

# ELEMENT MUSIC

## JAVA Backend Interface Documentation

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## 1. interface information

### 1.1.Song

#### 1.1.1. add song

Interface: "/song/add"

Calling method: RequestMethod.POST

parameter:

Param:

parameter name	type of data
file	MultipartFile

Body:

parameter name	type of data
songName _	String _
musicianId	String
musicianName	String
description	String
pic	String
lyric	String

Example:

Param: The Longest Movie.mp3

Body: {

```
    songName: "The Longest Movie "
    musicianId: "2"
    musicianName: "Jay Chou"
    description: " Included in "I'm Busy""
    pic: "/img/songPic/tubiao.jpg"
    lyric: " ...give me two more minutes to freeze my memory..."
```

}

#### 1.1.2. back to all songs

interface: "/ song /all"

Calling method: RequestMethod.GET

Returns: song details [ json objects]

#### 1.1.3. by song id

interface: "/ song Id / detail"

Calling method: RequestMethod.GET

parameter:

Body:

parameter name	type of data
----------------	--------------

id	String
----	--------

Example:

```
Body: {
    id: " 2 "
}
```

Returns: song details json object returns null if there is no song

#### 1.1.4. Find songs by song title

Interface: "/songName / detail"

Calling method: RequestMethod.GET

parameter:

Body:

parameter name	type of data
name	String

Example:

```
Body: {
    name : " echo "
}
```

Returns: song details json object returns null if there is no song

#### 1.1.5. delete song

interface: "/ song /delete"

Calling method: RequestMethod.POST

parameter:

Body:

parameter name	type of data
id	String

Example:

```
Body: {
    id: " 2 "
}
```

returns: boolean (false or true)

#### 1.1.6. Update song information

Interface: "/song/update"

Calling method: RequestMethod.POST

parameter:

Body:

parameter name	type of data
id	String
songName _	String _
musicianId	String
description	String
lyric	String

Example:

Body: {

id: "1"

songName : " Gangnam "

musicianId: "2"

description: "..."

lyric: "... circle circle circle circle ..."

}

Returns: json object ({ "msg": "modification successful", "code": 1} or { "msg": "modification failed", "code": 0})

### 1.1.7. Update song image

Interface: "/song/img/update"

Calling method: RequestMethod.POST

parameter:

Param:

parameter name	type of data
file	MultipartFile
id	long

Example:

Param: {

File: test.jpg

Id: 1

}

Returns: json object ({ "msg": "Upload successful", "code": 1, "portraitPath": "/img/singerPic/xxx.jpg"} or { "msg": "Upload failed", "code": 0} )

### 1.1.8. Update song URL

Interface: "/song/url/update"

Calling method: RequestMethod.POST

parameter:

Param:

parameter name	type of data
file	MultipartFile

id	long
----	------

Example:

Param: {

File : test.txt

Id: 1

}

Returns: json object ({ "msg": "Upload successful", "code": 1, "urlPath":  
"/img/singerPic/xxx.jpg" } or { "msg": "Upload failed", "code": 0} )

#### 1.1.9. Returns all songs by the specified artist

Interface: "/song/songsByMusicianId"

Calling method: RequestMethod.GET

parameter:

Param:

parameter name	type of data
id	long

Example:

Param: {

Id: 1

}

Returns: song details json object returns null if there is no song

#### 1.1.10. Return to singer's avatar

Interface: "/song/songPicture"

Calling method: RequestMethod.GET

parameter:

Param:

parameter name	type of data
id	long

Example:

Param: {

id: "2"

}

Returns: string (Example: "/img/songPic/1615938237513Sksolari.jpg")

#### 1.1.11. Download songs ( this function is not open for now)

Interface: "/song/ download "

Calling method: RequestMethod.POST

parameter:

Param:

parameter name	type of data
----------------	--------------

fileName	String
----------	--------

## 1.2.Musician \_

### 1.2.1. Add singer

Interface: "/musician/add"

Calling method: RequestMethod.POST

parameter:

Body:

parameter name	type of data
name ( cannot be empty)	String
sex	String
pic	String
birth	String
location	String
description	String
portrait	String
musicType ( not null)	String (choose among the following types) <ul style="list-style-type: none"><li>• POP</li><li>• R OCK</li><li>• ELECTRONIC</li><li>• FOLK</li><li>• CLASSICAL</li><li>• JAZZ</li><li>• ABSOLUTE_MUSIC</li><li>• RAP</li><li>• METAL</li><li>• WORLD_MUSIC</li><li>• NEW_AGE</li><li>• AMBIENT_MUSIC</li><li>• INDIE</li></ul>

Example:

Body: {

name: " Jay Chou"

sex: " m ale" ( only " male " and "female")

pic: "/img/songPic/tubiao.jpg"

birth: "1979-01-18" ( fixed format )

location: "Taiwan"

description: " Taiwanese pop singer, original musician, actor, director, screenwriter"

portrait: " zhoujielun.jpg"

musicType: " J AZZ" (JAZZ / RAP all caps )

}

return: json object ( {"msg":"Uploaded successfully","code":1,"urlPath":"/song/test5.mp3"} or {"msg":"Upload failed","code": 0 ,""})

### 1.2.2. back to all singers

Interface: "/musician/all"

Calling method: RequestMethod.GET

Returns: singer details [ json objects]



### 1.2.3. Find an artist by artist name

Interface: "/musician/name/detail"

Calling method: RequestMethod.GET

parameter:

Body:

parameter name	type of data
name	String

Example:

```
Body: {  
    name: "Jay Chou"  
}
```

Returns: singer details json object

### 1.2.4. Find singers by singer id

Interface: "/musician/ id /detail"

Calling method: RequestMethod.GET

parameter:

Body:

parameter name	type of data
musicianId	String

Example:

```
Body: {  
    musicianId: " 1 "  
}
```

Returns: singer details json object

### 1.2.5. remove singer

Interface: "/musician/delete"

Calling method: RequestMethod.POST

parameter:

Body:

parameter name	type of data
id	String

Example:

```
Body: {  
    id: "2"  
}
```

returns: boolean (false or true)

### 1.2.6. Update artist information

Interface: "/musician/update"

Calling method: RequestMethod.POST

parameter:

Body:

parameter name	type of data
id	String
name	String
sex	String
birth	String
location	String
description	String

Example:

Body: {

id: "2"

name: " Jay Chou"

sex: " male"

birth: "1979-01-18"

location: "Taiwan"

description: " Taiwanese pop singer, original musician, actor, director, screenwriter"

}

Returns: json object ({ "msg": "modification successful", "code": 1} or { "msg": "modification failed", "code": 0})

### 1.2.7. Update singer avatar

interface: "/musician/ portrait/update"

Calling method: RequestMethod.POST

parameter:

Param:

parameter name	type of data
file	MultipartFile
id	long

Example:

Param: {

file: singer.jpg

id: "2"

}

Returns: json object ({ "msg": "Upload successful", "code": 1, "pic": "/img/singerPic/xxx.jpg"} or { "msg": "Upload failed", "code": 0} )

### 1.2.8. Return to singer's avatar

Interface: "/musician/musicianPicture"

Calling method: RequestMethod.GET

parameter:

Param:

parameter name	type of data
id	long

Example:

```
Param: {  
    id: "2"  
}
```

Returns: string (Example: "/img/singerPic/1615938237513Sksolari.jpg")

## 1.3. User (Consumer)

### 1.3.1. Add user

interface: "/ c onsumer/add"

Calling method: RequestMethod.POST

parameter:

Body:

parameter name	type of data
username	String
password	String
sex	String
phoneNum	String
email	String
birth	String
location	String
portrait	String

Example:

```
Body: {  
    username: " Element "  
    password: "123456"  
    sex: " m ale"  
    phoneNum : "13800008888"  
    email: element@163.com  
    birth: " 2020-12-01"  
    location: " Hong Kong "  
    portrait: "element.jpg"  
}
```

Return: json object ( {"msg":"registration successful","code":1} or ( {"msg":"registration failed","code": 0 ,"} )

### 1.3.2. Check whether the login is successful by email

Interface: "/ consumer/ login "

Calling method: RequestMethod.POST

parameter:

Body:

parameter name	type of data
username	String
password	String

Example:

Body: {

username : " Element@gmail.com " \_

password: "123456"

}

returns: ({

"msg": "Login successful",

"code": 0,

"sessionId": "27C31032D44DD47586BAFEC99A34F53C"

} or {

"msg": "Username and password do not match",

"code": 3

} or {

"msg": "The account is not registered",

"code": 2

}

### 1.3.3. return all users

interface: "/ consumer / all "

Calling method: RequestMethod.GET

Returns: user details [ json objects]

### 1.3.4. Returns the specified id user

interface: "/ c onsumer/detail"

Calling method: RequestMethod.GET

Body:

parameter name	type of data
id	String

Example:

Body: {

id: "1"

}

Returns: user details json objects

### 1.3.5. delete users

interface: "/ consumer / delete "

Calling method: RequestMethod.POST

Body:

parameter name	type of data
id	String

Example:

```
Body: {  
    id: "1"  
}
```

### 1.3.6. Update user information

interface: "/ consumer /update"

Calling method: RequestMethod.POST

parameter:

Body ( all cannot be empty) :

parameter name	type of data
id	String
username	String
password	String
sex	String
phoneNum	String
email	String
birth	String
location	String
portrait	String

示例：

```
Body: {  
    id: "2"  
    username: "element"  
    password: "123456"  
    sex: "male"  
    phoneNum: "13800008888"  
    e mail: "element@163.com"  
    birth: "20201201"  
    location: "Taiwan"  
    portrait: "element.jpg"  
}
```

return: json object ( { "msg": "Modified successfully", "code": 1 } or ( { "msg": "Modified failed", "code": 0 , "" } )

### 1.3.7. Update user avatar

Interface: "/consumer/portrait/update"

Calling method: RequestMethod.POST

parameter:

Param:

parameter name	type of data
file	MultipartFile
id	long

Example:

Param: {

file: consumer.jpg

id: "2"

}

Returns: json object ({ "msg": "Upload successful", "code": 1, "pic": "/img/singerPic/xxx.jpg" }) or  
{ "msg":  
"Upload failed", "code": 0 }

### 1.3.8. User logout login

Interface: "/consumer/logout "

Calling method: RequestMethod.POST

Returns: json object ({ "msg": "Successfully logged off", "code": 1 } or { "msg": "Failed to log off",  
"code": 0 }

## 1.4.Song price (Price)

### 1.4.1. add price

interface: "/ price /add"

Calling method: RequestMethod.POST

parameter:

Body:

parameter name	type of data
Id _	String
originalPrice	String
rate	String

Example:

```
Body: {  
    id: "1"  
    originalPrice: "10"  
    rate: "0.15"  
}
```

Return: json object ( {"msg":"Success to increase song price","code": 1} or ( {"msg":"Failure to increase song price","code": 0 ,"} )

### 1.4.2. Get song price based on song id

Interface: "/ price /getPriceById"

Calling method: RequestMethod.GET

parameter:

Body:

parameter name	type of data
Id _	String

Example:

```
Body: {  
    id: "1"  
}
```

Returns: string ( song price)

### 1.4.3. back to all prices

Interface: "/ price /all"

Calling method: RequestMethod.GET

Returns: Song price details [ json objects]

## 1.5. Like (wish list)

### 1.5.1. User adds likes to songs

Interface: "/consumer/addToWishlist "

Calling method: RequestMethod.POST

parameter:

Param:

parameter name	type of data
songId	String
consumerId	String

Example:

```
Param: {  
    song Id: "1"  
    consumerId: "2"  
}
```

Returns: json object ({ "msg": "Successfully added", "code": 1 } or { "msg": "Add failed", "code": 0 })

### 1.5.2. Returns all user liked songs (favorites)

Interface: "/consumer/getWishlist "

Calling method: RequestMethod.GET

parameter:

Param:

parameter name	type of data
i d	String

Example:

```
Param: {  
    id: "2"  
}
```

Returns: all songs liked by this user [json object ]

### 1.5.3. Remove user-liked songs (favorites)

Interface: "/consumer/removeFromWishlist "

Calling method: RequestMethod.POST

parameter:

Param:

parameter name	type of data
songId	String
consumerId	String



Example:

```
Param: {  
    songId: "1"  
    consumerId: "2"  
}
```

Returns: all songs liked by this user [json object ]

## 1.6.User wallet (Purse)

### 1.6.1. Add value to specified user by user id

Interface: "/purse/addBalance "

Calling method: RequestMethod.POST

parameter:

Param:

parameter name	type of data
id	String
addValue	String

Example:

```
Param: {  
    id : "1"  
    addValue: "100"  
}
```

Returns: json object ({ "msg": "value added successfully", "code": 1 } or { "msg": "Failed to add value", "code": 0})

### 1.6.2. Returns the balance of the specified user by user id

Interface: "/purse/ get Balance "

Calling method: RequestMethod.GET

parameter:

Param:

parameter name	type of data
i d	String

Example:

```
Param: {  
    id: "2"  
}
```

Returns: string balance

### 1.6.3. Pay by user id

Interface: "/purse/ withdraw Balance "

Calling method: RequestMethod.POST

parameter:

Param:

parameter name	type of data
i d	String
Withdraw Value _	String

Example:

```
Param: {  
    id: "2"  
}
```

Returns: json object ({ "msg": "Successful payment", "code": 1 } or { "msg": "Payment failed",  
"code": 0})

## 1.7.Playlist

### 1.7.1. Add a playlist

Interface: "/palyList/add"

Calling method: RequestMethod.POST

parameter:

Body:

parameter name	type of data
name	String _
imagePath	String
description	String
songId	List of songId

Example:

[http://localhost:8088/playList/add?name=test\\_playlist&description=haha&songId=3&songId=4&imagePath](http://localhost:8088/playList/add?name=test_playlist&description=haha&songId=3&songId=4&imagePath)

```
Body: {  
    name: " Bedtime Playlist"  
    songId: [1,2,3]  
    description: " Included in "I'm Busy""  
    imagePath: "/img/songPic/tubiao.jpg"  
}
```

Returns: json object ({ "msg": "New success", "code": 1 } or { "msg": "New failed", "code": 0})

### 1.7.2. Back to all playlists

Interface: "/ playList / getAll "

Calling method: RequestMethod.GET

Return: Playlist details [ json objects]

### 1.7.3. Returns the playlist with the specified id

Interface: " / playList / getByld "

Calling method: RequestMethod.GET

parameter:

Body:

parameter name	type of data
id	String _

Example:

```
Body: {  
    id: " 1"  
}
```

Return: playlist details json object

#### 1.7.4. playlist with the specified id

Interface: " / playList / delete "

Calling method: RequestMethod.POST

parameter:

Body:

parameter name	type of data
id	String _

Example:

```
Body: {  
    id: " 1"  
}
```

Returns: json object ({ "msg": "Delete successful", "code": 1 } or { "msg": "Delete failed", "code": 0})

#### 1.7.5. Update playlist image

Interface: " / play List / image / update"

Calling method: RequestMethod.POST

parameter:

Body:

parameter name	type of data
id	String _
imagePath	File _

Example:

```
Body: {  
    id: " 1",  
    imagePath: "xxx.jpg"  
}
```

Returns: json object ({ "msg": "Upload successful", "code": 1, "pic": "xxx.jpg" } or { "msg": "Upload failed", "code": 0})

## 1.8.trade (Order)

### 1.8.1. Add transaction

interface: "/ order /add"

Calling method: RequestMethod.POST

parameter:

Body:

parameter name	type of data
consumerId	String _
songId	String

Example:

```
Body: {  
    consumerId: " 1"  
    songId: "1"  
}
```

Returns: json object ({ "msg": "Successful transaction", "code": 1 } or { "msg": "Insufficient balance", "code": 0} or { "msg": "Cannot add order", "code": 0})

### 1.8.2. Return all user's orders

interface: "/ order / all "

Calling method: RequestMethod.GET

Returns: transaction order details [ json objects]

## 1.9. Purchase List ( Collections )

### **1.9.1. Returns the songs purchased by the specified user**

Interface: "/ consumer /getCollection"

Calling method: RequestMethod.GET

Returns: transaction song details [ json objects]