

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.
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## 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.
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### 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.
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### 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"
}
```

