

BALLET EXERCISES API

DATABASE

Collections

Exercises

- id
- name (string)
- category (string)

Users

- username (string)
- email (string)
- password (string)

Favorites

Example object

Favorites

```
{
  "_id": "ex12345",
  "name": "Penché",
  "category": "Adagio",
  "difficulty": 4,
  "description": "A controlled tilt forward while extending one leg high behind, forming a long arabesque line.",
  "illustrations":
  [
    "/images/penche_step1.jpg",
    "/images/penche_step2.jpg"
  ],
  "videoUrl": "https://example.com/tutorials/penche",
  "tips": ["Keep hips square", "Engage your core"],
  "donts": ["Don't arch the lower back", "Don't lift the hip of the working leg"]
}
```

Users

```
{
  "_id": "user5678",
  "username": "balletlover",
  "email": "user@example.com",
  "passwordHash": "*****",
  "favorites": ["ex12345", "ex67890"]
}
```

Favorites

```
{
  "_id": "fav1122",
  "userId": "user5678",
  "exerciseId": "ex12345",
  "dateSaved": "2025-10-26"
}
```

API

*GET /exercises

Parameters:

- category
- difficulty
- sortBy

Example Request

GET /exercises?category=adagio&sortBy=difficulty

Succes Response(200)

```
[
  {
    "name": "Penché",
    "category": "Adagio",
    "difficulty": 4
  },
  {
    "name": "Développé",
    "category": "Adagio",
    "difficulty": 3
  }
]
```

Error Response(500)

“Internal server error – could not retrieve exercises.”

*GET /exercises/{id}

Example Request

GET /exercises/ex12345

Succes Response(200)

```
{
  "name": "Penché",
  "category": "Adagio",
  "difficulty": 4,
  "description": "A controlled tilt forward while extending one leg high behind...",
  "videoUrl": "https://example.com/tutorials/penche" }
```

Error Response(404, 500)

"Exercise not found"

"Internal server error"

*GET /users/{id}/favorites

Succes Response(200)

```
{
  "userId": "user5678",
  "favorites": [
    {
      "id": "ex12345",
      "name": "Penché",
      "category": "Adagio"
    },
    {
      "id": "ex67890",
      "name": "Grand Jeté",
      "category": "Jumps"
    }
  ]
}
```

Error Response(404, 500)

"Exercise not found"

"Error retrieving favorites"

*POST /users/{id}/favorites

Body

- exerciseld

Request body

```
{
  "exerciseld": "ex12345"
}
```

Succes Response(201)

```
{
  "message": "Exercise added to favorites."
}
```

Error Response(400, 404, 500)

"Exercise already in favorites."

"User or exercise not found."

"Could not add favorite."

*POST /users/login (MAYBE)

Body:

- email
- password

Request body

```
{  
  "email": "user@example.com",  
  "password": "mypassword123"  
}
```

Success Response(200)

```
{  
  "message": "Login successful.",  
  "token": "jwt.token.value"  
}
```

Error Response(401, 404)

"Invalid credentials."

"User not found."

*POST /users/register (MAYBE)

Body:

- username
- email
- password

Request body

```
{  
  "username": "balletlover",  
  "email": "user@example.com",  
  "password": "mypassword123"  
}
```

Success Response(201)

```
{  
  "message": "User registered successfully.",  
  "userId": "user5678"  
}
```

Error Response(400, 409, 500)

"Missing required fields."

"Email already in use."

"Error registering user."

*DELETE /users/{id}/favorites/{exerciseId}

Success Response(200)

```
{  
  "message": "Exercise removed from favorites."  
}
```

Error Response (404, 500)

"Favorite not found."

"Could not remove favorite."