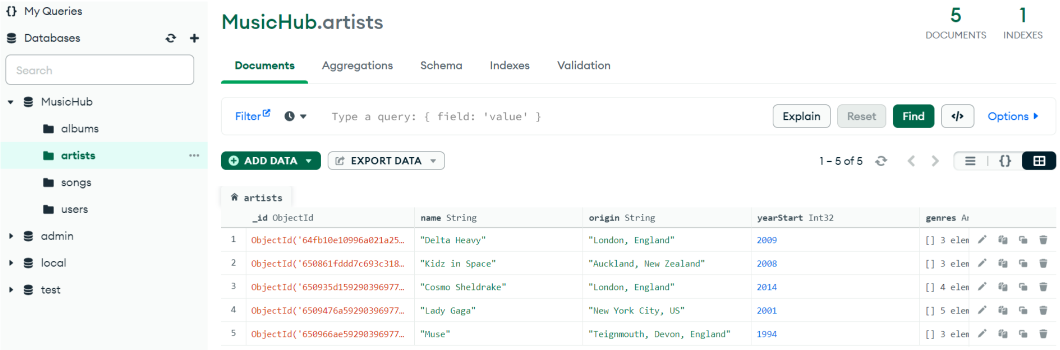
Task 2: Designing the Music Hub API

RAML Code: Too big for screenshot- code provided in VSC files under ‘api.raml’.

Task 3: Building the Music Hub API

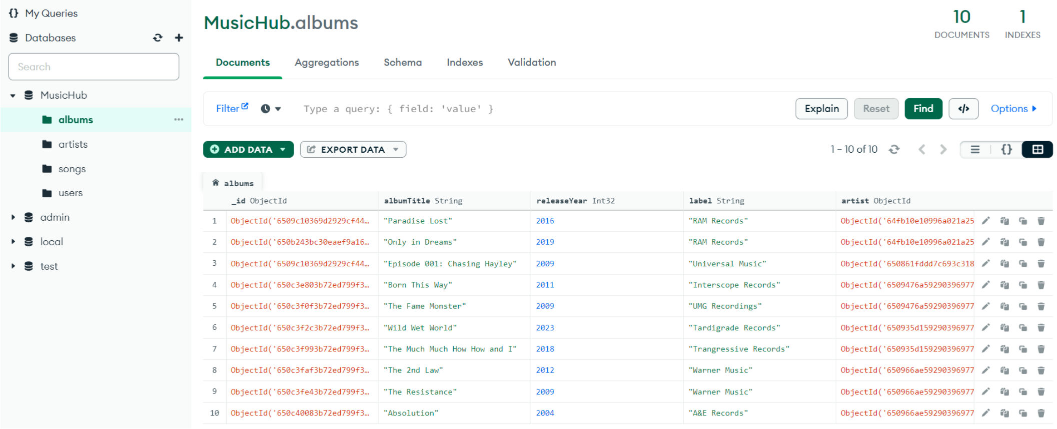
Documents in the created collection:

Artists:



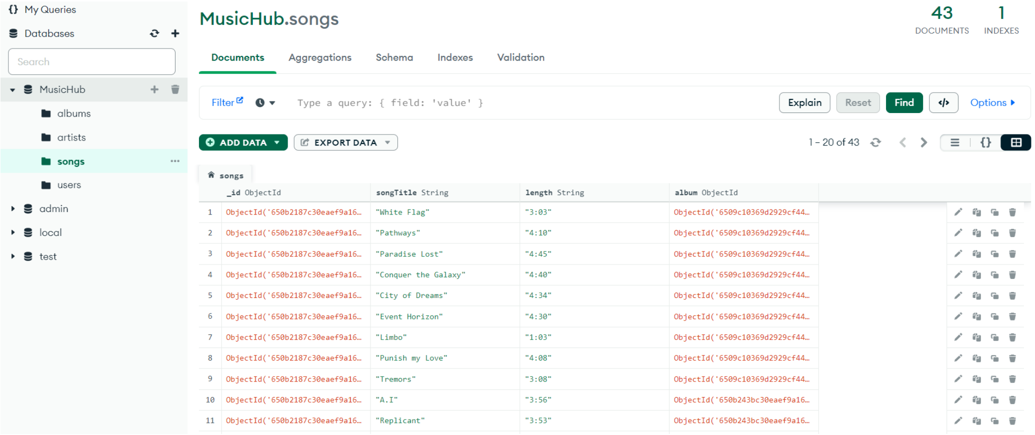
	_id ObjectId	name String	origin String	yearStart Int32	genres Ar
1	ObjectId('64fb10e10996a021a25…	"Delta Heavy"	"London, England"	2009	[] 3 elem
2	ObjectId('650861fddd7c693c318…	"Kidz in Space"	"Auckland, New Zealand"	2008	[] 3 elem
3	ObjectId('650935d159290396977…	"Cosmo Sheldrake"	"London, England"	2014	[] 4 elem
4	ObjectId('6509476a59290396977…	"Lady Gaga"	"New York City, US"	2001	[] 5 elem
5	ObjectId('650966ae59290396977…	"Muse"	"Teignmouth, Devon, England"	1994	[] 3 elem

Albums:



	_id ObjectId	albumTitle String	releaseYear Int32	label String	artist ObjectId
1	ObjectId('6509c10369d2929cf44…	"Paradise Lost"	2016	"RAM Records"	ObjectId('64fb10e10996a021a25
2	ObjectId('650b243bc30eaef9a16…	"Only in Dreams"	2019	"RAM Records"	ObjectId('64fb10e10996a021a25
3	ObjectId('6509c10369d2929cf44…	"Episode 001: Chasing Hayley"	2009	"Universal Music"	ObjectId('650861fddd7c693c318
4	ObjectId('650c3e803b72ed799f3…	"Born This Way"	2011	"Interscope Records"	ObjectId('6509476a59290396977
5	ObjectId('650c3f0f3b72ed799f3…	"The Fame Monster"	2009	"UMG Recordings"	ObjectId('6509476a59290396977
6	ObjectId('650c3f2c3b72ed799f3…	"Wild Wet World"	2023	"Tardigrade Records"	ObjectId('650935d159290396977
7	ObjectId('650c3f993b72ed799f3…	"The Much Much How How and I"	2018	"Trangressive Records"	ObjectId('650935d159290396977
8	ObjectId('650c3faf3b72ed799f3…	"The 2nd Law"	2012	"Warner Music"	ObjectId('650966ae59290396977
9	ObjectId('650c3fe43b72ed799f3…	"The Resistance"	2009	"Warner Music"	ObjectId('650966ae59290396977
10	ObjectId('650c40083b72ed799f3…	"Absolution"	2004	"A&E Records"	ObjectId('650966ae59290396977

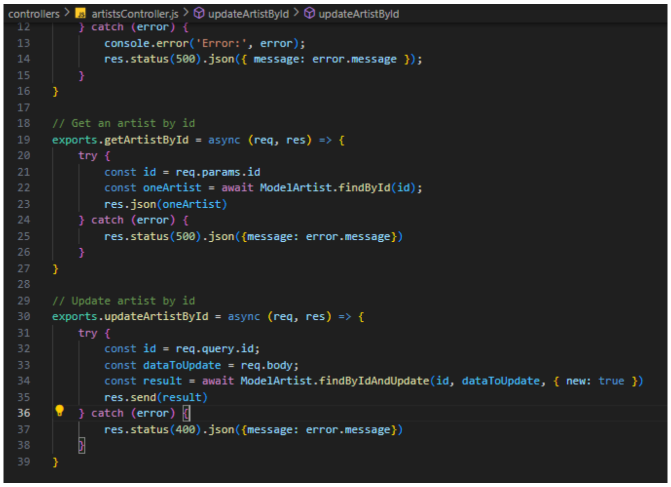
Songs (43 songs entered):



	_id ObjectId	songTitle String	length String	album ObjectId
1	ObjectId('650b2187c30eaef9a16…	"White Flag"	"3:03"	ObjectId('6509c10369d2929cf44…
2	ObjectId('650b2187c30eaef9a16…	"Pathways"	"4:10"	ObjectId('6509c10369d2929cf44…
3	ObjectId('650b2187c30eaef9a16…	"Paradise Lost"	"4:45"	ObjectId('6509c10369d2929cf44…
4	ObjectId('650b2187c30eaef9a16…	"Conquer the Galaxy"	"4:40"	ObjectId('6509c10369d2929cf44…
5	ObjectId('650b2187c30eaef9a16…	"City of Dreams"	"4:34"	ObjectId('6509c10369d2929cf44…
6	ObjectId('650b2187c30eaef9a16…	"Event Horizon"	"4:30"	ObjectId('6509c10369d2929cf44…
7	ObjectId('650b2187c30eaef9a16…	"Limbo"	"1:03"	ObjectId('6509c10369d2929cf44…
8	ObjectId('650b2187c30eaef9a16…	"Punish my Love"	"4:08"	ObjectId('6509c10369d2929cf44…
9	ObjectId('650b2187c30eaef9a16…	"Tremors"	"3:08"	ObjectId('6509c10369d2929cf44…
10	ObjectId('650b2187c30eaef9a16…	"A.I"	"3:56"	ObjectId('650b243bc30eaef9a16…
11	ObjectId('650b2187c30eaef9a16…	"Replicant"	"3:53"	ObjectId('650b243bc30eaef9a16…

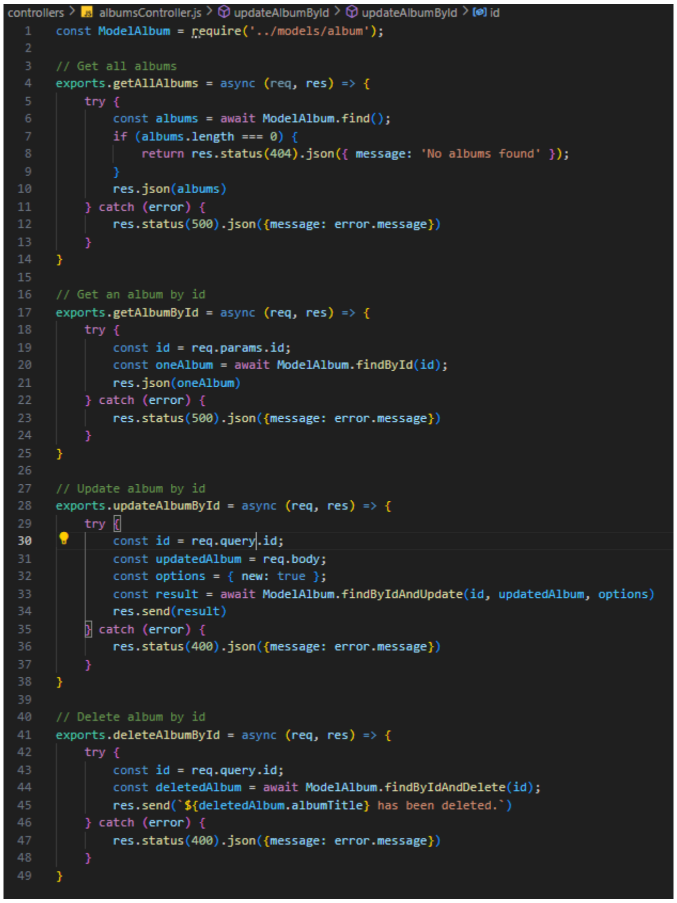
Controller files:

Artist controller:


controllers > artistsController.js > updateArtistById > updateArtistById

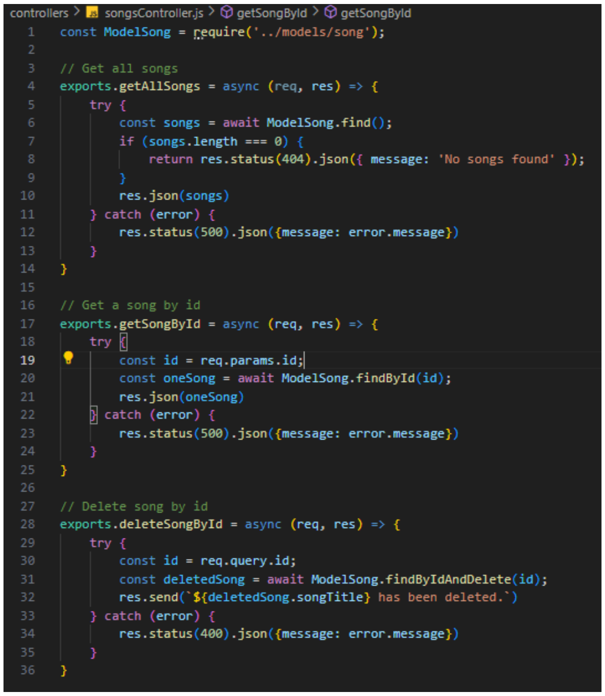
```
    } catch (error) {
        console.error('Error:', error);
        res.status(500).json({ message: error.message });
    }
}

// Get an artist by id
exports.getArtistById = async (req, res) => {
    try {
        const id = req.params.id
        const oneArtist = await ModelArtist.findById(id);
        res.json(oneArtist)
    } catch (error) {
        res.status(500).json({message: error.message})
    }
}

// Update artist by id
exports.updateArtistById = async (req, res) => {
    try {
        const id = req.query.id;
        const dataToUpdate = req.body;
        const result = await ModelArtist.findByIdAndUpdate(id, dataToUpdate, { new: true })
        res.send(result)
    } catch (error) {
        res.status(400).json({message: error.message})
    }
}
```

Album controller:


controllers > albumsController.js > updateAlbumById > updateAlbumById > id

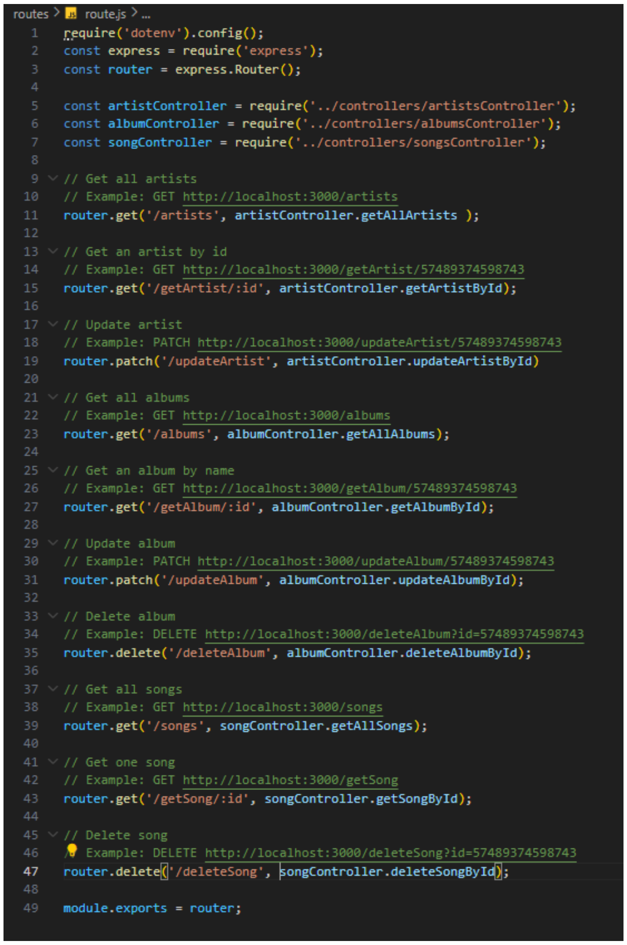
```
const ModelAlbum = require('../models/album');

// Get all albums
exports.getAllAlbums = async (req, res) => {
    try {
        const albums = await ModelAlbum.find();
        if (albums.length === 0) {
            return res.status(404).json({ message: 'No albums found' });
        }
        res.json(albums)
    } catch (error) {
        res.status(500).json({message: error.message})
    }
}

// Get an album by id
exports.getAlbumById = async (req, res) => {
    try {
        const id = req.params.id;
        const oneAlbum = await ModelAlbum.findById(id);
        res.json(oneAlbum)
    } catch (error) {
        res.status(500).json({message: error.message})
    }
}

// Update album by id
exports.updateAlbumById = async (req, res) => {
    try {
        const id = req.query.id;
        const updatedAlbum = req.body;
        const options = { new: true };
        const result = await ModelAlbum.findByIdAndUpdate(id, updatedAlbum, options)
        res.send(result)
    } catch (error) {
        res.status(400).json({message: error.message})
    }
}

// Delete album by id
exports.deleteAlbumById = async (req, res) => {
    try {
        const id = req.query.id;
        const deletedAlbum = await ModelAlbum.findByIdAndDelete(id);
        res.send(`${deletedAlbum.albumTitle} has been deleted.`)
    } catch (error) {
        res.status(400).json({message: error.message})
    }
}
```

Song controller:


controllers > songsController.js > getSongById > getSongById

```javascript
const ModelSong = require('../models/song');

// Get all songs
exports.getAllSongs = async (req, res) => {
    try {
        const songs = await ModelSong.find();
        if (songs.length === 0) {
            return res.status(404).json({ message: 'No songs found' });
        }
        res.json(songs)
    } catch (error) {
        res.status(500).json({message: error.message})
    }
}

// Get a song by id
exports.getSongById = async (req, res) => {
    try {
        const id = req.params.id;
        const oneSong = await ModelSong.findById(id);
        res.json(oneSong)
    } catch (error) {
        res.status(500).json({message: error.message})
    }
}

// Delete song by id
exports.deleteSongById = async (req, res) => {
    try {
        const id = req.query.id;
        const deletedSong = await ModelSong.findByIdAndDelete(id);
        res.send(`${deletedSong.songTitle} has been deleted.`)
    } catch (error) {
        res.status(400).json({message: error.message})
    }
}
```

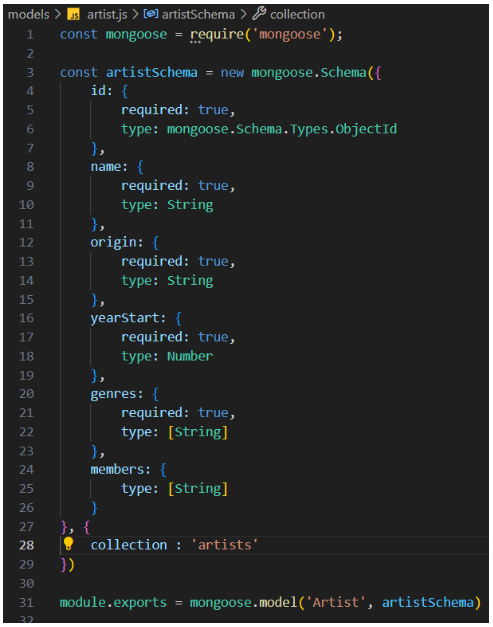
10 route methods:



```javascript
require('dotenv').config();
const express = require('express');
const router = express.Router();

const artistController = require('../controllers/artistsController');
const albumController = require('../controllers/albumsController');
const songController = require('../controllers/songsController');

// Get all artists
// Example: GET http://localhost:3000/artists
router.get('/artists', artistController.getAllArtists );

// Get an artist by id
// Example: GET http://localhost:3000/getArtist/57489374598743
router.get('/getArtist/:id', artistController.getArtistById);

// Update artist
// Example: PATCH http://localhost:3000/updateArtist/57489374598743
router.patch('/updateArtist', artistController.updateArtistById)

// Get all albums
// Example: GET http://localhost:3000/albums
router.get('/albums', albumController.getAllAlbums);

// Get an album by name
// Example: GET http://localhost:3000/getAlbum/57489374598743
router.get('/getAlbum/:id', albumController.getAlbumById);

// Update album
// Example: PATCH http://localhost:3000/updateAlbum/57489374598743
router.patch('/updateAlbum', albumController.updateAlbumById);

// Delete album
// Example: DELETE http://localhost:3000/deleteAlbum?id=57489374598743
router.delete('/deleteAlbum', albumController.deleteAlbumById);

// Get all songs
// Example: GET http://localhost:3000/songs
router.get('/songs', songController.getAllSongs);

// Get one song
// Example: GET http://localhost:3000/getSong
router.get('/getSong/:id', songController.getSongById);

// Delete song
// Example: DELETE http://localhost:3000/deleteSong?id=57489374598743
router.delete('/deleteSong', songController.deleteSongById);

module.exports = router;
```

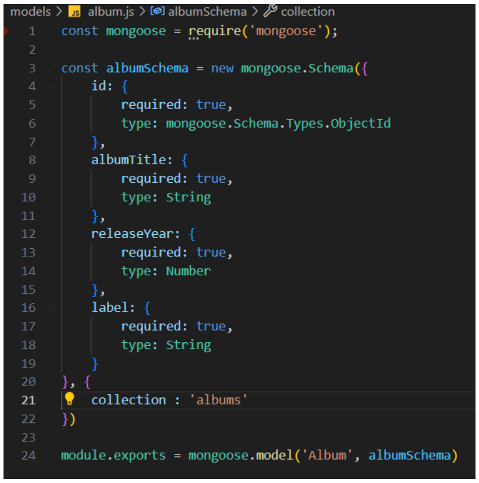
Code for API models:

Artist Model:



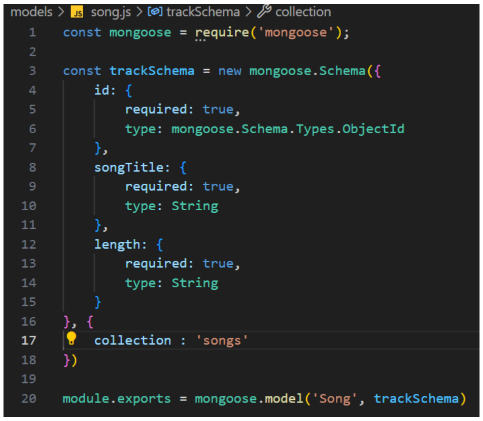
```
const mongoose = require('mongoose');

const artistSchema = new mongoose.Schema({
    id: {
        required: true,
        type: mongoose.Schema.Types.ObjectId
    },
    name: {
        required: true,
        type: String
    },
    origin: {
        required: true,
        type: String
    },
    yearStart: {
        required: true,
        type: Number
    },
    genres: {
        required: true,
        type: [String]
    },
    members: {
        type: [String]
    }
}, {
    collection : 'artists'
})

module.exports = mongoose.model('Artist', artistSchema)
```

Album Model:



```
const mongoose = require('mongoose');

const albumSchema = new mongoose.Schema({
    id: {
        required: true,
        type: mongoose.Schema.Types.ObjectId
    },
    albumTitle: {
        required: true,
        type: String
    },
    releaseYear: {
        required: true,
        type: Number
    },
    label: {
        required: true,
        type: String
    }
}, {
    collection : 'albums'
})

module.exports = mongoose.model('Album', albumSchema)
```

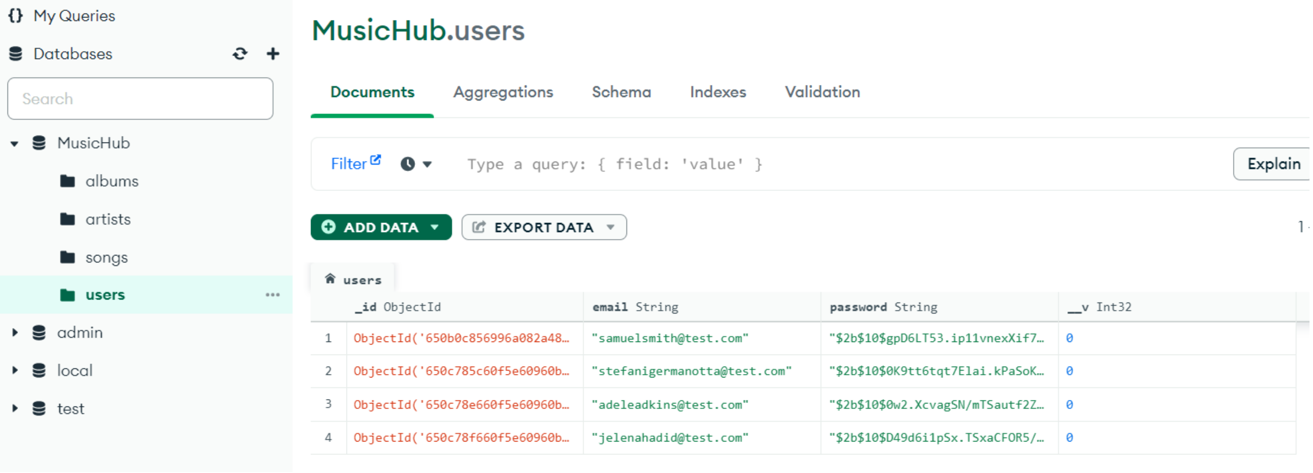
Song Model:



```
const mongoose = require('mongoose');

const trackSchema = new mongoose.Schema({
    id: {
        required: true,
        type: mongoose.Schema.Types.ObjectId
    },
    songTitle: {
        required: true,
        type: String
    },
    length: {
        required: true,
        type: String
    }
}, {
    collection : 'songs'
})

module.exports = mongoose.model('Song', trackSchema)
```

Task 4: Adding User Authentication to the MusicHub API

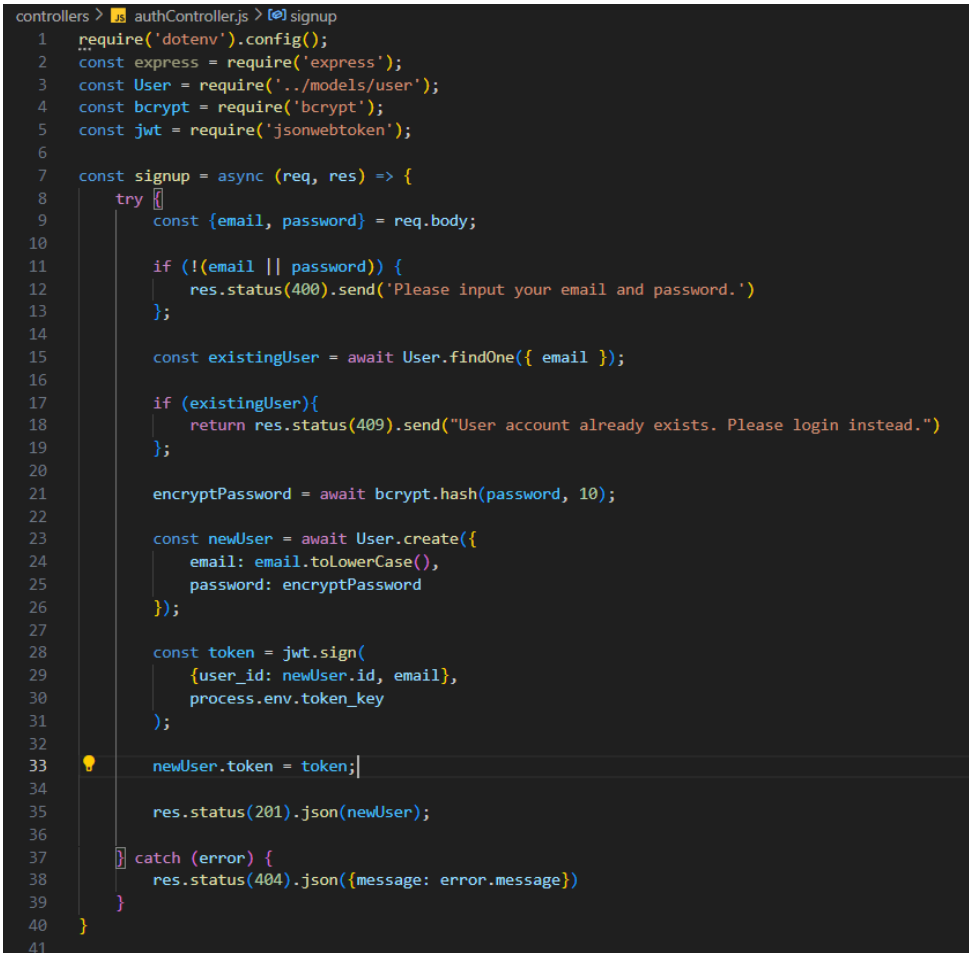
Documents in the users collection in the MongoDB Database: (all passwords are password123)



	_id ObjectId	email String	password String	__v Int32
1	ObjectId('650b0c856996a082a48…	"samuelsmith@test.com"	"$2b$10$gpD6LT53.ip11vnexXif7…	0
2	ObjectId('650c785c60f5e60960b…	"stefanigermanotta@test.com"	"$2b$10$0K9tt6tqt7Elai.kPaSoK…	0
3	ObjectId('650c78e660f5e60960b…	"adeleadkins@test.com"	"$2b$10$0w2.XcvagSN/mTSautf2Z…	0
4	ObjectId('650c78f660f5e60960b…	"jelenahadid@test.com"	"$2b$10$D49d6i1pSx.TSxaCFOR5/…	0

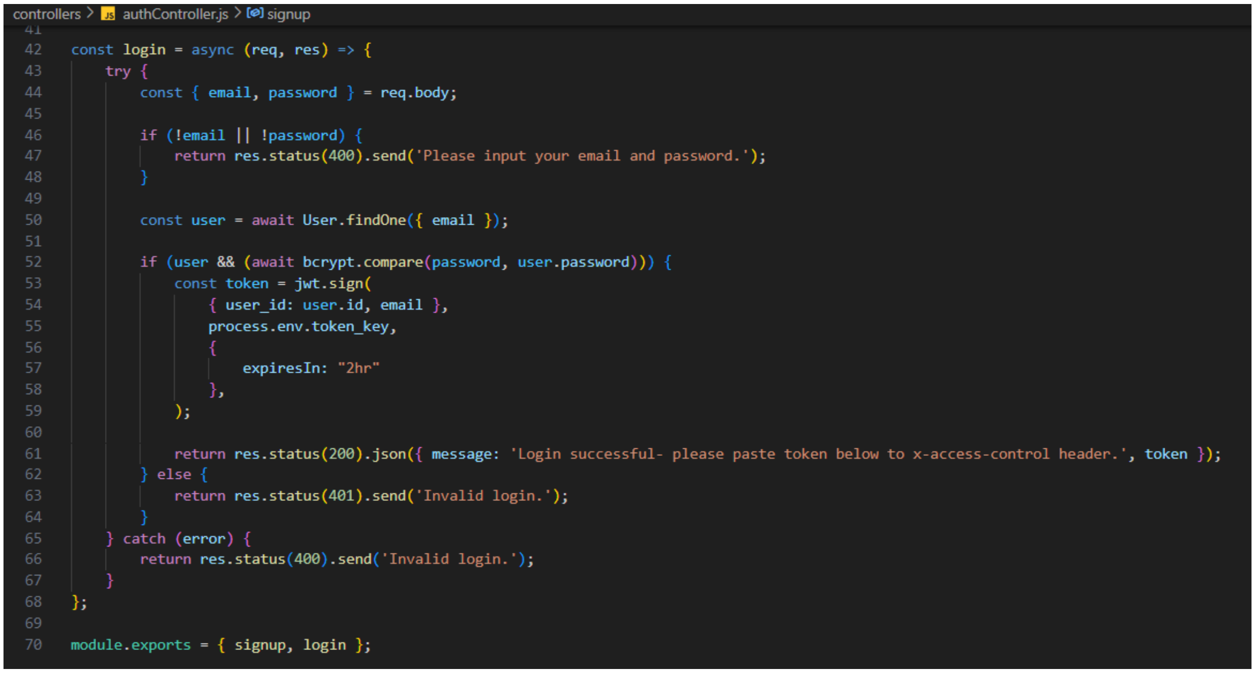
Functions created for signing up and logging the user in:

Signup:



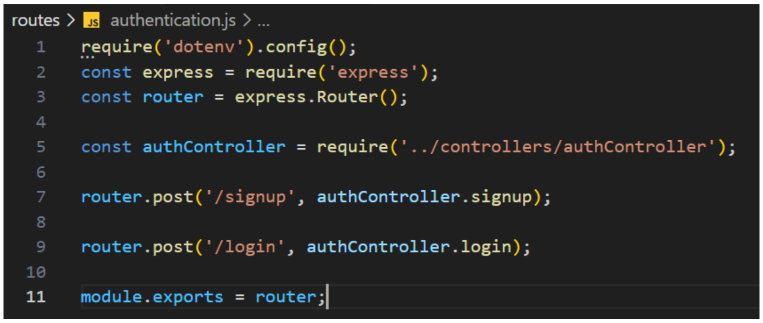
```javascript
require('dotenv').config();
const express = require('express');
const User = require('../models/user');
const bcrypt = require('bcrypt');
const jwt = require('jsonwebtoken');

const signup = async (req, res) => {
    try {
        const {email, password} = req.body;

        if (!(email || password)) {
            res.status(400).send('Please input your email and password.')
        };

        const existingUser = await User.findOne({ email });

        if (existingUser){
            return res.status(409).send("User account already exists. Please login instead.")
        };

        encryptPassword = await bcrypt.hash(password, 10);

        const newUser = await User.create({
            email: email.toLowerCase(),
            password: encryptPassword
        });

        const token = jwt.sign(
            {user_id: newUser.id, email},
            process.env.token_key
        );

        newUser.token = token;

        res.status(201).json(newUser);

    } catch (error) {
        res.status(404).json({message: error.message})
    }
}
```

Login:



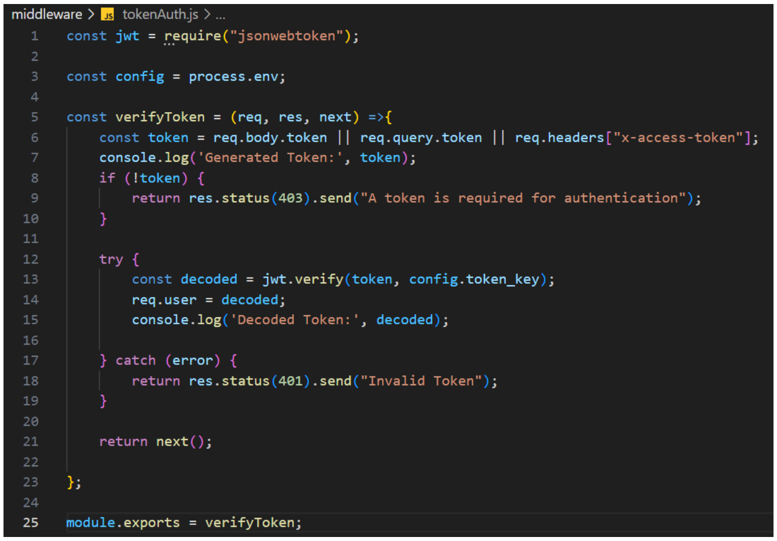
```
const login = async (req, res) => {
    try {
        const { email, password } = req.body;

        if (!email || !password) {
            return res.status(400).send('Please input your email and password.');
        }

        const user = await User.findOne({ email });

        if (user && (await bcrypt.compare(password, user.password))) {
            const token = jwt.sign(
                { user_id: user.id, email },
                process.env.token_key,
                {
                    expiresIn: "2hr"
                },
            );

            return res.status(200).json({ message: 'Login successful- please paste token below to x-access-control header.', token });
        } else {
            return res.status(401).send('Invalid login.');
        }
    } catch (error) {
        return res.status(400).send('Invalid login.');
    }
};

module.exports = { signup, login };
```

Endpoints for the login and signup routes:

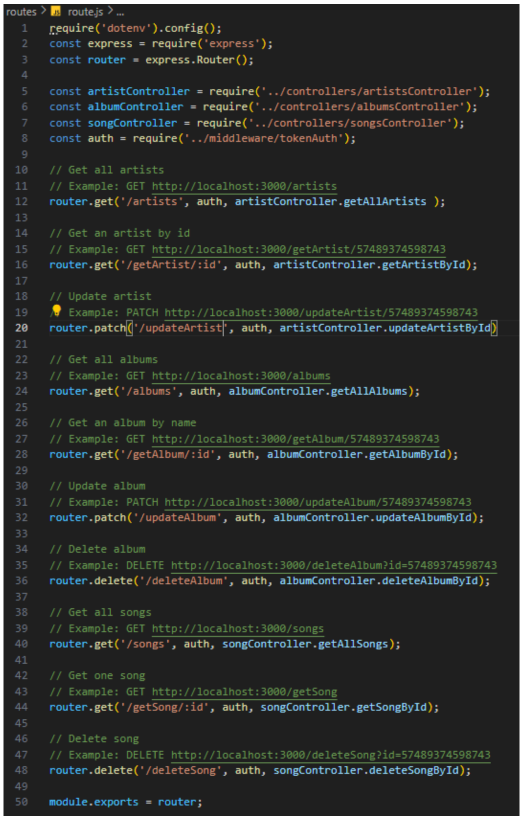


```
require('dotenv').config();
const express = require('express');
const router = express.Router();

const authController = require('../controllers/authController');

router.post('/signup', authController.signup);

router.post('/login', authController.login);

module.exports = router;
```

Code relevant to establishing JWT authentication:



```
const jwt = require("jsonwebtoken");

const config = process.env;

const verifyToken = (req, res, next) =>{
    const token = req.body.token || req.query.token || req.headers["x-access-token"];
    console.log('Generated Token:', token);
    if (!token) {
        return res.status(403).send("A token is required for authentication");
    }

    try {
        const decoded = jwt.verify(token, config.token_key);
        req.user = decoded;
        console.log('Decoded Token:', decoded);

    } catch (error) {
        return res.status(401).send("Invalid Token");
    }

    return next();

};

module.exports = verifyToken;
```

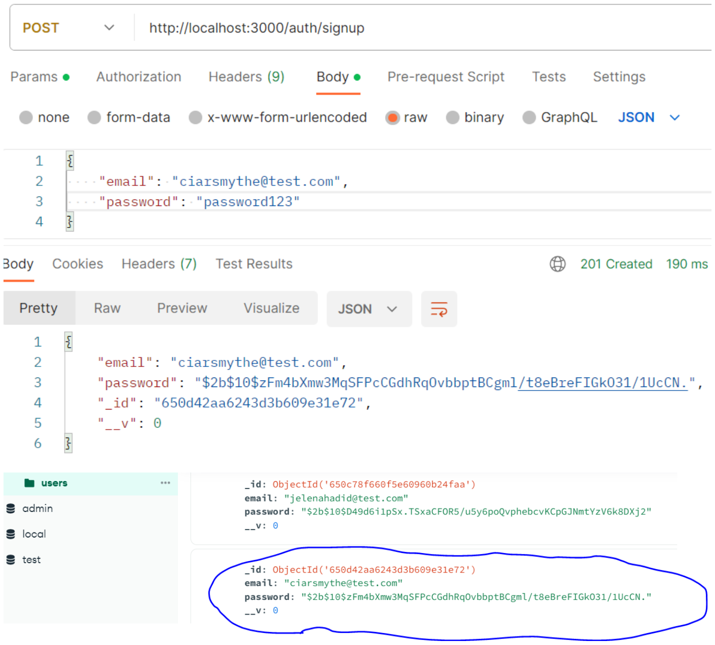


routes > route.js > ...

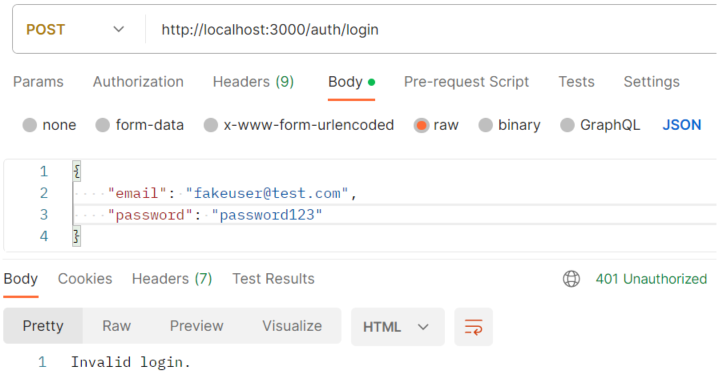
```
require('dotenv').config();
const express = require('express');
const router = express.Router();

const artistController = require('../controllers/artistsController');
const albumController = require('../controllers/albumsController');
const songController = require('../controllers/songsController');
const auth = require('../middleware/tokenAuth');

// Get all artists
// Example: GET http://localhost:3000/artists
router.get('/artists', auth, artistController.getAllArtists );

// Get an artist by id
// Example: GET http://localhost:3000/getArtist/57489374598743
router.get('/getArtist/:id', auth, artistController.getArtistById);

// Update artist
// Example: PATCH http://localhost:3000/updateArtist/57489374598743
router.patch('/updateArtist', auth, artistController.updateArtistById)

// Get all albums
// Example: GET http://localhost:3000/albums
router.get('/albums', auth, albumController.getAllAlbums);

// Get an album by name
// Example: GET http://localhost:3000/getAlbum/57489374598743
router.get('/getAlbum/:id', auth, albumController.getAlbumById);

// Update album
// Example: PATCH http://localhost:3000/updateAlbum/57489374598743
router.patch('/updateAlbum', auth, albumController.updateAlbumById);

// Delete album
// Example: DELETE http://localhost:3000/deleteAlbum?id=57489374598743
router.delete('/deleteAlbum', auth, albumController.deleteAlbumById);

// Get all songs
// Example: GET http://localhost:3000/songs
router.get('/songs', auth, songController.getAllSongs);

// Get one song
// Example: GET http://localhost:3000/getSong
router.get('/getSong/:id', auth, songController.getSongById);

// Delete song
// Example: DELETE http://localhost:3000/deleteSong?id=57489374598743
router.delete('/deleteSong', auth, songController.deleteSongById);

module.exports = router;
```

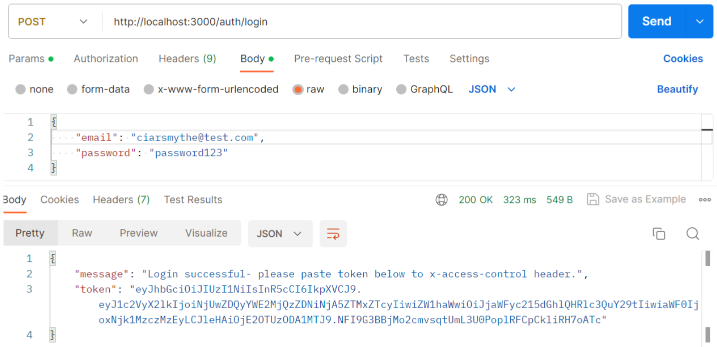
Task 5: Testing the MusicHub API

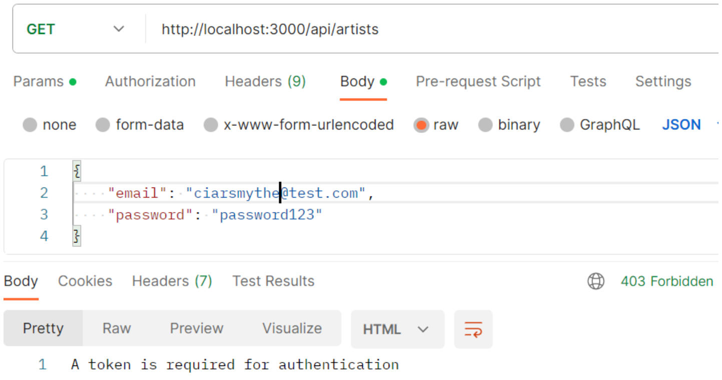
Date	Route Test	Expectation	Actual	Evidence

22/09/23	Route: /auth/signup
	Params: email: ciarsmythe@test.com, password: password123
		Inputting the email and password will print the json result of creating a user account, and can be found in the user collection in MongoDB.	**PASS**: user created in both Postman and MongoDB.	
				POST http://localhost:3000/auth/signup
				Params ● Authorization Headers (9) Body ● Pre-request Script Tests Settings
				○ none ○ form-data ○ x-www-form-urlencoded ● raw ○ binary ○ GraphQL JSON
				`{`
				`    "email": "ciarsmythe@test.com",`
				`    "password": "password123"`
				`}`
				Body Cookies Headers (7) Test Results 201 Created 190 ms
				Pretty Raw Preview Visualize JSON
				`{`
				`    "email": "ciarsmythe@test.com",`
				`    "password": "$2b$10$zFm4bXmw3MqSFPcCGdhRqOvbbptBCgml/t8eBreFIGkO31/1UcCN.",`
				`    "_id": "650d42aa6243d3b609e31e72",`
				`    "__v": 0`
				`}`
				users admin local test
				`_id: ObjectId('650c78f660f5e60960b24faa')`
				`email: "jelenahadid@test.com"`
				`password: "$2b$10$D49d6i1pSx.TSxaCFOR5/u5y6poQvphebcvKCpGJNmtYzV6k8DXj2"`
				`__v: 0`
				`_id: ObjectId('650d42aa6243d3b609e31e72')`
				`email: "ciarsmythe@test.com"`
				`password: "$2b$10$zFm4bXmw3MqSFPcCGdhRqOvbbptBCgml/t8eBreFIGkO31/1UcCN."`
				`__v: 0`

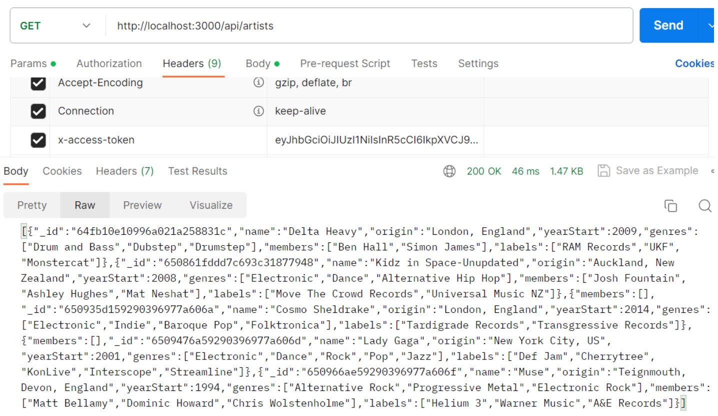
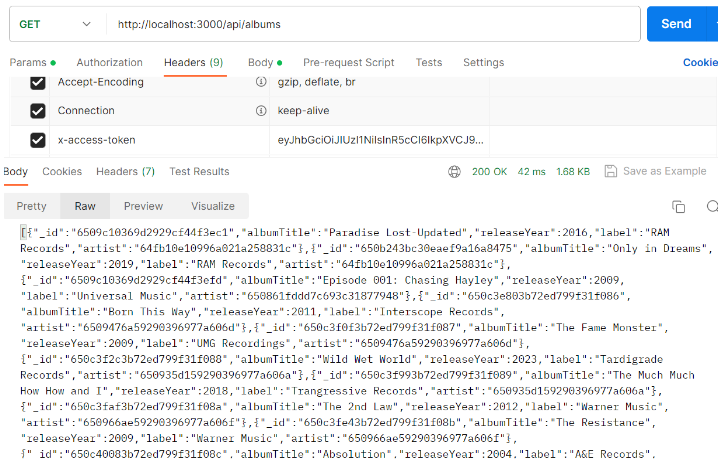
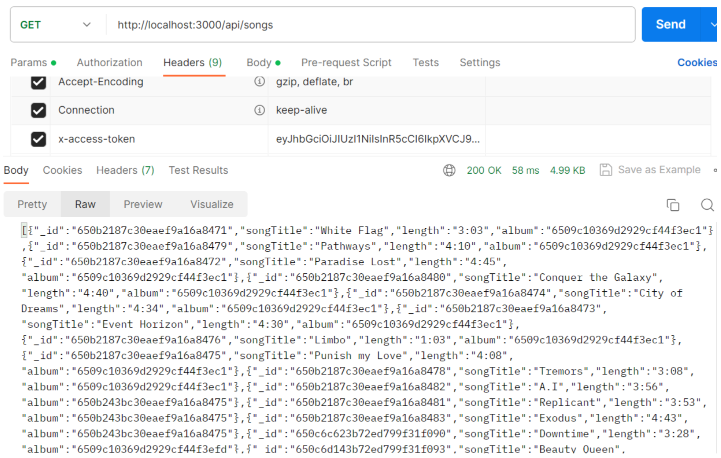
IT6038 Web Services Practical Tasks Ciar Smythe (20210993)

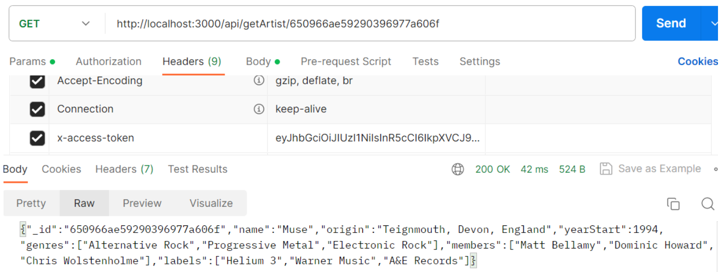
22/09/23	Route: /auth/login
	Params: email: fakeuser@test.com, password: password123
		The user not previously created will not be able to log in. Invalid login message should appear.	**PASS:** Invalid login message appeared.	POST http://localhost:3000/auth/login
				Body ● raw JSON
				`{`
				`"email": "fakeuser@test.com",`
				`"password": "password123"`
				`}`
				Body Cookies Headers (7) Test Results — 401 Unauthorized
				Pretty HTML
				`Invalid login.`

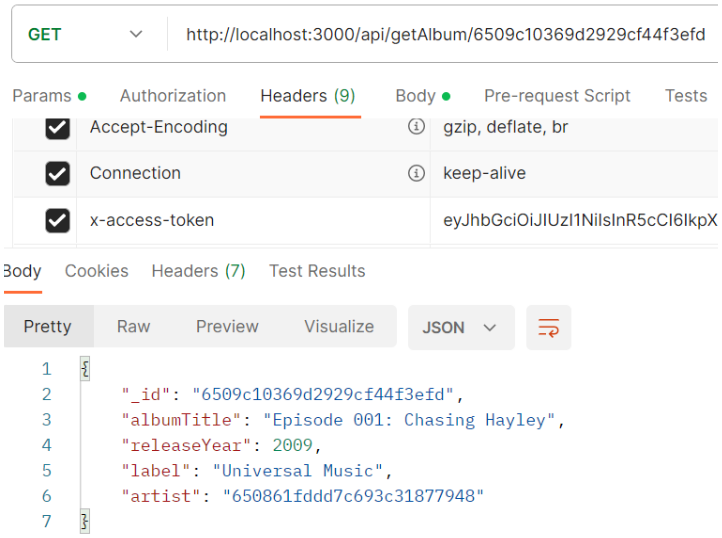
22/09/23	Route: /auth/login
	Params: email: ciarsmythe@test.com, password: password123
		A successful login message will appear, and a JWT will be generated for the user to use for authentication.	**PASS:** token has been randomly generated.	POST http://localhost:3000/auth/login Send
				Params ● Body ● raw JSON
				`{`
				`"email": "ciarsmythe@test.com",`
				`"password": "password123"`
				`}`
				Body Cookies Headers (7) Test Results — 200 OK 323 ms 549 B Save as Example
				Pretty JSON
				`{`
				`"message": "Login successful- please paste token below to x-access-control header.",`
				`"token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VyX2lkIjoiNjUwZDQyYWE2MjQzZDNiNjA5ZTMxZTcyIiwiZW1haWwiOiJjaWFyc215dGhlQHRlc3QuY29tIiwiaWF0IjoxNjk1MzczMzEyLCJleHAiOjE2OTUzODA1MTJ9.NFI9G3BBjMo2cmvsqtUmL3U0PoplRFCpCkliRH7oATc"`
				`}`

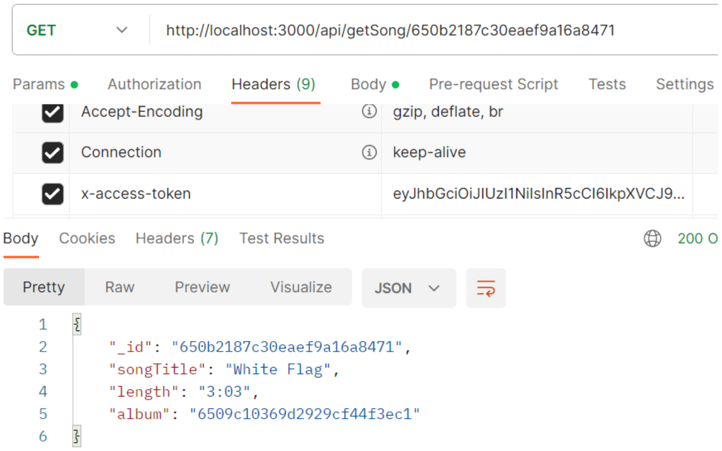
22/09/23	Route: /api/artists
	Params: no JWT entered.
		Without a JWT input, the authenticated user will be unable to access api routes. A 403 error message needing a token will be displayed.	**PASS:** without a token, the user could not access or use the api routes.	GET http://localhost:3000/api/artists
				Params ● Body ● raw JSON
				`{`
				`"email": "ciarsmythe@test.com",`
				`"password": "password123"`
				`}`
				Body Cookies Headers (7) Test Results — 403 Forbidden
				Pretty HTML
				`A token is required for authentication`

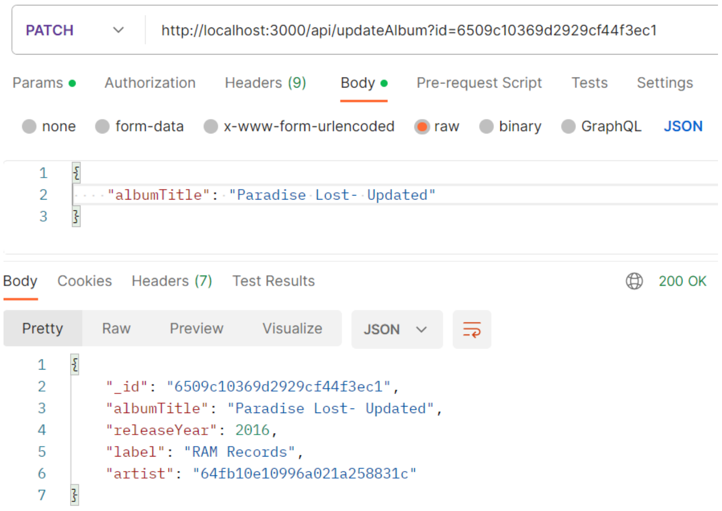
IT6038 Web Services Practical Tasks Ciar Smythe (20210993)

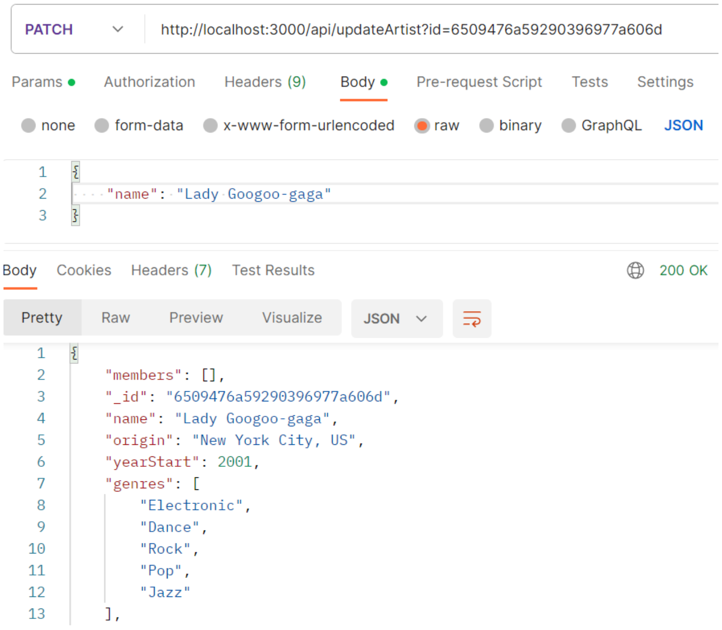
22/09/23	<u>Route:</u> /api/artists <u>Params:</u> Show all artists.	The authenticated user can see a list of all the artists in the database.	**PASS:** All artists are printed.	 http://localhost:3000/api/artists Params ● Authorization Headers (9) Body ● Pre-request Script Tests Settings Cookies ☑ Accept-Encoding gzip, deflate, br ☑ Connection keep-alive ☑ x-access-token eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9... Body Cookies Headers (7) Test Results 200 OK 46 ms 1.47 KB Pretty Raw Preview Visualize [{"_id":"64fb10e10996a021a258831c","name":"Delta Heavy","origin":"London, England","yearStart":2009,"genres":["Drum and Bass","Dubstep","Drumstep"],"members":["Ben Hall","Simon James"],"labels":["RAM Records","UKF","Monstercat"]},{"_id":"650861fddd7c693c31877948","name":"Kidz in Space-Unupdated","origin":"Auckland, New Zealand","yearStart":2008,"genres":["Electronic","Dance","Alternative Hip Hop"],"members":["Josh Fountain","Ashley Hughes","Mat Neshat"],"labels":["Move The Crowd Records","Universal Music NZ"]},{"members":[],"_id":"650935d159290396977a606a","name":"Cosmo Sheldrake","origin":"London, England","yearStart":2014,"genres":["Electronic","Indie","Baroque Pop","Folktronica"],"labels":["Tardigrade Records","Transgressive Records"]},{"members":[],"_id":"6509476a59290396977a606d","name":"Lady Gaga","origin":"New York City, US","yearStart":2001,"genres":["Electronic","Dance","Rock","Pop","Jazz"],"labels":["Def Jam","Cherrytree","KonLive","Interscope","Streamline"]},{"_id":"650966ae59290396977a606f","name":"Muse","origin":"Teignmouth, Devon, England","yearStart":1994,"genres":["Alternative Rock","Progressive Metal","Electronic Rock"],"members":["Matt Bellamy","Dominic Howard","Chris Wolstenholme"],"labels":["Helium 3","Warner Music","A&E Records"]}]
22/09/23	<u>Route:</u> /api/albums <u>Params:</u> Show all albums.	The authenticated user can see a list of all the albums in the database.	**PASS:** All albums are printed.	 http://localhost:3000/api/albums Params ● Authorization Headers (9) Body ● Pre-request Script Tests Settings Cookie ☑ Accept-Encoding gzip, deflate, br ☑ Connection keep-alive ☑ x-access-token eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9... Body Cookies Headers (7) Test Results 200 OK 42 ms 1.68 KB Pretty Raw Preview Visualize [{"_id":"6509c10369d2929cf44f3ec1","albumTitle":"Paradise Lost-Updated","releaseYear":2016,"label":"RAM Records","artist":"64fb10e10996a021a258831c"},{"_id":"650b243bc30eaef9a16a8475","albumTitle":"Only in Dreams","releaseYear":2019,"label":"RAM Records","artist":"64fb10e10996a021a258831c"},{"_id":"6509c10369d2929cf44f3efd","albumTitle":"Episode 001: Chasing Hayley","releaseYear":2009,"label":"Universal Music","artist":"650861fddd7c693c31877948"},{"_id":"650c3e803b72ed799f31f086","albumTitle":"Born This Way","releaseYear":2011,"label":"Interscope Records","artist":"6509476a59290396977a606d"},{"_id":"650c3f0f3b72ed799f31f087","albumTitle":"The Fame Monster","releaseYear":2009,"label":"UMG Recordings","artist":"6509476a59290396977a606d"},{"_id":"650c3f2c3b72ed799f31f088","albumTitle":"Wild Wet World","releaseYear":2023,"label":"Tardigrade Records","artist":"650935d159290396977a606a"},{"_id":"650c3f993b72ed799f31f089","albumTitle":"The Much Much How How and I","releaseYear":2018,"label":"Trangressive Records","artist":"650935d159290396977a606a"},{"_id":"650c3faf3b72ed799f31f08a","albumTitle":"The 2nd Law","releaseYear":2012,"label":"Warner Music","artist":"650966ae59290396977a606f"},{"_id":"650c3fe43b72ed799f31f08b","albumTitle":"The Resistance","releaseYear":2009,"label":"Warner Music","artist":"650966ae59290396977a606f"},{"_id":"650c40083b72ed799f31f08c","albumTitle":"Absolution","releaseYear":2004,"label":"A&E Records",
22/09/23	<u>Route:</u> /api/songs <u>Params:</u> Show all songs.	The authenticated user can see a list of all the songs in the database.	**PASS:** All songs are printed.	 http://localhost:3000/api/songs Params ● Authorization Headers (9) Body ● Pre-request Script Tests Settings Cookies ☑ Accept-Encoding gzip, deflate, br ☑ Connection keep-alive ☑ x-access-token eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9... Body Cookies Headers (7) Test Results 200 OK 58 ms 4.99 KB Pretty Raw Preview Visualize [{"_id":"650b2187c30eaef9a16a8471","songTitle":"White Flag","length":"3:03","album":"6509c10369d2929cf44f3ec1"},{"_id":"650b2187c30eaef9a16a8479","songTitle":"Pathways","length":"4:10","album":"6509c10369d2929cf44f3ec1"},{"_id":"650b2187c30eaef9a16a8472","songTitle":"Paradise Lost","length":"4:45","album":"6509c10369d2929cf44f3ec1"},{"_id":"650b2187c30eaef9a16a8480","songTitle":"Conquer the Galaxy","length":"4:40","album":"6509c10369d2929cf44f3ec1"},{"_id":"650b2187c30eaef9a16a8474","songTitle":"City of Dreams","length":"4:34","album":"6509c10369d2929cf44f3ec1"},{"_id":"650b2187c30eaef9a16a8473","songTitle":"Event Horizon","length":"4:30","album":"6509c10369d2929cf44f3ec1"},{"_id":"650b2187c30eaef9a16a8476","songTitle":"Limbo","length":"1:03","album":"6509c10369d2929cf44f3ec1"},{"_id":"650b2187c30eaef9a16a8475","songTitle":"Punish my Love","length":"4:08","album":"6509c10369d2929cf44f3ec1"},{"_id":"650b2187c30eaef9a16a8478","songTitle":"Tremors","length":"3:08","album":"6509c10369d2929cf44f3ec1"},{"_id":"650b2187c30eaef9a16a8482","songTitle":"A.I","length":"3:56","album":"650b243bc30eaef9a16a8475"},{"_id":"650b2187c30eaef9a16a8481","songTitle":"Replicant","length":"3:53","album":"650b243bc30eaef9a16a8475"},{"_id":"650b2187c30eaef9a16a8483","songTitle":"Exodus","length":"4:43","album":"650b243bc30eaef9a16a8475"},{"_id":"650c6c623b72ed799f31f090","songTitle":"Downtime","length":"3:28","album":"6509c10369d2929cf44f3efd"},{"_id":"650c6d143b72ed799f31f093","songTitle":"Beauty Queen",

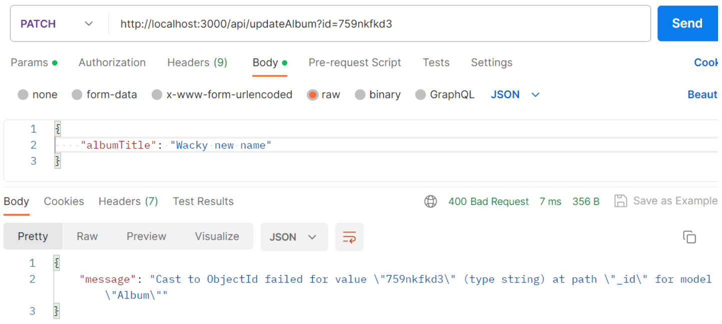
22/09/23	Route: /api/getArtist/:id Params: Get a specific artist. Artist selected: Muse, id = (650966ae59290396977a606f)	Only the specific artist's information will be shown. In this case, the information for the band Muse.	**PASS:** Only Muse's information displayed.	 GET http://localhost:3000/api/getArtist/650966ae59290396977a606f ☑ Accept-Encoding: gzip, deflate, br ☑ Connection: keep-alive ☑ x-access-token: eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9... 200 OK 42 ms 524 B {"_id":"650966ae59290396977a606f","name":"Muse","origin":"Teignmouth, Devon, England","yearStart":1994, "genres":["Alternative Rock","Progressive Metal","Electronic Rock"],"members":["Matt Bellamy","Dominic Howard", "Chris Wolstenholme"],"labels":["Helium 3","Warner Music","A&E Records"]}

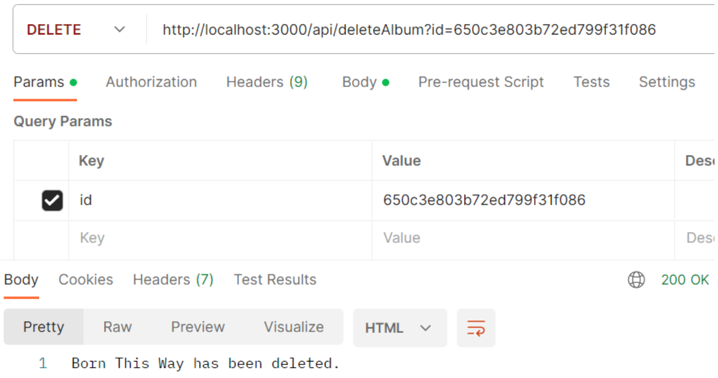
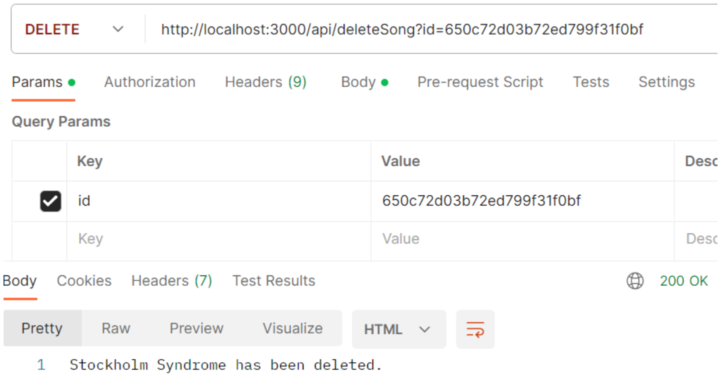
22/09/23	Route:
	/api/getAlbum/:id
	Params: Get a specific album.
	Album selected: Episode 001: Chasing Haley, id = (6509c10369d2929cf44f3efd)
		Only the specific album's information will be shown. In this case, the information for the album Episode 001: Chasing Haley.	**PASS:** Only 'Episode 001: Chasing Haley' album information was displayed.	
				GET http://localhost:3000/api/getAlbum/6509c10369d2929cf44f3efd
				☑ Accept-Encoding: gzip, deflate, br
				☑ Connection: keep-alive
				☑ x-access-token: eyJhbGciOiJIUzI1NiIsInR5cCI6IkpX
				{
				"_id": "6509c10369d2929cf44f3efd",
				"albumTitle": "Episode 001: Chasing Hayley",
				"releaseYear": 2009,
				"label": "Universal Music",
				"artist": "650861fddd7c693c31877948"
				}

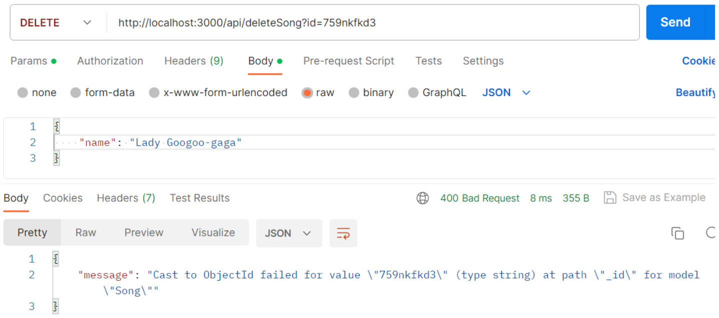
22/09/23	Route:
	/api/getSong/:id
	/api/getAlbum/:id
	Params: Get a specific song.
	Song selected: White Flag, id = (650b2187c30eaef9a16a8471)
		Only the specific song's information will be shown. In this case, the information for the song White Flag.	**PASS:** Only 'Episode 001: Chasing Haley' album information was displayed.	
				GET http://localhost:3000/api/getSong/650b2187c30eaef9a16a8471
				☑ Accept-Encoding: gzip, deflate, br
				☑ Connection: keep-alive
				☑ x-access-token: eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9...
				200 O
				{
				"_id": "650b2187c30eaef9a16a8471",
				"songTitle": "White Flag",
				"length": "3:03",
				"album": "6509c10369d2929cf44f3ec1"
				}

22/09/23	Route: /api/updateAlbum
	Params: Update an album by using its id number. In this case, the id was (6509c10369d2929cf44f3ec1) for Paradise Lost.
		Patching the title of the album should show an updated version of its title on Postmate, with the update also being registered in MongoDB.	**PASS:** The album title was updated.	
				PATCH http://localhost:3000/api/updateAlbum?id=6509c10369d2929cf44f3ec1
				Body: raw JSON
				`{`
				`"albumTitle": "Paradise Lost- Updated"`
				`}`
				200 OK
				`{`
				`"_id": "6509c10369d2929cf44f3ec1",`
				`"albumTitle": "Paradise Lost- Updated",`
				`"releaseYear": 2016,`
				`"label": "RAM Records",`
				`"artist": "64fb10e10996a021a258831c"`
				`}`

22/09/23	Route: /api/updateArtist
	Params: Update an artist by using their id number. In this case, the id was (6509c10369d2929cf44f3ec1) for Lady Gaga.
		Patching the name of the artist/band should show an updated version of its name on Postmate, with the update also being registered in MongoDB.	**PASS:** The artist's name was updated.	
				PATCH http://localhost:3000/api/updateArtist?id=6509476a59290396977a606d
				Body: raw JSON
				`{`
				`"name": "Lady Googoo-gaga"`
				`}`
				200 OK
				`{`
				`"members": [],`
				`"_id": "6509476a59290396977a606d",`
				`"name": "Lady Googoo-gaga",`
				`"origin": "New York City, US",`
				`"yearStart": 2001,`
				`"genres": [`
				`"Electronic",`
				`"Dance",`
				`"Rock",`
				`"Pop",`
				`"Jazz"`
				`],`

22/09/23	Route: /api/updateAlbum
	Params: Try to update an album with an id that doesn't exist.
		Error message will appear, updating nothing.	**PASS:** error message appeared.	
				PATCH http://localhost:3000/api/updateAlbum?id=759nkfkd3
				Body: raw JSON
				`{`
				`"albumTitle": "Wacky new name"`
				`}`
				400 Bad Request 7 ms 356 B
				`{`
				`"message": "Cast to ObjectId failed for value \"759nkfkd3\" (type string) at path \"_id\" for model \"Album\""`
				`}`

22/09/23	Route: /api/deleteAlbum Params: Delete an album using its id number. Id was (650c3e803b72ed799f31f086) for Born This Way.	A message saying Born This Way has been deleted, and will be removed from the database.	**PASS:** The album has been deleted.	 DELETE http://localhost:3000/api/deleteAlbum?id=650c3e803b72ed799f31f086 Params ● Authorization Headers (9) Body ● Pre-request Script Tests Settings Query Params Key: id ☑ Value: 650c3e803b72ed799f31f086 Body Cookies Headers (7) Test Results 200 OK Pretty Raw Preview Visualize HTML `Born This Way has been deleted.`
22/09/23	Route: /api/deleteSong Params: Delete a song using its id number. In this case, the id was (650c72d03b72ed799f31f0bf) for Stockholm Syndrome.	A message saying Stockholm Syndrome was deleted, and it will be removed from the database.	**PASS:** The song has been deleted.	 DELETE http://localhost:3000/api/deleteSong?id=650c72d03b72ed799f31f0bf Params ● Authorization Headers (9) Body ● Pre-request Script Tests Settings Query Params Key: id ☑ Value: 650c72d03b72ed799f31f0bf Body Cookies Headers (7) Test Results 200 OK Pretty Raw Preview Visualize HTML `Stockholm Syndrome has been deleted.`

22/09/23	Route: /api/deleteSong
	Params: Try to delete a song using an id that doesn't exist.
		Error message will appear, deletes nothing.	**PASS:** error message appeared.	
				DELETE http://localhost:3000/api/deleteSong?id=759nkfkd3 Send
				Params ● Authorization Headers (9) Body ● Pre-request Script Tests Settings
				○ none ○ form-data ○ x-www-form-urlencoded ● raw ○ binary ○ GraphQL JSON
				`{ "name": "Lady Googoo-gaga" }`
				Body Cookies Headers (7) Test Results 400 Bad Request 8 ms 355 B Save as Example
				Pretty Raw Preview Visualize JSON
				`{ "message": "Cast to ObjectId failed for value \"759nkfkd3\" (type string) at path \"_id\" for model \"Song\"" }`