Fantasy Futball

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Change log

Version	Change	Date
1.0	Initial version.	June 4, 2022

Data Model

The app stores three kinds of entities in Datastore, users, teams, players. All attributes seen below are required, none are optional.

Users

Property	Data Type	Notes	
id	Integer	The id of the user. Datastore automatically generates it. Don't	
		add it yourself as a property of the entity. Example: 432809854	
user_id	String	This is the sub value of the jwt token generated when a user	
		creates an account. It is generated by Auth0 and automatically	
		added. Example: "auth0 3480f34"	
email	String	The users email for their Auth0 account Example:	
		"user@test.com"	
teams	Array	This array houses objects containing details regarding the	
		user's teams	
		{	
		"name": "The Lambda",	
		"id": 5631671361601536,	
		"self": "http://ramosna-portfolio.uc.r.	
		appspot.com/teams/5631671361601536"	
		}	

Teams

Property	Data Type	Notes	
id	Integer	The id of the team. Datastore automatically generates it. Don't add it	
		yourself as a property of the entity. Example: 34546342	
name	String	This is the team's name, must be no greater than 32 characters, and	
		contain no special characters.	
		Example: "Legends FC"	
wins	Integer	This attribute is to track the number of wins a team has. Must be an	
		integer >= 0 and < 10,000	
		Example: 5	
losses	Integer	This attribute is to track the number of losses a team has. Must be an	
		integer >= 0 and < 10,000 Example: 5	
draws	Integer	This attribute is to track the number of draws a team has. Must be an	
		integer >= 0 and < 10,000 Example: 3	
owner	Object	This object is generated using the jwt token provided with creating a team.	
		It contains the owners information. Example:	
		{	
		"id": "5634161670881280",	
		"user_id": "auth0 6282c4202804870068ce951a"	
		}	
players	Array	This array houses objects containing details regarding the team's players	
		Example:	

Players

Property	Data Type	Notes	
id	Integer	The id of the player. Datastore automatically generates it. Don't add it yourself as a property of the entity. Example:	
		42342	
first_name	String	First name of the player. Must be no greater than 16	
		characters, cannot contain numbers, cannot contain special characters Example: "Diego"	
last_name	String	Last name of the player. Must be no greater than 16	
		characters, cannot contain numbers, cannot contain special	
		characters Example: "Simeone"	
position	String	Position of the player. Must be no greater than 16 characters,	
		cannot contain numbers, cannot contain special characters Example: "Left Back"	
team	Object	Object holding details as to which team the player is a part of.	
		{	
		"team_id": 5651673292734464,	
		"team_name": "Legends FC",	
		"self": "http://ramosna-portfolio.uc.r.appspot.com	
		/teams/5651673292734464"	
		}	

Description

The relationship between the non-user entities is as follows. The two non-entities are teams and players. Teams have a many to one relationship with players. Thus, a team can have many players on it but a player can only be apart of one team.

User entities are modeled by using the sub value of the jwt. This is held by the user object in datastore under the user_id attribute. The user_id attribute is used in the relationship between teams to determine which user owns a team. The relationship is one to many. Each user can have many teams, but each team will only be owned by one user. In order to supply a user identifier each request dealing with a team must have the user's jwt token so the sub value can be read and owner confirmed. Users are created as soon as an account as made, linking the sub value from the token to user_id attribute. The user id attribute is mainly just used to pull the user from datastore to update the team's attribute. The unique identifier is the user_id value.

Create a Team

Allows you to create a new team.

POST /teams

Request

Path Parameters

None

Path Protected

Yes — In order to create a team a valid account jwt for a valid user must be present in the authorization header.

Request Body

Required

Request Body Format

JSON - Required

Request JSON Attributes

Name	Description	Required?
name	Name of the team. Must be no greater than 32 characters, no special characters (/[$!@#$\%^&*()_+\-={};':"?^,<>$)	Yes

Request Body Example

```
{
    "name": "Legends FC",
}
```

Response

Response Body Format

JSON

Response Statuses

Outcome	Status Code	Notes	
Success	201 Created		
Failure	400 Bad Request	If the request is missing the name attribute, the name attribute is not of the correct type, or there are additional attributes the team must not be created, and 400 status code must be returned. Also, if the request contains additional invalid attributes	
Failure	403 Forbidden	If the provided jwt is valid but not from a current user	
Failure	406 Not Acceptable	If accept header does not support application/json	
Failure	415 Unsupported	If the content type is not application/json	
	Media Type		

Response Examples

• Datastore will automatically generate an ID and store it with the entity being created.

- The request must be in JSON and the response will always be in JSON
- The "self" attribute is also generated based on the datastore id number.

Success

```
Status: 201 Created

{
    "id": 5651673292734464,
    "name": "Legends FC",
    "wins": 0,
    "losses": 0,
    "draws": 0,
    "owner": {
        "id": "5634161670881280",
        "user_id": "auth0|6282c4202804870068ce951a"
    },
    "players": [],
    "self": "http://ramosna-portfolio.uc.r.appspot.com/teams/5651673292734464"
}
```

```
Status: 400 Bad Request

{
    "Error": "The name attribute is not provided"
}

Status: 403 Forbidden

{
    "Error": "Forbidden request, authorization token must be for a current user"
}

Status: 406 Not Acceptable

{
    "Error": "Response can only be application/json"
}

Status: 415 Unsupported Media Type

{
    "Error": "Application only accepts application/json data"
}
```

Get All Teams For A User

Allows a user to see all teams that are assigned to their account.

GET /team

Request

Path Parameters

None

Path Protected

Yes — In order to view all teams for a user a valid jwt for the team's owner must be present in the authorization header.

Request Body

None

Response

Response Body Format

JSON

Response Statuses

Outcome	Status Code	Notes
Success	200 OK	
Failure	401 Unauthorized	If request is missing or has invalid jwt authorization token
	Request	
Failure	406 Not Acceptable	If accept header does not support application/json

Response Examples

Success

```
Status: 401 Unauthorized Request

{
"Error": "Unauthorized request, invalid authorization token"
}
```

```
Status: 406 Not Acceptable

{
    "Error": "Response can only be application/json"
}
```

Get a Team

Allows you to get an existing Team

```
GET /team/:team_id
```

Request

Path Parameters

Name	Description
team_id	ID of the team

Path Protected

Yes — In order to view a team a valid jwt for the team's owner must be present in the authorization header.

Request Body

None

Response

Response Body Format

JSON

Response Statuses

Outcome	Status Code	Notes	
Success	200 OK		
Failure	401 Unauthorized	If request is missing or has invalid jwt authorization token	
	Request		
Failure	403 Forbidden Request	If the valid provided authorization does not have access	
		to the team	
Failure	404 Not Found	No team with this team_id exists	
Failure	406 Not Acceptable	If accept header does not support application/json	

Response Examples

Success

```
Status: 401 Unauthorized Request
{
"Error": "Unauthorized request, invalid authorization token"
}
```

```
Status: 403 Forbidden Request

{
"Error": "Forbidden request"
}
```

```
Status: 404 Not Found

{
"Error": "No team with this team_id exists"
}
```

```
Status: 406 Not Acceptable

{
    "Error": "Response can only be application/json"
}
```

Edit a Team PUT

Allows you to edit a team but all attributes must be present.

PUT /team/:team_id

Request

Path Parameters

Name	Description
team_id	ID of the team

Path Protected

Yes — In order to edit a team a valid jwt for the team's owner must be present in the authorization header.

Request Body

Required

Request Body Format

JSON - Required

Request JSON Attributes

Name	Description	Required?
name	Name of the team. Must be no greater than 32 characters, no special characters (/[$^!@\#$\%^*()_+\-={};':"?^-,<>$)	Yes
wins	The number of team losses. Must be an integer between 0 - 10,000	Yes
losses	The number of team losses. Must be an integer between 0 - 10,000	Yes
draws	The number of team losses. Must be an integer between 0 - 10,000	Yes

Request Body Example

```
{
   "name": "Strikers FC",
   "wins": 12
   "draws": 6,
   "losses": 7,
}
```

Response

Response Body Format

No Body

Response Statuses

Outcome	Status Code	Notes
Success	204 No Response	
Failure	400 Bad Request	If the request is missing any of the 4 required attributes, the name attribute is invalid, the wins, losses, and draws attributes are not the correct integers or there are additional attributes, the team must not be updated, and

		400 status code must be returned.
Failure	401 Unauthorized	If request is missing or has invalid jwt authorization token
	Request	
Failure	403 Forbidden	If the valid provided authorization does not have access
		to the team
Failure	404 Not Found	No team with this team_id exists
Failure	415 Unsupported	If the content type is not application/json
	Media Type	

Response Examples

Success

```
Status: 204 No Response
```

```
Status: 400 Bad Request

{
    "Error": "The request body contains an invalid attribute"
}
```

```
Status: 401 Unauthorized Request

{
"Error": "Unauthorized request, invalid authorization token"
}
```

```
Status: 403 Forbidden Request

{
"Error": "Forbidden request"
}
```

```
Status: 404 Not Found

{
"Error": "No team with this team_id exists"
}
```

```
Status: 406 Not Acceptable

{
    "Error": "Response can only be application/json"
}
```

```
Status: 415 Unsupported Media Type
```

```
{
    "Error": "Application only accepts application/json data"
}
```

Edit a Team Patch

Allows you to edit a however many of a team's attributes you choose. Will not affect the content of the unspecified attributes.

```
PATCH /teams/:team_id
```

Request

Path Parameters

Name	Description
team_id	ID of the team

Path Protected

Yes — In order to edit a team a valid jwt for the team's owner must be present in the authorization header.

Request Body

Required

Request Body Format

JSON - Required

Request JSON Attributes

Name	Description	Required?
name	Name of the team. Must be no greater than 32 characters, no special characters (/[$!@#$%^&*()_+\-={};':"?^,<>$)	No
wins	The number of team losses. Must be an integer between 0 - 10,000	No
losses	The number of team losses. Must be an integer between 0 - 10,000	No
draws	The number of team losses. Must be an integer between 0 - 10,000	

Request Body Example

```
{
   "name": "Strikers FC",
   "wins": 12
   "draws": 6,
   "losses": 7,
}
```

Response

Response Body Format

JSON - Only

Response Statuses

Outcome	Status Code	Notes
Success	204 No Response	
Failure	400 Bad Request	If the name attribute is invalid, the wins, losses, and draws attributes are not the correct integers or there are additional attributes, the team must not be updated, and

		400 status code must be returned.
Failure	401 Unauthorized	If request is missing or has invalid jwt authorization token
	Request	
Failure	403 Forbidden	If the valid provided authorization does not have access
		to the team
Failure	404 Not Found	No team with this team_id exists
Failure	415 Unsupported	If the content type is not application/json
	Media Type	

Response Examples

Success

```
Status: 204 No Response
```

Failure

```
Status: 400 Bad Request

{
    "Error": "The request body contains an invalid attribute"
}
```

```
Status: 401 Unauthorized Request

{
    "Error": "Unauthorized request, invalid authorization token"
}
```

```
Status: 403 Forbidden Request
{
"Error": "Forbidden request"
}
```

```
Status: 404 Not Found

{
    "Error": "No team with this team_id exists"
    }
```

```
Status: 406 Not Acceptable

{
    "Error": "Response can only be application/json"
}
```

Status: 415 Unsupported Media Type

```
{
    "Error": "Application only accepts application/json data"
}
```

Delete a Team

Allows you to delete a team. Note, deleting a team will remove all players from that team.

DELETE /team/:team_id

Request

Path Parameters

Name	Description
team_id	ID of the team

Path Protected

Yes — In order to delete a team a valid jwt for the team's owner must be present in the authorization header.

Request Body

None

Response

No body

Response Body Format

Success: No body

Failure: JSON

Response Statuses

Outcome	Status Code	Notes
Success	204 No Content	
Failure	401 Unauthorized	If request is missing or has invalid jwt authorization token
	Request	
Failure	403 Forbidden	If the valid provided authorization does not have access
		to the team
Failure	404 Not Found	No team with this team_id exists

Response Examples

Success

Status: 204 No Content

```
Status: 401 Unauthorized Request

{
"Error": "Unauthorized request, invalid authorization token"
}
```

```
Status: 403 Forbidden Request
{
"Error": "Forbidden request"
}
```

```
Status: 404 Not Found

{
    "Error": "No team with this team_id exists"
}
```

Create a Player

Allows you to create a new player.

POST /player

Request

Path Parameters

None

Path Protected

No

Request Body

Required

Request Body Format

JSON - Required

Request JSON Attributes

Name	Description	Required?
first_name	Name of the team. Must be no greater than 16 characters, no special characters (/[$!@#$\%^&*()_+\-={};':"?^,<>$), and no numbers.	Yes
last_name	Name of the team. Must be no greater than 16 characters, no special characters (/[$!@#$\%^&*()_+\-={};':"?^,<>$), and no numbers.	Yes
position	Name of the team. Must be no greater than 16 characters, no special characters (/[$!@#$\%^&*()_+\-={};':"?^,<>$), and no numbers.	Yes

Request Body Example

```
{
   "first_name": "Fernando",
   "last_name": "Llorente",
   "position": "Center Back"
}
```

Response

Response Body Format

JSON

Response Statuses

Outcome	Status Code	Notes
Success	201 Created	
Failure	400 Bad Request	If the request is missing the any attribute, the first_name, last_name, or position attribute is not of the correct type, or there are additional attributes the player must not be created, and 400 status code must be returned. Also, if the request contains additional invalid attributes

Failure	406 Not Acceptable	If accept header does not support application/json
Failure	415 Unsupported	If the content type is not application/json
	Media Type	

Response Examples

- Datastore will automatically generate an ID and store it with the entity being created.
- The request must be in JSON and the response will always be in JSON
- The "self" attribute is also generated based on the datastore id number.

Success

```
Status: 201 Created

{
    "id": 5739956077068288,
    "first_name": "Lionel",
    "last_name": "Messi",
    "position": "Center Forward",
    "team": null,
    "self": "http://ramosna-portfolio.uc.r.appspot.com/players/5739956077068288"
}
```

```
Status: 400 Bad Request

{
    "Error": "The first_name attribute is not provided"
}

Status: 406 Not Acceptable

{
    "Error": "Response can only be application/json"
}

Status: 415 Unsupported Media Type

{
    "Error": "Application only accepts application/json data"
}
```

Get All Players

Gets all players and displays them

GET /team

Request

Path Parameters

None

Path Protected

No

Request Body

None

Response

Response Body Format

JSON

Response Statuses

Outcome	Status Code	Notes
Success	200 OK	
Failure	406 Not Acceptable	If accept header does not support application/json

Response Examples

Success

```
Status: 200 OK JSON
   "id": 5739956077068288,
    "first_name": "Lionel",
    "last name": "Messi",
    "position": "Center Forward",
    "team": null,
    "self": "http://ramosna-portfolio.uc.r.appspot.com/players/5739956077068288"
    "id": 5739956077068289,
    "first name": "David",
    "last name": "Villa",
    "position": "Forward",
    "team": {
             "team_name": "Legends FC",
             "team id": 5651673292734464,
             "self": "http://ramosna-portfolio.uc.r.appspot.com/teams/
             5651673292734464"
    "self": "http://ramosna-portfolio.uc.r.appspot.com/players/5739956077068289"
```

```
}
]
```

```
Status: 406 Not Acceptable

{
    "Error": "Response can only be application/json"
}
```

Get a Player

Allows you to get an existing player

GET /player/:player_id

Request

Path Parameters

Name	Description
player_id	ID of the player

Path Protected

No

Request Body

None

Response

Response Body Format

JSON

Response Statuses

Outcome	Status Code	Notes
Success	200 OK	
Failure	404 Not Found	No player with this player_id exists
Failure	406 Not Acceptable	If accept header does not support application/json

Response Examples

Success

```
Status: 404 Not Found

{
"Error": "No player with this player_id exists"
}
```

```
Status: 406 Not Acceptable

{
    "Error": "Response can only be application/json"
}
```

Edit a Player PUT

Allows you to edit a player but all attributes must be present.

```
PUT /players/:player_id
```

Request

Path Parameters

Name	Description
player_id	ID of the player

Path Protected

No

Request Body

Required

Request Body Format

JSON - Required

Request JSON Attributes

Name	Description	Required?
first_name	Name of the team. Must be no greater than 16 characters, no special characters (/[$!@#$\%^&*()_+\-={};':"?^,<>$), and no numbers.	Yes
last_name	Name of the team. Must be no greater than 16 characters, no special characters (/[$!@#$\%^&*()_+\-={};':"?^,<>$), and no numbers.	Yes
position	Name of the team. Must be no greater than 16 characters, no special characters (/[$!@#$\%^&*()_+\-={};':"?^,<>$), and no numbers.	Yes

Request Body Example

```
{
   "first_name": "Fernando",
   "last_name": "Llorente",
   "position": "Center Back"
}
```

Response

Response Body Format

No Body

Response Statuses

Outcome	Status Code	Notes
Success	204 No Response	
Failure	400 Bad Request	If the request is missing the any attribute, the first_name, last_name, or position attribute is not of the correct type, or there are additional attributes the player must not be

		created, and 400 status code must be returned. Also, if the request contains additional invalid attributes
Failure	404 Not Found	If there is not a player with the player_id
Failure	406 Not Acceptable	If accept header does not support application/json
Failure	415 Unsupported Media Type	If the content type is not application/json

Response Examples

Success

```
Status: 204 No Response
```

```
Status: 400 Bad Request

{
"Error": "The request body contains an invalid attribute"
}
```

```
Status: 404 Not Found

{
"Error": "No player with this player_id exists"
}
```

```
Status: 406 Not Acceptable

{
    "Error": "Response can only be application/json"
}
```

```
Status: 415 Unsupported Media Type

{
    "Error": "Application only accepts application/json data"
}
```

Edit a Player PATCH

Allows you to edit a however many of a player's attributes you choose. Will not affect the content of the unspecified attributes.

PATCH /players/:player_id

Request

Path Parameters

Name	Description
player_id	ID of the player

Path Protected

No

Request Body

Required

Request Body Format

JSON - Required

Request JSON Attributes

Name	Description Re	
first_name	Name of the team. Must be no greater than 16 characters, no special characters (/[$!@#$\%^&*()_+\-={};':"?^,<>$), and no numbers.	No
last_name	Name of the team. Must be no greater than 16 characters, no special characters (/[$!@#$\%^&*()_+\-={};':"?^,<>$), and no numbers.	No
position	Name of the team. Must be no greater than 16 characters, no special characters (/[$!@#$\%^&*()_+\-={};':"?^,<>$), and no numbers.	No

Request Body Example

```
{
    "last_name": "Llorente",
    "position": "Center Back"
}
```

Response

Response Body Format

No Body

Response Statuses

Outcome	Status Code	Notes
Success	204 No Response	
Failure	400 Bad Request	If the first_name, last_name, or position attribute is not
		of the correct type, or there are additional attributes the
		player must not be created, and 400 status code must be

		returned.
Failure	404 Not Found	If there is not a player with the player_id
Failure	406 Not Acceptable	If accept header does not support application/json
Failure	415 Unsupported	If the content type is not application/json
	Media Type	

Response Examples

Success

```
Status: 204 No Response
```

```
Status: 400 Bad Request

{
"Error": "The request body contains an invalid attribute"
}
```

```
Status: 404 Not Found
{
"Error": "No player with this player_id exists"
}
```

```
Status: 406 Not Acceptable

{
    "Error": "Response can only be application/json"
}
```

```
Status: 415 Unsupported Media Type

{
    "Error": "Application only accepts application/json data"
}
```

Delete a Player

Allows you to delete a Player. Note, deleting a player will remove the player from its assigned team.

DELETE /player/:player_id

Request

Path Parameters

Name	Description
player_id	ID of the player

Path Protected

Partly – If a player is assigned to a team to delete that player, the jwt token of the user who owns the team the player is assigned to must be provided. If the player is not on a team no jwt token is necessary.

Request Body

None

Response

No body

Response Body Format

Success: No body

Failure: JSON

Response Statuses

Outcome	Status Code	Notes
Success	204 No Content	
Failure	401 Unauthorized	If request is missing or has invalid jwt authorization token
	Request	and the player is assigned to team
Failure	403 Forbidden	If the valid provided authorization does not have access
		to the team the player a is on
Failure	404 Not Found	No player with this player_id exists

Response Examples

Success

Status: 204 No Content

```
Status: 401 Unauthorized Request

{
"Error": "Unauthorized request, invalid authorization token"
}
```

```
Status: 403 Forbidden Request

{
"Error": "Forbidden request"
}
```

```
Status: 404 Not Found

{
"Error": "No player with this player_id exists"
}
```

Assign a Player to a Team

Player is assigned to a team.

PUT /teams/:team_id/players/:player_id

Request

Path Parameters

Name	Description
team_id	ID of the team
player_id	ID of the player

Path Protected

Yes — In order to assign a player to a team a valid jwt for the team's owner must be present in the authorization header.

Request Body

None

Response

No body

Response Body Format

Success: No body

Failure: JSON

Response Statuses

Outcome	Status Code	Notes	
Success	204 No Response		
Failure	400 Bad Request	If the player is already assigned to another team	
Failure	401 Unauthorized	If request is missing or has invalid jwt authorization token	
	Request		
Failure	403 Forbidden	If the valid provided authorization does not have access	
		to the team	
Failure	404 Not Found	No team with this team_id exists or no player with this	
		player_id exists.	

Response Examples

Success

Status: 204 No Response

```
Status: 400 Bad Request

{
"Error": "The player with this player_id is already assigned to a team"
}
```

```
Status: 401 Unauthorized Request
{
"Error": "Unauthorized request, invalid authorization token"
}
```

```
Status: 403 Forbidden Request

{
"Error": "Forbidden request"
}
```

```
Status: 404 Not Found

{
"Error": "No team with this team_id exists"
}
```

Remove a Player From a Team

Removes a player who is currently assigned to team.

DELETE /teams/:team_id/players/:player_id

Request

Path Parameters

Name	Description
team_id	ID of the team
player_id	ID of the player

Path Protected

Yes — In order to remove a player to a team a valid jwt for the team's owner must be present in the authorization header.

Request Body

None

Response

No body

Response Body Format

Success: No body

Failure: JSON

Response Statuses

Outcome	Status Code	Notes		
Success	204 No Content	Succeeds only if a player exists with this player_id, a team exists with this team_id and this player is assigned to this team.		
Failure	401 Unauthorized Request	If request is missing or has invalid jwt authorization token		
Failure	403 Forbidden	If the valid provided authorization does not have access to the team		
Failure	404 Not Found	No team with this team_id is assigned a player with this player_id. This could be because no team with this team_id exists, or because no player with player_id exists, or even if both player_id and team_id are valid, the player with this player_id is not assigned to this team with this team id.		

Response Examples

Success

		,
Status: 204 No Content		,
1 3141US 2U4 NO COMEN		
Status: 20 1 110 Content		

Failure

Status: 401 Unauthorized Request

```
"Error": "Unauthorized request, invalid authorization token"
}
```

```
Status: 403 Forbidden Request

{
"Error": "Forbidden request"
}
```

```
Status: 404 Not Found

{
"Error": "No player with this player_id is on a team with this team_id"
}
```