**URL:** <https://thomlane-final.wl.r.appspot.com>

**Entities**

users

|  |  |  |
| --- | --- | --- |
| **Name** | **Type** | **Description** |
| id | int (unique) | A unique value to describe each user (Pulled from the sub of jwt) |
| games | list | A list of all the users games |

IMPORTANT NOTE: The unique identifier is pulled from the token passed in the authorization header. There is no need to put this value in yourself. Simply the token is enough.

balls

|  |  |  |
| --- | --- | --- |
| **Name** | **Type** | **Description** |
| id | int (unique) | A unique value to describe each ball |
| weight | int | the weight of the bowling ball |
| color | string | The color of the ball |
| inserts | bool | whether the ball should have fingertip inserts |
| game | game | The game this ball belongs to |

games

|  |  |  |
| --- | --- | --- |
| **Name** | **Type** | **Description** |
| id | int (unique) | A unique value to describe each game |
| lane | int | preferred lane number (one game per lane) |
| bumpers | bool | Whether this game has bumpers |
| lights | bool | If this game uses fancy blacklights |
| user | int | id of user playing this game |
| balls | list | A list of all bowling balls being used in this game |

**Endpoint:** /balls

GET: Used to list all this balls

*Request*

Possible Body: False

*Response*

Response Format: JSON

|  |  |  |
| --- | --- | --- |
| **Outcome** | **Status Code** | **Notes** |
| Success | 200 | Returns a list of all balls |
| Failure | 406 | If the request Accept header does not include ‘application/json’, a 406 status code is returned. Only json can be returned |

**Success Responses**

|  |
| --- |
| Status: 200 OK  {  “id”: 789234798324,  “user”: 123123  “lane”: 15,  “bumpers”: false,  “lights”: false,  “balls”: {}  “self”: https://thomlane-final.wl.r.appspot.com/789234798324  } |

**Failure Responses**

|  |
| --- |
| Status: 406 Not Acceptable  {  “Error”: “Can only return application/json”  } |

POST: Used to create a new ball (protected)

*Request*

Possible Body: True

Required Body: True

Required Body Format: JSON

Request Body JSON Attributes

|  |  |
| --- | --- |
| **Name** | **Required?** |
| weight | Yes |
| color | Yes |
| inserts | Yes |

Notes: None of the body is required. Any pieces not included will use their default value

Body Example

|  |
| --- |
| {  “weight”: 15,  “color”: “orange”,  “inserts”: false  } |

*Response*

Response Format: JSON

|  |  |  |
| --- | --- | --- |
| **Outcome** | **Status Code** | **Notes** |
| Success | 201 | Returns the created database object |
| Failure | 400 | If any input isn’t correct, a 400 status code is returned. |
| Failure | 406 | If the request Accept header does not include ‘application/json’, a 406 status code is returned. Only json can be returned |
| Failure | 415 | If the request ‘Content-Type’ header is not ‘application/json’, a 415 status code is returned. POST body must be JSON. |

**Success Responses**

|  |
| --- |
| Status: 201 Created  {  “id”: 789234798324,  “weight”: 15  “color”: “orange”,  “inserts”: false,  “self”: https://thomlane-final.wl.r.appspot.com/balls/789234798324  } |

**Failure Responses**

|  |
| --- |
| Status: 400 Bad Request  {  “Error”: “The request object is missing an attribute"  } |

|  |
| --- |
| Status: 406 Not Acceptable  {  “Error”: “Can only return application/json”  } |

|  |
| --- |
| Status: 415 Unsupported Media Type  {  “Error”: “Can only receive application/json”  } |

**Endpoint:** /balls/<id>

Put: Used to completely edit ball (partially protected)

*Request*

Possible Body: True

Required Body: True

Required Body Format: JSON

Request Body JSON Attributes

|  |  |
| --- | --- |
| **Name** | **Required?** |
| bumpers | Yes |
| lane | Yes |
| lights | Yes |

Notes: If this ball is in a game, an authorization token will be required and it will need to match that game’s user’s id

Body Example

|  |
| --- |
| {  “weight”: 15,  “color”: “blue”,  “inserts”: false  } |

*Response*

Response Format: JSON

|  |  |  |
| --- | --- | --- |
| **Outcome** | **Status Code** | **Notes** |
| Success | 200 | Returns the created database object |
| Failure | 400 | If any input is of the wrong type, a 400 status code is returned. |
| Failure | 401 | If this ball belongs to a game, must be authorized |
| Failure | 403 | If the requested lane is already in use |
| Failure | 404 | No lanes currently available; try again later |
| Failure | 406 | If the request Accept header does not include ‘application/json’, a 406 status code is returned. Only json can be returned |
| Failure | 415 | If the request ‘Content-Type’ header is not ‘application/json’, a 415 status code is returned. POST body must be JSON. |

**Success Responses**

|  |
| --- |
| Status: 200 OK  {  “id”: 789234798324,  “weight”: 15,  “color”: “blue”,  “inserts”: false,  “game”: []  “self”: https://thomlane-final.wl.r.appspot.com/789234798324  } |

**Failure Responses**

|  |
| --- |
| Status: 400 Bad Request  {  “Error”: “weight must be an int”  or  “Error”: “blue must be a string”  or  “Error”: “inserts must be a boolean”  } |

|  |
| --- |
| Status: 401 Unauthorized  {  “Error”: “Must have an Authorization header”  } |

|  |
| --- |
| Status: 403 Forbidden  {  “Error”: “Only This game's user can edit this game} |

|  |
| --- |
| Status: 404 Not Found  {  “Error”: “No ball with this ball\_id exists”  } |

|  |
| --- |
| Status: 406 Not Acceptable  {  “Error”: “Can only return application/json”  } |

|  |
| --- |
| Status: 415 Unsupported Media Type  {  “Error”: “Can only receive application/json”  } |

Patch: Used to partially edit ball (partially protected)

*Request*

Possible Body: True

Required Body: False

Required Body Format: JSON

Request Body JSON Attributes

|  |  |
| --- | --- |
| **Name** | **Required?** |
| bumpers | No |
| lane | No |
| lights | No |

Notes: If this ball is in a game, an authorization token will be required and it will need to match that game’s user’s id

Note: If a portion is missing it will be replaced with what’s already in the ball data

Body Example

|  |
| --- |
| {  “weight”: 15,  “color”: “blue”  } |

*Response*

Response Format: JSON

|  |  |  |
| --- | --- | --- |
| **Outcome** | **Status Code** | **Notes** |
| Success | 200 | Returns the created database object |
| Failure | 400 | If any input is of the wrong type, a 400 status code is returned. |
| Failure | 401 | If this ball belongs to a game, must be authorized |
| Failure | 403 | If the requested lane is already in use |
| Failure | 404 | No lanes currently available; try again later |
| Failure | 406 | If the request Accept header does not include ‘application/json’, a 406 status code is returned. Only json can be returned |
| Failure | 415 | If the request ‘Content-Type’ header is not ‘application/json’, a 415 status code is returned. POST body must be JSON. |

**Success Responses**

|  |
| --- |
| Status: 200 OK  {  “id”: 789234798324,  “weight”: 15,  “color”: “blue”,  “inserts”: false,  “game”: []  “self”: https://thomlane-final.wl.r.appspot.com/789234798324  } |

**Failure Responses**

|  |
| --- |
| Status: 400 Bad Request  {  “Error”: “weight must be an int”  or  “Error”: “blue must be a string”  or  “Error”: “inserts must be a boolean”  } |

|  |
| --- |
| Status: 401 Unauthorized  {  “Error”: “Must have an Authorization header”  } |

|  |
| --- |
| Status: 403 Forbidden  {  “Error”: “A game is already being played in that lane”  } |

|  |
| --- |
| Status: 404 Not Found  {  “Error”: “No ball with this ball\_id exists”  } |

|  |
| --- |
| Status: 406 Not Acceptable  {  “Error”: “Can only return application/json”  } |

DELETE: Used to delete a game (partially PROTECTED)

*Request*

Possible Body: No

Note: ball id is passed in url

*Response*

Response Format: JSON

|  |  |  |
| --- | --- | --- |
| **Outcome** | **Status Code** | **Notes** |
| Success | 204 | Any connections will be removed before deletion |
| Failure | 401 | If an authorization token was not passed in and ball ahs a game |
| Failure | 403 | If the user is not in the ball’s game |
| Failure | 404 | No ball with this id exists |

**Success Responses**

|  |
| --- |
| Status: 204 No Content  ‘’ |

**Failure Responses**

|  |
| --- |
| Status: 401 Unauthorized  {  “Error”: “This ball belongs to a game. Must have an Authorization header”  } |

|  |
| --- |
| Status: 403 Forbidden  {  “Error”: “That ball belongs to another user's game”  } |

|  |
| --- |
| Status: 404 Not Found  {  “Error”: “No ball with this ball\_id exists”  } |

GET: Used to get a specific ball

*Request*

Possible Body: No

Note: ball id is passed in url

*Response*

Response Format: JSON

|  |  |  |
| --- | --- | --- |
| **Outcome** | **Status Code** | **Notes** |
| Success | 200 | Returns all the info related to the ball |
| Failure | 404 | No ball with this id exists |
| Failure | 406 | Can only return application/json |

**Success Responses**

|  |
| --- |
| Status: 200 OK  {  “id”: 789234798324,  “user”: 123123  “lane”: 15,  “bumpers”: false,  “lights”: false,  “balls”: {}  “self”: https://thomlane-final.wl.r.appspot.com/789234798324  } |

**Failure Responses**

|  |
| --- |
| Status: 404 Not Found  {  “Error”: “No ball with this ball\_id exists”  } |

|  |
| --- |
| Status: 406 Not Acceptable  {  “Error”: “Can only return application/json”  } |

**Endpoint:** /games

POST: Used to create a new game (protected)

*Request*

Possible Body: True

Required Body: False

Required Body Format: JSON

Request Body JSON Attributes

|  |  |
| --- | --- |
| **Name** | **Required?** |
| bumpers | No (default: false) |
| lane | No (default: next available, min: 1, max 20) |
| lights | No (default: false) |

Notes: None of the body is required. Any pieces not included will use their default value

Body Example

|  |
| --- |
| {  “lane”: 15,  “bumpers”: false,  “lights”: false  } |

*Response*

Response Format: JSON

|  |  |  |
| --- | --- | --- |
| **Outcome** | **Status Code** | **Notes** |
| Success | 201 | Returns the created database object |
| Failure | 400 | If any input is of the wrong type, a 400 status code is returned. |
| Failure | 401 | If an authorization token wasn’t passed in |
| Failure | 403 | If the requested lane is already in use |
| Failure | 404 | No lanes currently available; try again later |
| Failure | 406 | If the request Accept header does not include ‘application/json’, a 406 status code is returned. Only json can be returned |
| Failure | 415 | If the request ‘Content-Type’ header is not ‘application/json’, a 415 status code is returned. POST body must be JSON. |

**Success Responses**

|  |
| --- |
| Status: 201 Created  {  “id”: 789234798324,  “user”: 123123  “lane”: 15,  “bumpers”: false,  “lights”: false,  “balls”: {}  “self”: https://thomlane-final.wl.r.appspot.com/789234798324  } |

**Failure Responses**

|  |
| --- |
| Status: 400 Bad Request  {  “Error”: “lane must be an int”  or  “Error”: “lights must be a boolean”  or  “Error”: “bumpers must be a boolean”  or  “Error”: “Lane number must be between 1 and 20, inclusive”  } |

|  |
| --- |
| Status: 403 Forbidden  {  “Error”: “A game is already being played in that lane”  } |

|  |
| --- |
| Status: 404 Not Found  {  “Error”: “No lanes currently available; try again later”  } |

|  |
| --- |
| Status: 406 Not Acceptable  {  “Error”: “Can only return application/json”  } |

|  |
| --- |
| Status: 415 Unsupported Media Type  {  “Error”: “Can only receive application/json”  } |

GET: Used to list all of this user’s games (Protected)

*Request*

Possible Body: False

*Response*

Response Format: JSON

|  |  |  |
| --- | --- | --- |
| **Outcome** | **Status Code** | **Notes** |
| Success | 200 | Returns a paginated list of all games |
| Failure | 401 | If an authorization token was not passed in |
| Failure | 406 | If the request Accept header does not include ‘application/json’, a 406 status code is returned. Only json can be returned |

**Success Responses**

|  |
| --- |
| Status: 200 OK  {  “id”: 789234798324,  “user”: 123123  “lane”: 15,  “bumpers”: false,  “lights”: false,  “balls”: {}  “self”: https://thomlane-final.wl.r.appspot.com/789234798324  } |

**Failure Responses**

|  |
| --- |
| Status: 401 Unauthorized  {  “Error”: “A game is already being played in that lane”  } |

|  |
| --- |
| Status: 406 Not Acceptable  {  “Error”: “Can only return application/json”  } |

**Endpoint:** /games/<id>

PUT: Used to completely edit a game (PROTECTED)

*Request*

Possible Body: True

Required Body: True

Required Body Format: JSON

Request Body JSON Attributes

|  |  |
| --- | --- |
| **Name** | **Required?** |
| bumpers | Yes |
| lane | Yes |
| lights | Yes |

Body Example

|  |
| --- |
| {  “lane”: 15,  “bumpers”: true,  “lights”: false  } |

*Response*

Response Format: JSON

|  |  |  |
| --- | --- | --- |
| **Outcome** | **Status Code** | **Notes** |
| Success | 200 | Returns the edited database object |
| Failure | 400 | If any input is of the wrong type, a 400 status code is returned. |
| Failure | 401 | If an authorization token was not passed in |
| Failure | 403 | If the user is not this game’s user |
| Failure | 404 | No lanes currently available; try again later |
| Failure | 406 | If the request Accept header does not include ‘application/json’, a 406 status code is returned. Only json can be returned |
| Failure | 415 | If the request ‘Content-Type’ header is not ‘application/json’, a 415 status code is returned. POST body must be JSON. |

**Success Responses**

|  |
| --- |
| Status: 200 OK  {  “id”: 789234798324,  “user”: 123123  “lane”: 15,  “bumpers”: true,  “lights”: false,  “balls”: {}  “self”: https://thomlane-final.wl.r.appspot.com/789234798324  } |

**Failure Responses**

|  |
| --- |
| Status: 400 Bad Request  {  “Error”: “The request object is missing at least one of the required attributes”  or  “Error”: “lane must be an int”  or  “Error”: “lights must be a boolean”  or  “Error”: “bumpers must be a boolean”  or  “Error”: “Lane number must be between 1 and 20, inclusive”  } |

|  |
| --- |
| Status: 401 Unauthorized  {  “Error”: “A game is already being played in that lane”  } |

|  |
| --- |
| Status: 403 Forbidden  {  “Error”: “Only This game's user can edit this game”  or  “Error”: “A game is already being played in that lane”  } |

|  |
| --- |
| Status: 404 Not Found  {  “Error”: “No game with this game\_id exists”  } |

|  |
| --- |
| Status: 406 Not Acceptable  {  “Error”: “Can only return application/json”  } |

|  |
| --- |
| Status: 415 Unsupported Media Type  {  “Error”: “Can only receive application/json”  } |

PATCH: Used to partially edit a game (PROTECTED)

*Request*

Possible Body: True

Required Body: True

Required Body Format: JSON

Request Body JSON Attributes

|  |  |
| --- | --- |
| **Name** | **Required?** |
| bumpers | No |
| lane | No |
| lights | No |

Body Example

|  |
| --- |
| {  “lane”: 20  } |

*Response*

Response Format: JSON

|  |  |  |
| --- | --- | --- |
| **Outcome** | **Status Code** | **Notes** |
| Success | 200 | Returns the edited database object |
| Failure | 400 | If any input is of the wrong type, a 400 status code is returned. |
| Failure | 401 | If an authorization token was not passed in |
| Failure | 403 | If the user is not this game’s user |
| Failure | 404 | No lanes currently available; try again later |
| Failure | 406 | If the request Accept header does not include ‘application/json’, a 406 status code is returned. Only json can be returned |
| Failure | 415 | If the request ‘Content-Type’ header is not ‘application/json’, a 415 status code is returned. POST body must be JSON. |

**Success Responses**

|  |
| --- |
| Status: 200 OK  {  “id”: 789234798324,  “user”: 123123  “lane”: 20,  “bumpers”: false,  “lights”: false,  “balls”: {}  “self”: https://thomlane-final.wl.r.appspot.com/789234798324  } |

**Failure Responses**

|  |
| --- |
| Status: 400 Bad Request  {  “Error”: “lane must be an int”  or  “Error”: “lights must be a boolean”  or  “Error”: “bumpers must be a boolean”  or  “Error”: “Lane number must be between 1 and 20, inclusive”  } |

|  |
| --- |
| Status: 401 Unauthorized  {  “Error”: “Must have an Authorization header”  } |

|  |
| --- |
| Status: 403 Forbidden  {  “Error”: “Only This game's user can edit this game”  or  “Error”: “A game is already being played in that lane”  } |

|  |
| --- |
| Status: 404 Not Found  {  “Error”: “No game with this game\_id exists”  } |

|  |
| --- |
| Status: 406 Not Acceptable  {  “Error”: “Can only return application/json”  } |

|  |
| --- |
| Status: 415 Unsupported Media Type  {  “Error”: “Can only receive application/json”  } |

DELETE: Used to delete a game (PROTECTED)

*Request*

Possible Body: No

Note: game id is passed in url

*Response*

Response Format: JSON

|  |  |  |
| --- | --- | --- |
| **Outcome** | **Status Code** | **Notes** |
| Success | 204 | N/A |
| Failure | 401 | If an authorization token was not passed in |
| Failure | 403 | If the user is not this game’s user |
| Failure | 404 | No game with this id exists |

**Success Responses**

|  |
| --- |
| Status: 204 No Content  ‘’ |

**Failure Responses**

|  |
| --- |
| Status: 401 Unauthorized  {  “Error”: “Must have an Authorization header”  } |

|  |
| --- |
| Status: 403 Forbidden  {  “Error”: “Only This game's user can edit this game”  } |

|  |
| --- |
| Status: 404 Not Found  {  “Error”: “No game with this game\_id exists”  } |

GET: Used to get a specific game (PROTECTED)

*Request*

Possible Body: No

Note: game id is passed in url

*Response*

Response Format: JSON

|  |  |  |
| --- | --- | --- |
| **Outcome** | **Status Code** | **Notes** |
| Success | 200 | Returns all the info related to the game |
| Failure | 401 | If an authorization token was not passed in |
| Failure | 403 | If the user is not this game’s user |
| Failure | 404 | No game with this id exists |
| Failure | 406 | Can only return application/json |

**Success Responses**

|  |
| --- |
| Status: 200 OK  {  “id”: 789234798324,  “user”: 123123  “lane”: 15,  “bumpers”: false,  “lights”: false,  “balls”: {}  “self”: https://thomlane-final.wl.r.appspot.com/789234798324  } |

**Failure Responses**

|  |
| --- |
| Status: 401 Unauthorized  {  “Error”: “Must have an Authorization header”  } |

|  |
| --- |
| Status: 403 Forbidden  {  “Error”: “Only This game's user can view this game”  } |

|  |
| --- |
| Status: 404 Not Found  {  “Error”: “No game with this game\_id exists”  } |

|  |
| --- |
| Status: 406 Not Acceptable  {  “Error”: “Can only return application/json”  } |

**Endpoint:** /games/<g\_id>/balls/<b\_id>

DELETE: Used to remove a ball from a game (PROTECTED)

*Request*

Possible Body: No

Note: game id and ball id is passed in url

*Response*

Response Format: JSON

|  |  |  |
| --- | --- | --- |
| **Outcome** | **Status Code** | **Notes** |
| Success | 204 | N/A |
| Failure | 401 | If an authorization token was not passed in |
| Failure | 403 | If the user is not this game’s user |
| Failure | 404 | No game or ball with this id exists |

**Success Responses**

|  |
| --- |
| Status: 204 No Content  ‘’ |

**Failure Responses**

|  |
| --- |
| Status: 401 Unauthorized  {  “Error”: “Must have an Authorization header”  } |

|  |
| --- |
| Status: 403 Forbidden  {  “Error”: “Only This game's user can edit this game”  } |

|  |
| --- |
| Status: 404 Not Found  {  “Error”: “No game with this game\_id exists”  or  “Error”: “No ball with this ball\_id exists”  } |

PATCH: Used to add a ball to a game (PROTECTED)

*Request*

Possible Body: No

Note: game id and ball id is passed in url

*Response*

Response Format: JSON

|  |  |  |
| --- | --- | --- |
| **Outcome** | **Status Code** | **Notes** |
| Success | 204 | N/A |
| Failure | 401 | If an authorization token was not passed in |
| Failure | 403 | If the user is not this game’s user |
| Failure | 404 | No game or ball with this id exists |

**Success Responses**

|  |
| --- |
| Status: 204 No Content  ‘’ |

**Failure Responses**

|  |
| --- |
| Status: 401 Unauthorized  {  “Error”: “Must have an Authorization header”  } |

|  |
| --- |
| Status: 403 Forbidden  {  “Error”: “Only This game's user can edit this game”  } |

|  |
| --- |
| Status: 404 Not Found  {  “Error”: “No game with this game\_id exists”  or  “Error”: “No ball with this ball\_id exists”  } |