

# API Documentation

## 1. Get Leaderboard

**Endpoint:** http://localhost:8000/api/leaderboard

**HTTP Method:** GET

**Description:** Fetches a list of users ranked by their points, with the highest points displayed first.

**Response:**

```
[
  {
    "id": 11,
    "name": "Akshay Ghatiki",
    "age": 25,
    "points": 8,
    "address": "145, 19th B Cross, 17th Main, Sector 3, HSR
Layout, Bangalore-560102",
    "created_at": "2024-10-12T11:09:27.000000Z",
    "updated_at": "2024-10-13T19:21:30.000000Z"
  },
  {
    "id": 5,
    "name": "Magdalena McGlynn",
    "age": 60,
    "points": 5,
    "address": "23437 Elwin Pines Suite 295\nWest Vinnie, MO
43956-8602",
    "created_at": "2024-10-09T13:08:57.000000Z",
    "updated_at": "2024-10-13T19:21:06.000000Z"
  }
]
```

**Response Codes:**

200: Leaderboard retrieved successfully

## 2. Add a New User

**Endpoint:** http://localhost:8000/api/users

**HTTP Method:** POST

**Description:** Creates a new user with initial details such as name, age, and address. The user's points will default to 0 upon creation. QR code is generated which stores user addresses.

**Request Body:**

```
{
  "name": "Akshay Ghatiki",
  "age": 25,
  "address": "145, 19th B Cross, 17th Main, Sector 3, HSR Layout,
Bangalore-560102"
}
```

**Response:**

```
{
  "name": "Akshay Ghatiki",
  "age": 25,
  "address": "145, 19th B Cross, 17th Main, Sector 3, HSR Layout,
Bangalore-560102",
  "points": 0,
  "updated_at": "2024-10-13T10:18:55.000000Z",
  "created_at": "2024-10-13T10:18:55.000000Z",
  "id": 24
}
```

**Response Codes:**

201: User created successfully and new user data is returned.

### 3. Get User Details

**Endpoint:** http://localhost:8000/api/users/{id}

**HTTP Method:** GET

**Description:** Retrieves details of the user identified by the provided id.

**Response:**

```
{
  "id": 11,
  "name": "Akshay Ghatiki",
  "age": 25,
  "points": 8,
  "address": "145, 19th B Cross, 17th Main, Sector 3, HSR Layout,
Bangalore-560102",
  "created_at": "2024-10-12T11:09:27.000000Z",
  "updated_at": "2024-10-13T19:21:30.000000Z"
}
```

**Response Codes:**

200: User was retrieved successfully.

### 4. Increment User Points

**Endpoint:** http://localhost:8000/api/users/{id}/increment

**HTTP Method:** POST

**Description:** Increases the points of the user identified by the provided id by 1.

**Response:**

```
{
  "id": 11,
  "name": "Akshay Ghatiki",
  "age": 25,
  "points": 8,
  "address": "145, 19th B Cross, 17th Main, Sector 3, HSR Layout,
Bangalore-560102",
}
```

```
"created_at": "2024-10-12T11:09:27.000000Z",
"updated_at": "2024-10-13T19:21:29.000000Z"
}
```

**Response Codes:**

200: The user's points were successfully incremented.

## 5. Decrement User Points

**Endpoint:** http://localhost:8000/api/users/{id}/decrement

**HTTP Method:** POST

**Description:** Decreases the points of the user identified by the provided id by 1 if points are greater than 0.

**Response:**

```
{
  "id": 11,
  "name": "Akshay Ghatiki",
  "age": 25,
  "points": 7,
  "address": "145, 19th B Cross, 17th Main, Sector 3, HSR Layout,
Bangalore-560102",
  "created_at": "2024-10-12T11:09:27.000000Z",
  "updated_at": "2024-10-13T19:21:30.000000Z"
}
```

**Response Codes:**

200: The user's points were successfully decremented.

## 6. Delete a User

**Endpoint:** http://localhost:8000/api/users/{id}

**HTTP Method:** DELETE

**Description:** Deletes the user identified by the provided id. Users are also removed from the winners table.

**Response:**

```
{
  "message": "User deleted"
}
```

**Response Codes:**

200: The user was successfully deleted.

## 7. Group Users by Score

**Endpoint:** http://localhost:8000/api/groupusers

**HTTP Method:** GET

**Description:** Returns the users info grouped by score and includes the average age of the users

**Response:**

```
{
  "1": {
    "names": [
      "Maida Bode",

```

```

        "Ned Grady"
      ],
      "average_age": 44
    },
    "2": {
      "names": [
        "Reinhold Jast",
        "Eusebio Carroll",
        "Dr. Amos Heathcote"
      ],
      "average_age": 37.67
    },
    "3": {
      "names": [
        "Miss Paige Schuster Jr."
      ],
      "average_age": 53
    },
    "4": {
      "names": [
        "Magdalena McGlynn"
      ],
      "average_age": 60
    },
    "5": {
      "names": [
        "Dr. Richie Howell DDS"
      ],
      "average_age": 33
    },
    "7": {
      "names": [
        "Akshay Ghatiki"
      ],
      "average_age": 25
    }
  }
}

```

**Response Code:**

200: Returns grouped users successfully.