```
"openapi": "3.0.1",
"info": {
  "title": "OpenAPI definition",
  "version": "v0"
"servers": [
    "url": "http://localhost:8080",
    "description": "Generated server url"
],
"paths": {
  "/api/songcollection/artists/{uuid}": {
    "get": {
      "tags": [
        "artists-controller"
      ],
      "summary": "Get artist by its unique identifier",
      "operationId": "getArtistById",
      "parameters": [
          "name": "uuid",
          "in": "path",
          "required": true,
          "schema": {
   "type": "string",
            "format": "uuid"
      ],
      "responses": {
        "200": {
          "description": "Found searched artist",
          "content": {
            "application/json": {
              "schema": {
                "$ref": "#/components/schemas/ArtistResponse"
          }
        "400": {
          "description": "Invalid syntax for path variables"
        "404": {
          "description": "Searched artist not found",
          "content": {
            "application/json": {
              "schema": {
                "$ref": "#/components/schemas/ExceptionResponse"
              }
            }
      }
    },
    "put": {
      "tags": [
        "artists-controller"
      "summary": "Create new artist or replace an existing one",
      "operationId": "createOrReplaceArtist",
      "parameters": [
          "name": "uuid",
          "in": "path",
          "required": true,
          "schema": {
            "type": "string",
            "format": "uuid"
          }
        },
          "name": "Authorization",
```

```
"in": "header",
     "required": false,
      "schema": {
        "type": "string"
 ],
 "requestBody": {
   "content": {
     "application/json": {
       "schema": {
         "$ref": "#/components/schemas/NewArtistRequest"
     }
   }.
   "required": true
 "responses": {
   "201": {
     "description": "Successfully created a new artist resource",
      "content": {
       "application/json": {
          "schema": {
           "$ref": "#/components/schemas/ArtistResponse"
    "204": {
     "description": "Successfully replaced an existing resource with given uuid"
    "400": {
     "description": "Incorrect syntax for path variables"
   "401": {
     "description": "Invalid token"
    "403": {
     "description": "Invalid role"
    "409": {
     "description": "Conflict: unique name constraint unsatisfied",
      "content": {
       "application/json": {
          "schema": {
            "$ref": "#/components/schemas/ExceptionResponse"
         }
       }
   },
    "422": {
     "description": "Invalid values for request fields",
      "content": {
        "application/json": {
         "schema": {
            "$ref": "#/components/schemas/ExceptionResponse"
         }
       }
     }
 }
},
"delete": {
 "tags": [
   "artists-controller"
 "summary": "Delete artist identified by uuid",
 "operationId": "deleteArtist",
 "parameters": [
     "name": "uuid",
     "in": "path",
     "required": true,
     "schema": {
      "type": "string",
```

```
"format": "uuid"
      },
        "name": "Authorization",
        "in": "header",
        "required": false,
        "schema": {
         "type": "string"
   ],
   "responses": {
      "200": {
        "description": "Successfully deleted artist resource",
        "content": {
          "application/json": {
            "schema": {
             "$ref": "#/components/schemas/ArtistResponse"
         }
       }
      "400": {
        "description": "Incorrect syntax for path variables"
      "401": {
        "description": "Invalid token"
      "403": {
       "description": "Invalid role"
      "404": {
        "description": "Searched artist not found",
        "content": {
          "application/json": {
            "schema": {
              "$ref": "#/components/schemas/ExceptionResponse"
"/api/songcollection/songs": {
  "get": {
   "tags": [
     "songs-controller"
   "summary": "Get all songs",
   "operationId": "getAllSongs",
    "parameters": [
        "name": "page",
        "in": "query",
        "required": false,
        "schema": {
          "minimum": 0,
          "type": "integer",
          "format": "int32"
      },
        "name": "size",
        "in": "query",
        "required": false,
        "schema": {
          "minimum": 1,
          "type": "integer",
          "format": "int32",
          "default": 9
       }
      },
```

```
"name": "searchBy",
      "in": "query",
      "required": false,
      "schema": {
        "pattern": "title|year|genre",
        "type": "string"
     "name": "searchedValue",
     "in": "query",
     "required": false,
     "schema": {
       "type": "string"
   },
     "name": "match",
     "in": "query",
     "required": false,
     "schema": {
       "pattern": "exact",
       "type": "string"
   }
 ],
 "responses": {
   "200": {
     "description": "Found searched songs",
     "content": {
       "application/json": {
          "schema": {
           "type": "array",
            "items": {
              "$ref": "#/components/schemas/SongResponse"
    "400": {
     "description": "Invalid syntax for query params"
    "422": {
     "description": "Invalid values for query params",
     "content": {
        "application/json": {
          "schema": {
           "$ref": "#/components/schemas/ExceptionResponse"
   }
"post": {
 "tags": [
   "songs-controller"
 "summary": "Add new song to song resources",
 "operationId": "createSong",
 "parameters": [
     "name": "Authorization",
     "in": "header",
     "required": false,
     "schema": {
       "type": "string"
 "requestBody": {
   "content": {
     "application/json": {
      "schema": {
```

```
"$ref": "#/components/schemas/NewSongRequest"
       }
      },
      "required": true
   "responses": {
      "201": {
        "description": "Successfully added new song resource",
        "content": {
         "application/json": {
            "schema": {
             "$ref": "#/components/schemas/SongResponse"
       }
      },
      "400": {
        "description": "Malformed request syntax"
      "401": {
       "description": "Invalid token"
      "403": {
        "description": "Invalid role"
      "409": {
        "description": "Mentioned album or artists don't exist yet",
        "content": {
         "application/json": {
            "schema": {
             "$ref": "#/components/schemas/ExceptionResponse"
         }
       }
      "422": {
        "description": "Semantically erroneous request body fields",
        "content": {
          "application/json": {
           "schema": {
             "$ref": "#/components/schemas/ExceptionResponse"
       }
     }
   }
 }
"/api/songcollection/artists/{uuid}/songs": {
  "get": {
   "tags": [
     "artists-controller"
   "summary": "Get songs for artist identified by uuid",
   "operationId": "getAllSongsForGivenArtist",
   "parameters": [
        "name": "uuid",
        "in": "path",
        "required": true,
        "schema": {
         "type": "string",
          "format": "uuid"
   ],
   "responses": {
      "200": {
        "description": "Found artist",
        "content": {
          "application/json": {
            "schema": {
              "$ref": "#/components/schemas/ArtistResponse"
```

```
"400": {
     "description": "Invalid syntax for path variables"
    "404": {
     "description": "Searched artist not found",
      "content": {
       "application/json": {
         "schema": {
            "$ref": "#/components/schemas/ExceptionResponse"
       }
 }
},
"post": {
 "tags": [
   "artists-controller"
 "summary": "Assign songs to an artist",
 "operationId": "assignSongsToArtist",
 "parameters": [
     "name": "uuid",
     "in": "path",
     "required": true,
     "schema": {
       "type": "string",
        "format": "uuid"
   },
     "name": "Authorization",
     "in": "header",
     "required": false,
     "schema": {
       "type": "string"
   }
 1,
 "requestBody": {
   "content": {
     "application/json": {
        "schema": {
          "$ref": "#/components/schemas/NewSongsForArtistRequest"
     }
    "required": true
 },
 "responses": {
   "200": {
     "description": "Successfully updated join table",
      "content": {
        "application/json": {
          "schema": {
           "$ref": "#/components/schemas/ArtistResponse"
     }
    "400": {
     "description": "Incorrect syntax for path variables"
   "401": {
     "description": "Invalid token"
    "403": {
      "description": "Invalid role"
    "404": {
     "description": "Searched artist/song not found",
```

```
"content": {
          "application/json": {
            "schema": {
              "$ref": "#/components/schemas/ExceptionResponse"
       }
      "409": {
        "description": "The artist is not active",
        "content": {
          "application/json": {
            "schema": {
              "$ref": "#/components/schemas/ExceptionResponse"
        }
      "422": {
        "description": "Invalid values for request fields",
        "content": {
         "application/json": {
            "schema": {
              "$ref": "#/components/schemas/ExceptionResponse"
     }
   }
"/api/songcollection/songs/{id}": {
  "get": {
   "tags": [
     "songs-controller"
   "summary": "Get song by its identifier",
   "operationId": "getSongById",
   "parameters": [
        "name": "id",
        "in": "path",
        "required": true,
        "schema": {
          "type": "integer",
          "format": "int32"
        }
    "responses": {
      "200": {
        "description": "Found searched song",
        "content": {
          "application/json": {
           "schema": {
              "$ref": "#/components/schemas/SongResponse"
         }
       }
      "400": {
        "description": "Invalid syntax for path variables"
      "404": {
        "description": "Searched song not found",
        "content": {
          "application/json": {
            "schema": {
              "$ref": "#/components/schemas/ExceptionResponse"
       }
     }
   }
```

```
"delete": {
 "tags": [
   "songs-controller"
 "summary": "Delete song resource identified by id",
 "operationId": "deleteSong",
 "parameters": [
     "name": "id",
     "in": "path",
     "required": true,
     "schema": {
       "type": "integer",
       "format": "int32"
   },
     "name": "Authorization",
     "in": "header",
     "required": false,
     "schema": {
       "type": "string"
 ],
 "responses": {
   "200": {
     "description": "Successfully deleted song resource",
      "content": {
       "application/json": {
         "schema": {
           "$ref": "#/components/schemas/SongResponse"
       }
     }
    "400": {
     "description": "Incorrect syntax for path variables"
    "401": {
     "description": "Invalid token"
    "403": {
     "description": "Invalid role"
   "404": {
     "description": "Searched song not found",
      "content": {
        "application/json": {
         "schema": {
           "$ref": "#/components/schemas/ExceptionResponse"
         }
       }
      }
    "409": {
     "description": "Conflict: cannot remove album without removing all its songs",
     "content": {
       "application/json": {
         "schema": {
            "$ref": "#/components/schemas/ExceptionResponse"
     }
 }
},
"patch": {
 "tags": [
   "songs-controller"
 "summary": "Update an existing song",
 "operationId": "updateSong",
 "parameters": [
```

```
"name": "id",
        "in": "path",
        "required": true,
        "schema": {
         "type": "integer",
          "format": "int32"
        "name": "Authorization",
        "in": "header",
        "required": false,
       "schema": {
         "type": "string"
   ],
   "requestBody": {
      "content": {
        "application/json": {
          "schema": {
           "$ref": "#/components/schemas/SongForUpdateRequest"
       }
      },
      "required": true
    "responses": {
      "204": {
       "description": "Successfully updated"
      "400": {
       "description": "Incorrect syntax for path variables"
      "401": {
        "description": "Invalid token"
      "403": {
        "description": "Invalid role"
      "404": {
        "description": "Song not found",
        "content": {
         "application/json": {
            "schema": {
              "$ref": "#/components/schemas/ExceptionResponse"
      "422": {
        "description": "Invalid music genre",
        "content": {
          "application/json": {
           "schema": {
              "$ref": "#/components/schemas/ExceptionResponse"
         }
       }
   }
"/api/songcollection/songs/{id}/artists": {
  "get": {
   "tags": [
     "songs-controller"
   "summary": "Get artists for song identified by id",
   "operationId": "getAllArtistsForGivenSong",
    "parameters": [
     {
        "name": "id",
        "in": "path",
        "required": true,
```

```
"schema": {
          "type": "integer",
          "format": "int32"
   "responses": {
     "200": {
        "description": "Found song by id",
        "content": {
         "application/json": {
            "schema": {
              "type": "array",
              "items": {
                "$ref": "#/components/schemas/ArtistResponse"
      "400": {
       "description": "Invalid syntax for path variables"
      "404": {
        "description": "Searched song not found",
        "content": {
          "application/json": {
            "schema": {
              "$ref": "#/components/schemas/ExceptionResponse"
 }
"/api/songcollection/artists": {
  "get": {
   "tags": [
     "artists-controller"
   "summary": "Get all artists",
   "operationId": "getAllArtists",
    "parameters": [
        "name": "page",
        "in": "query",
        "required": false,
        "schema": {
         "minimum": 0,
          "type": "integer",
         "format": "int32"
      },
        "name": "size",
        "in": "query",
        "required": false,
        "schema": {
          "minimum": 1,
          "type": "integer",
          "format": "int32",
          "default": 1
      },
        "name": "name",
        "in": "query",
        "required": false,
        "schema": {
         "pattern": "^[a-zA-Z\\s]+",
          "type": "string"
       }
```

```
"name": "match",
          "in": "query",
          "required": false,
          "schema": {
           "pattern": "exact",
            "type": "string"
     ],
     "responses": {
       "200": {
         "description": "Found searched artists",
          "content": {
            "application/json": {
             "schema": {
               "type": "array",
               "items": {
                 "$ref": "#/components/schemas/ArtistResponse"
             }
         }
        "400": {
         "description": "Invalid syntax for query params"
        "422": {
         "description": "Invalid values for query params",
          "content": {
           "application/json": {
             "schema": {
               "$ref": "#/components/schemas/ExceptionResponse"
           }
         }
       }
     }
"components": {
 "schemas": {
   "NewArtistRequest": {
     "required": [
       "name"
     "type": "object",
     "properties": {
        "name": {
         "pattern": "^[a-zA-Z\\s]+",
         "type": "string"
       "active": {
         "pattern": "true|false",
         "type": "string"
     }
   },
   "ExceptionResponse": {
     "type": "object",
     "properties": {
       "error": {
         "type": "string"
       "status": {
         "type": "integer",
         "format": "int32"
        "details": {
         "type": "string"
   "ArtistResponse": {
     "required": [
```

```
"name"
  ],
  "type": "object",
  "properties": {
    "uuid": {
     "type": "string",
     "format": "uuid"
    "name": {
     "type": "string"
    "active": {
      "type": "boolean"
    "songs": {
      "uniqueItems": true,
      "type": "array",
"items": {
       "$ref": "#/components/schemas/SongResponse"
    "hasSongs": {
      "type": "boolean"
    "links": {
      "type": "array",
      "items": {
       "$ref": "#/components/schemas/Link"
 }
},
"Link": {
  "type": "object",
  "properties": {
    "rel": {
     "type": "string"
    "href": {
      "type": "string"
    "hreflang": {
     "type": "string"
    "media": {
     "type": "string"
    "title": {
   "type": "string"
    "type": {
      "type": "string"
    "deprecation": {
     "type": "string"
    "profile": {
      "type": "string"
    "name": {
     "type": "string"
},
"SongResponse": {
  "type": "object",
  "properties": {
    "id": {
     "type": "integer",
      "format": "int32"
    "name": {
      "type": "string"
    "genre": {
```

```
"type": "string",
      "enum": [
        "HEAVY_METAL",
        "ROCK",
        "POP",
        "COUNTRY"
    "year": {
     "type": "integer",
      "format": "int32"
    "type": {
      "type": "string",
      "enum": [
       "ALBUM",
       "SONG",
       "SINGLE"
    "parentId": {
     "type": "integer",
"format": "int32"
    "links": {
      "type": "array",
      "items": {
       "$ref": "#/components/schemas/Link"
 }
"NewSongRequest": {
 "required": [
   "artists",
   "genre",
   "name",
    "type"
 "type": "object",
 "properties": {
    "name": {
     "pattern": "^[- 'a-zA-Z\\s]+",
      "type": "string"
    "genre": {
      "type": "string"
    "year": {
      "maximum": 9999,
      "minimum": 0,
     "type": "integer",
     "format": "int32"
    "type": {
      "type": "string"
    "parentId": {
      "type": "integer",
      "format": "int32"
    "artists": {
      "uniqueItems": true,
      "type": "array",
      "items": {
       "type": "string"
     }
},
"NewSongsForArtistRequest": {
 "required": [
   "songsId"
 ],
 "type": "object",
```

```
"properties": {
           "songsId": {
            "type": "array",
"items": {
   "type": "integer",
              "format": "int32"
          }
        }
      "SongForUpdateRequest": {
        "required": [
          "genre",
          "name"
        "type": "object",
        "properties": {
           "name": {
            "pattern": "^[- 'a-zA-Z\\s]+",
            "type": "string"
           "genre": {
            "type": "string"
           "year": {
            "maximum": 9999,
             "minimum": 0,
            "type": "integer",
"format": "int32"
} }
```