



./music.yaml

Explore

Musicband Service Endpoints - OpenAPI

3.1.1

0.0.1 OAS 3.1

./music.yaml

OpenAPI specification for **Laboratory work №1** of **Service-oriented architecture** at **ITMO-University**.

[Roman Kobelev & Balin Artem - Website](#)

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Servers

https://localhost:5252 - Helios

default

GET **/music-bands** Get list of musicbands.

Get list of musicbands with possible filtering, sorting and pagination.

Parameters

Try it out

Name	Description
sort array<string> (query)	Fields to sort by. Prefix with '-' for descending order. If field is used multiple times (both with and without prefix), the last occurrence takes precedence.
page integer(\$int32) (query)	Page number. If provided, size must also be provided. Otherwise, page is ignored. <i>Default value</i> : 1
size integer(\$int32) (query)	Number of items per page. If page is provided, size must also be provided. Otherwise, size is ignored. <i>Default value</i> : 10
filter array<string> (query)	Filter conditions in the format field(> = < = < != == ^= \$= @=)value. "^=" is for prefix matching, "\$=" is for suffix matching, and "@=" is for substring matching. If a non-

Name	Description
	numeric field is used with a numeric operator or date format is invalid, an error is returned.

Responses

Code	Description	Links
200	<div>A list of musicbands.</div> <div>Media type</div> <div>application/xml</div> <div>Controls Accept header.</div> <div>Example Value Schema</div> <div><?xml version="1.0" encoding="UTF-8"?> <musicBands> <musicBandAllSchema> <name>string</name> <coordinates> <x>-975</x> <y>1</y> </coordinates> <numberOfParticipants>1</numberOfParticipants> <albumsCount>1</albumsCount> <description>string</description> <genre>PSYCHEDELIC_CLOUD_RAP</genre> <album> <name>string</name> <tracks>1</tracks> </album> <id>1</id> <creationDate>2025-09-05</creationDate> </musicBandAllSchema> </musicBands></div>	No links
400	<div>Bad Request - Invalid Query Parameters.</div> <div>Media type</div> <div>application/xml</div> <div>Example Value Schema</div> <div><?xml version="1.0" encoding="UTF-8"?> <error> <code>400</code> <message>Bad Request</message> </error></div>	No links
500	<div>Internal Server Error</div> <div>Media type</div> <div>application/xml</div> <div>Example Value Schema</div> <div><?xml version="1.0" encoding="UTF-8"?> <error> <code>500</code></div>	No links

Code	Description	Links
	<pre><message>Internal Server Error</message> </error></pre>	
default	Internal Server Error	No links
	Media type	
	<div>application/xml</div>	
	Example Value	Schema
	<pre><?xml version="1.0" encoding="UTF-8"?> <error> <code>500</code> <message>Internal Server Error</message> </error></pre>	

POST

/music-bands

Create a new musicband.

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Create a new musicband with the provided details.

Parameters

Try it out

No parameters

Request body

required

application/xml

Musicband to add.

Example Value

Schema

<?xml version="1.0" encoding="UTF-8"?>
<musicBand>
 <name>string</name>
 <coordinates>
 <x>-975</x>
 <y>1</y>
 </coordinates>
 <numberOfParticipants>1</numberOfParticipants>
 <albumsCount>1</albumsCount>
 <description>string</description>
 <genre>PSYCHEDELIC_CLOUD_RAP</genre>
 <album>
 <name>string</name>
 <tracks>1</tracks>
 </album>
</musicBand>

Responses

Code	Description	Links
201	Musicband created successfully.	No links

Code	Description	Links
	<div>Media type</div> <div>application/xml</div> <div>Controls Accept header.</div> <div>Example Value Schema</div> <div><?xml version="1.0" encoding="UTF-8"?><musicBandAllSchema> <name>string</name> <coordinates> <x>-975</x> <y>1</y> </coordinates> <numberOfParticipants>1</numberOfParticipants> <albumsCount>1</albumsCount> <description>string</description> <genre>PSYCHEDELIC_CLOUD_RAP</genre> <album> <name>string</name> <tracks>1</tracks> </album> <id>1</id> <creationDate>2025-09-05</creationDate></musicBandAllSchema></div>	
400	<div>Bad Request - Invalid input.</div> <div>Media type</div> <div>application/xml</div> <div>Example Value Schema</div> <div><?xml version="1.0" encoding="UTF-8"?><error> <code>400</code> <message>Bad Request</message></error></div>	No links
500	<div>Internal Server Error</div> <div>Media type</div> <div>application/xml</div> <div>Example Value Schema</div> <div><?xml version="1.0" encoding="UTF-8"?><error> <code>500</code> <message>Internal Server Error</message></error></div>	No links
default	<div>Internal Server Error</div> <div>Media type</div> <div>application/xml</div> <div>Example Value Schema</div> <div><?xml version="1.0" encoding="UTF-8"?><error> <code>500</code> <message>Internal Server Error</message></error></div>	No links



Retrieve a single musicband by its unique ID.

Parameters

Try it out

Name	Description
id * required	The unique identifier of the musicband.
integer(\$int32) (path)	<div>id</div>

Responses

Code	Description	Links
200	<div>A single musicband.</div> <div>Media type</div> <div>application/xml</div> <div>Controls Accept header.</div> <div>Example Value Schema</div> <div><?xml version="1.0" encoding="UTF-8"?> <musicBandAllSchema> <name>string</name> <coordinates> <x>-975</x> <y>1</y> </coordinates> <numberOfParticipants>1</numberOfParticipants> <albumsCount>1</albumsCount> <description>string</description> <genre>PSYCHEDELIC_CLOUD_RAP</genre> <album> <name>string</name> <tracks>1</tracks> </album> <id>1</id> <creationDate>2025-09-05</creationDate> </musicBandAllSchema></div>	No links
400	<div>Bad Request - Invalid ID supplied.</div> <div>Media type</div> <div>application/xml</div> <div>Example Value Schema</div> <div><?xml version="1.0" encoding="UTF-8"?> <error> <code>400</code> <message>Bad Request</message> </error></div>	No links

Code	Description	Links
404	Not Found - Musicband not found. Media type <div>application/xml</div> Example Value Schema <pre><?xml version="1.0" encoding="UTF-8"?> <error> <code>404</code> <message>Not Found</message> </error></pre>	No links
422	Parameter 'id' must be a positive integer. Media type <div>application/xml</div> Example Value Schema <pre><?xml version="1.0" encoding="UTF-8"?> <error> <code>422</code> <message>Unprocessable Entity</message> </error></pre>	No links
500	Internal Server Error Media type <div>application/xml</div> Example Value Schema <pre><?xml version="1.0" encoding="UTF-8"?> <error> <code>500</code> <message>Internal Server Error</message> </error></pre>	No links
default	Internal Server Error Media type <div>application/xml</div> Example Value Schema <pre><?xml version="1.0" encoding="UTF-8"?> <error> <code>500</code> <message>Internal Server Error</message> </error></pre>	No links

PUT

/music-bands/{id} Update an existing musicband (with all fields).



Update an existing musicband by its ID. All fields must be provided. Missing fields will be set to null.

Parameters

Try it out

Name	Description
id * required	The unique identifier of the musicband to update.
integer(\$int32) (path)	<input type="text" value="id"/>

Request body required

application/xml

Updated musicband details.

Example Value Schema

```
<?xml version="1.0" encoding="UTF-8"?>
<musicBand>
  <name>string</name>
  <coordinates>
    <x>-975</x>
    <y>1</y>
  </coordinates>
  <numberOfParticipants>1</numberOfParticipants>
  <albumsCount>1</albumsCount>
  <description>string</description>
  <genre>PSYCHEDELIC_CLOUD_RAP</genre>
  <album>
    <name>string</name>
    <tracks>1</tracks>
  </album>
</musicBand>
```

Responses

Code	Description	Links
200	<p>Musicband updated successfully.</p> <p>Media type</p> <div>application/xml</div> <p>Controls Accept header.</p> <p>Example Value Schema</p> <pre><?xml version="1.0" encoding="UTF-8"?> <musicBandAllSchema> <name>string</name> <coordinates> <x>-975</x> <y>1</y> </coordinates> <numberOfParticipants>1</numberOfParticipants> <albumsCount>1</albumsCount> <description>string</description> <genre>PSYCHEDELIC_CLOUD_RAP</genre> <album> <name>string</name> <tracks>1</tracks> </album> <id>1</id> <creationDate>2025-09-05</creationDate> </musicBandAllSchema></pre>	No links

Code	Description	Links
400	<p>Bad Request - Invalid input.</p> <p>Media type</p> <div>application/xml</div> <p>Example Value Schema</p> <pre><?xml version="1.0" encoding="UTF-8"?> <error> <code>400</code> <message>Bad Request</message> </error></pre>	No links
404	<p>Not Found - Musicband not found.</p> <p>Media type</p> <div>application/xml</div> <p>Example Value Schema</p> <pre><?xml version="1.0" encoding="UTF-8"?> <error> <code>404</code> <message>Not Found</message> </error></pre>	No links
422	<p>Parameter 'id' must be a positive integer.</p> <p>Media type</p> <div>application/xml</div> <p>Example Value Schema</p> <pre><?xml version="1.0" encoding="UTF-8"?> <error> <code>422</code> <message>Unprocessable Entity</message> </error></pre>	No links
500	<p>Internal Server Error</p> <p>Media type</p> <div>application/xml</div> <p>Example Value Schema</p> <pre><?xml version="1.0" encoding="UTF-8"?> <error> <code>500</code> <message>Internal Server Error</message> </error></pre>	No links
default	<p>Internal Server Error</p> <p>Media type</p> <div>application/xml</div> <p>Example Value Schema</p> <pre><?xml version="1.0" encoding="UTF-8"?> <error> <code>500</code></pre>	No links

Code	Description	Links
	<pre><message>Internal Server Error</message> </error></pre>	

DELETE /music-bands/{id} Delete a musicband by ID.

Delete a single musicband by its unique ID.

Parameters

Try it out

Name	Description
id * required integer(\$int32) (path)	The unique identifier of the musicband to delete. <div>id</div>

Responses

Code	Description	Links
204	Musicband deleted successfully. No content returned.	No links
400	Bad Request - Invalid ID supplied. <div>Media type<div>application/xml</div><div>Example Value Schema<pre><?xml version="1.0" encoding="UTF-8"?> <error> <code>400</code> <message>Bad Request</message> </error></pre></div></div>	No links
404	Not Found - Musicband not found. <div>Media type<div>application/xml</div><div>Example Value Schema<pre><?xml version="1.0" encoding="UTF-8"?> <error> <code>404</code> <message>Not Found</message> </error></pre></div></div>	No links
422	Parameter 'id' must be a positive integer. <div>Media type</div>	No links

Code	Description	Links
	<div>application/xml</div> <div>Example Value Schema</div> <div><?xml version="1.0" encoding="UTF-8"?> <error> <code>422</code> <message>Unprocessable Entity</message> </error></div>	
500	<div>Internal Server Error</div> <div>Media type</div> <div>application/xml</div> <div>Example Value Schema</div> <div><?xml version="1.0" encoding="UTF-8"?> <error> <code>500</code> <message>Internal Server Error</message> </error></div>	No links
default	<div>Internal Server Error</div> <div>Media type</div> <div>application/xml</div> <div>Controls Accept header.</div> <div>Example Value Schema</div> <div><?xml version="1.0" encoding="UTF-8"?> <error> <code>500</code> <message>Internal Server Error</message> </error></div>	No links

PATCH

/music-bands/{id}

Partially update a musicband by ID.

Update one or more fields of an existing musicband by its ID. Only the provided fields will be updated; other fields will remain unchanged.

Parameters

Try it out

Name	Description
<div><div>id</div><div><div>* required</div></div><div>integer(\$int32)</div><div>(path)</div></div>	<div>The unique identifier of the musicband to update.</div> <div>id</div>

Request body

required

application/xml

Fields to update in the musicband.

Example Value Schema

```
<?xml version="1.0" encoding="UTF-8"?>
<musicBand>
  <name>string</name>
  <coordinates>
    <x>-975</x>
    <y>1</y>
  </coordinates>
  <numberOfParticipants>1</numberOfParticipants>
  <albumsCount>1</albumsCount>
  <description>string</description>
  <genre>PSYCHEDELIC_CLOUD_RAP</genre>
  <album>
    <name>string</name>
    <tracks>1</tracks>
  </album>
</musicBand>
```

Responses

Code	Description	Links
200	<div>Musicband updated successfully.</div> <div>Media type</div> <div>application/xml</div> <div>Controls Accept header.</div> <div>Example Value Schema</div> <div><?xml version="1.0" encoding="UTF-8"?> <musicBandAllSchema> <name>string</name> <coordinates> <x>-975</x> <y>1</y> </coordinates> <numberOfParticipants>1</numberOfParticipants> <albumsCount>1</albumsCount> <description>string</description> <genre>PSYCHEDELIC_CLOUD_RAP</genre> <album> <name>string</name> <tracks>1</tracks> </album> <id>1</id> <creationDate>2025-09-05</creationDate> </musicBandAllSchema> </div>	No links
400	<div>Bad Request - Invalid input.</div> <div>Media type</div> <div>application/xml</div> <div>Example Value Schema</div> <div><?xml version="1.0" encoding="UTF-8"?> <error> <code>400</code> <message>Bad Request</message> </error> </div>	No links
404	<div>Not Found - Musicband not found.</div> <div>Media type</div>	No links

Code	Description	Links
	<div>application/xml</div> <div>Example Value Schema</div> <div><?xml version="1.0" encoding="UTF-8"?> <error> <code>404</code> <message>Not Found</message> </error></div>	
422	Parameter 'id' must be a positive integer. <div>Media type</div> <div>application/xml</div> <div>Example Value Schema</div> <div><?xml version="1.0" encoding="UTF-8"?> <error> <code>422</code> <message>Unprocessable Entity</message> </error></div>	No links
500	Internal Server Error <div>Media type</div> <div>application/xml</div> <div>Example Value Schema</div> <div><?xml version="1.0" encoding="UTF-8"?> <error> <code>500</code> <message>Internal Server Error</message> </error></div>	No links
default	Internal Server Error <div>Media type</div> <div>application/xml</div> <div>Example Value Schema</div> <div><?xml version="1.0" encoding="UTF-8"?> <error> <code>500</code> <message>Internal Server Error</message> </error></div>	No links

DELETE

/music-bands/all-with-description

Delete all musicbands with a specific description.

⌵

Delete all musicbands whose description matches the provided value. If nothing is deleted, it means success too.

Parameters

Try it out

Name		Description
description * required		The description to filter musicbands for deletion.
string (query)		<div>description</div>
Responses		
Code	Description	Links
204	Musicbands deleted successfully. No content returned.	No links
400	Bad Request - Missing or invalid description parameter.	No links
Media type		
<div>application/xml</div>		
Example Value		Schema
<?xml version="1.0" encoding="UTF-8"?><error><code>400</code><message>Bad Request</message></error>		
500	Internal Server Error	No links
Media type		
<div>application/xml</div>		
Example Value		Schema
<?xml version="1.0" encoding="UTF-8"?><error><code>500</code><message>Internal Server Error</message></error>		
default	Internal Server Error	No links
Media type		
<div>application/xml</div>		
Controls Accept header.		
Example Value		Schema
<?xml version="1.0" encoding="UTF-8"?><error><code>500</code><message>Internal Server Error</message></error>		



Delete one random musicband whose genre matches the provided value. Input is case-sencetive. If nothing is deleted, it means success too.

Parameters

Try it out

Name	Description
genre * required string (query)	The genre to filter musicbands for deletion. Available values : PSYCHEDELIC_CLOUD_RAP, SOUL, POP <div>PSYCHEDELIC_CLOUD_RAP</div>

Responses

Code	Description	Links
204	Musicband deleted successfully. No content returned.	No links
400	Bad Request - Missing or invalid genre parameter. Media type <div>application/xml</div> Example Value Schema <pre><?xml version="1.0" encoding="UTF-8"?> <error> <code>400</code> <message>Bad Request</message> </error></pre>	No links
500	Internal Server Error Media type <div>application/xml</div> Example Value Schema <pre><?xml version="1.0" encoding="UTF-8"?> <error> <code>500</code> <message>Internal Server Error</message> </error></pre>	No links
default	Internal Server Error Media type <div>application/xml</div> Controls Accept header. Example Value Schema <pre><?xml version="1.0" encoding="UTF-8"?> <error></pre>	No links

Code	Description	Links
	<pre><code>500</code> <message>Internal Server Error</message> </error></pre>	

GET	/music-bands/count-best-album	Count musicbands with best album greater than provided.	⤴
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Get the count of musicbands whose best album has more tracks than the specified number. If equals, uses alphabetical comparison of the names.

Parameters

Try it out

Name	Description
albumName * required string (query)	The name of the album to compare against. <div>albumName</div>
albumTracks * required integer(\$int64) (query)	The number of tracks in the album to compare against. <div>albumTracks</div>

Responses

Code	Description	Links
200	Count of musicbands with best album tracks greater than the specified number. Media type <div>application/xml</div> Controls Accept header. Example Value Schema <pre><?xml version="1.0" encoding="UTF-8"?> <count>5</count></pre>	No links
400	Bad Request - Missing or invalid tracks parameter. Media type <div>application/xml</div> Example Value Schema <pre><?xml version="1.0" encoding="UTF-8"?> <error> <code>400</code></pre>	No links

Code	Description	Links
	<pre><message>Bad Request</message> </error></pre>	
500	Internal Server Error	No links
	Media type application/xml	
	Example Value Schema	
	<pre><?xml version="1.0" encoding="UTF-8"?> <error> <code>500</code> <message>Internal Server Error</message> </error></pre>	
default	Internal Server Error	No links
	Media type application/xml	
	Example Value Schema	
	<pre><?xml version="1.0" encoding="UTF-8"?> <error> <code>500</code> <message>Internal Server Error</message> </error></pre>	

Schemas ^

Album > Expand all object

Coordinates > Expand all object

MusicBand > Expand all object

MusicBandAllSchema > Expand all (any & object)

MusicBandPatch > Expand all object

Error > Expand all object

InternalServerError > Expand all (any & object)

NotFoundError > Expand all (any & object)

BadRequestError > Expand all (any & object)

UnprocessableEntityError > Expand all (any & object)

FilterCondition string matches ^((name|creationDate|description|genre|bestAlbum\.name)(>=|<|>|<=|!=|==|^=|\$=|@=).+)|(coordinates\.x(>=|<=|>|<|!=|==)-?\d+(\.\d+)?)|(id|coordinates\.y|numberOfParticipants|albumsCount|bestAlbum\.tracks)(>=|<=|>|<|!=|==)-?\d+)\$

SortValues string matches ^(id|-id|name|-name|coordinates\.x|-coordinates\.x|coordinates\.y|-coordinates\.y|creationDate|-creationDate|numberOfParticipants|-numberOfParticipants|albumsCount|-albumsCount|description|-description|genre|-genre|bestAlbum\.name|-bestAlbum\.name|bestAlbum\.tracks|-bestAlbum\.tracks)\$

PatchOption > Expand all string matches ^((name|creationDate|description|genre|bestAlbum\.name)=.+)|(coordinates\.x=-?\d+(\.\d+)?)|(id|coordinates\.y|numberOfParticipants|albumsCount|bestAlbum\.tracks)=-?\d+)\$

MusicBandId integer ≥ 1 int32

MusicBandDescription string ≥ 0 characters

MusicBandGenre > Expand all string