

Go League API Dokümanı

Bu proje ile istenen sayıda(n) tane takıma kadar takıma sahip bir lig oluşturabilir ve oluşturduğunuz takımları istediğiniz şekilde maç yapacak şekilde maçlar oluşturabilirsiniz. Yapılan maçların ardından oluşan puan durumunu ve gelecek haftaya ait şampiyonluk sıralaması tahminini de görebilirsiniz.

Repository

Projeye ait özenle oluşturduğum ve her geliştirmeyi adım adım ekleyerek oluşturduğum GitHub Repository'sine aşağıdaki adresten ulaşabilirsiniz. Projeye ait repository'i incelemenizi özellikle tavsiye ederim.

GitHub - hasanalay/insider-go-task: league API - Creating teams and playing matches to determine champion

league API - Creating teams and playing matches to determine champion - hasanalay/insider-go-task

<https://github.com/hasanalay/insider-go-task/tree/main>

hasanalay/insider-go-task

league API - Creating teams and playing matches to determine champion

1 Contributor 0 Issues 0 Stars 0 Forks

Postman Collection

Projeye ait servisleri test etmek için GitHub Repository'sine eklenmiş olan postman collection'a buradan erişebilirsiniz.

- https://github.com/hasanalay/insider-go-task/blob/main/Insider-go-league-API.postman_collection.json

Cloud Erişimi ve Deployment

Projeye ait veritabanı ve Go uygulaması Google Cloud'a deploy edilmiştir. Cloud edilen uygulama <http://34.30.232.220:3000/api/> adresi üzerinden erişilebilir durumdadır.

Deploy edilen uygulama: Google Cloud üzerindeki bir adet sanal makinede çalışan postgres docker container'ı ve go uygulamasının birlikte çalışmasıyla hizmet vermektedir. Her iki uygulama için de birer adet systemd servisi yazılmış olup uygulamanın sürekli hizmet vermesi amaçlanmaktadır.

postgres.service

```
[Unit]
Description=PostgreSQL Docker Container
After=docker.service
Requires=docker.service

[Service]
ExecStart=/usr/bin/docker start -a postgresql
ExecStop=/usr/bin/docker stop postgresql
Restart=always

[Install]
WantedBy=multi-user.target
```

go-api.service

```
[Unit]
Description=Go API for league system
After=network.target postgresql-docker.service
Requires=postgresql-docker.service

[Service]
ExecStart=/usr/local/bin/go-league-api
Restart=always
User=hasannalay1
WorkingDirectory=/home/hasannalay1/insider-go-task
EnvironmentFile=/home/hasannalay1/insider-go-task/.env

[Install]
WantedBy=multi-user.target
```

Kullanılan Teknolojiler

- Go 1.21.6
- PostgreSQL
- Fiber V2
- gorm

Proje Yapısı

Projeye ait klasör yapısı aşağıdaki gibidir.

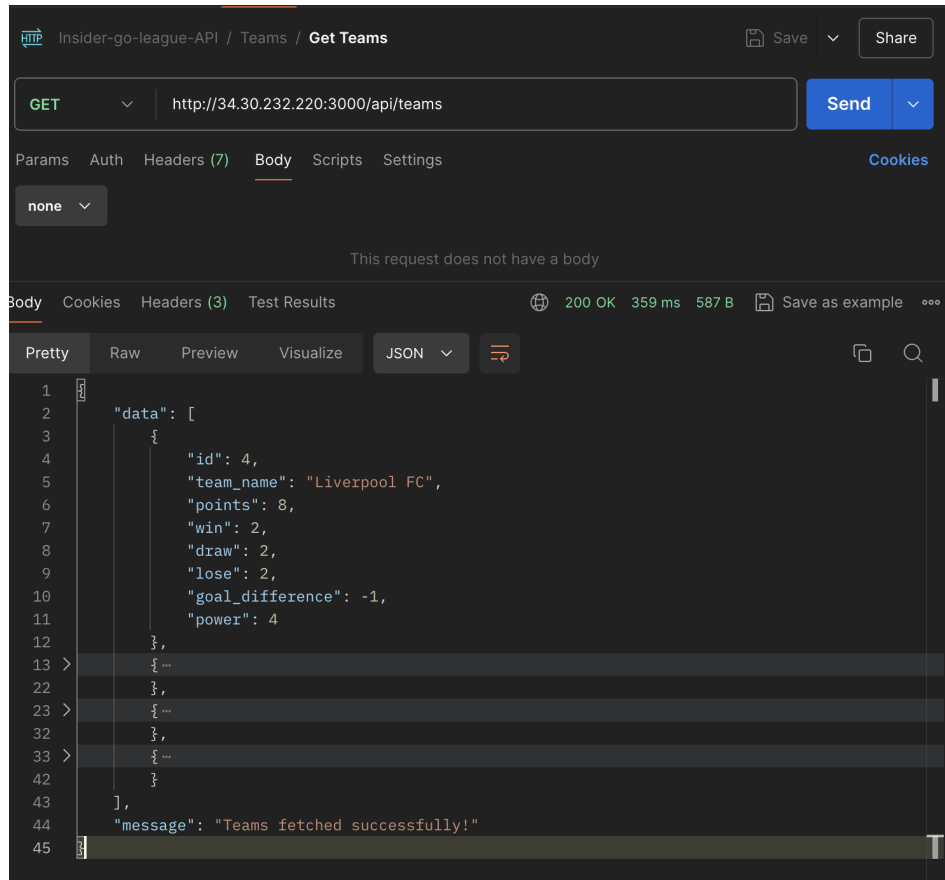
```
/insider-go-task
├── cmd/
│   └── league-api/
│       └── main.go
├── internal/
│   ├── db/
│   │   └── postgres.go
│   ├── models/
│   │   └── models.go
│   ├── handlers/
│   │   └── handlers.go
│   └── repository/
│       └── repository.go
├── helpers/
│   └── helpers.go
└── .env
```

```
└─ go.mod
└─ go.sum
```

Endpoint'ler ve Response'lar

Teams:

Get All Teams



Create A Team

Insider-go-league-API / Teams / **Create Team** Save Share

POST http://34.30.232.220:3000/api/teams Send

Params Auth Headers (9) **Body** Scripts Settings Cookies Beautify

raw JSON



```
1 {
2   "team_name": "Arsenal FC",
3   "points": 0,
4   "win": 0,
5   "draw": 0,
6   "lose": 0,
7   "goal_difference": 0,
8   "power": 4
9 }
```



Body Cookies Headers (3) Test Results 200 OK 219 ms 257 B Save as example


Pretty Raw Preview Visualize JSON ↕



```
1 {
2   "data": {
3     "id": 5,
4     "team_name": "Arsenal FC",
5     "points": 0,
6     "win": 0,
7     "draw": 0,
8     "lose": 0,
9     "goal_difference": 0,
10    "power": 4
11  },
12  "message": "Team created successfully!"
13 }
```

Update Team





HTTP Insider-go-league-API / Teams / **Update Team**  Save  Share




PUT  http://34.30.232.220:3000/api/teams/5 **Send** 

Params Auth Headers (9) **Body**  Scripts Settings [Cookies](#)

raw  **JSON**  [Beautify](#)



```
1 {
2   "team_name": "Manchester City FC",
3   "points": 0,
4   "win": 0,
5   "draw": 0,
6   "lose": 0,
7   "goal_difference": 0,
8   "power": 7
9 }
```



Body   200 OK 187 ms 265 B  Save as example 

Pretty Raw Preview Visualize **JSON**   


```
1 {
2   "data": {
3     "id": 0,
4     "team_name": "Manchester City FC",
5     "points": 0,
6     "win": 0,
7     "draw": 0,
8     "lose": 0,
9     "goal_difference": 0,
10    "power": 7
11  },
12  "message": "Team updated successfully!"
13 }
```

Get Team By Id





HTTP Insider-go-league-API / Teams / **Get Team By ID**  Save  Share




GET  http://34.30.232.220:3000/api/teams/4 **Send** 

Params Auth Headers (7) **Body** Scripts Settings [Cookies](#)

none 

This request does not have a body

Body   200 OK 173 ms 260 B  Save as example 

Pretty Raw Preview Visualize **JSON**   

```
1 {
2   "data": {
3     "id": 4,
4     "team_name": "Liverpool FC",
5     "points": 8,
6     "win": 2,
7     "draw": 2,
8     "lose": 2,
9     "goal_difference": -1,
10    "power": 4
11  },
12  "message": "Team fetched successfully!"
13 }
```

Delete Team

HTTP Insider-go-league-API / Teams / Delete Team Save Share

DELETE http://34.30.232.220:3000/api/teams/5 Send

Params Auth Headers (7) Body Scripts Settings Cookies

Query Params

	Key	Value	Descript...	...	Bulk Edit
	Key	Value	Description		

Body 204 No Content 173 ms 64 B Save as example

Pretty Raw Preview Visualize Text

1

Matches

Get All Matches

HTTP Insider-go-league-API / Matches / **Get Matches** Save Share

GET http://34.30.232.220:3000/api/matches Send

Params Auth Headers (7) **Body** Scripts Settings Cookies

none

This request does not have a body

Body 200 OK 173 ms 3.99 KB Save as example

Pretty Raw Preview Visualize **JSON**

```
1 {
2   "data": [
3     {
4       "id": 2,
5       "week": 1,
6       "home_id": 4,
7       "away_id": 3,
8       "home_goals": 3,
9       "away_goals": 4,
10      "is_played": true,
11      "home_team": {
12        "id": 4,
13        "team_name": "Liverpool FC",
14        "points": 8,
15        "win": 2,
16        "draw": 2,
17        "lose": 2,
18        "goal_difference": -1,
19        "power": 4
20      },
21      "away_team": {
22        "id": 3,
23        "team_name": "Chelsea FC",
24        "points": 8,
25        "win": 2,
26        "draw": 2,
27        "lose": 2,
28        "goal_difference": -3,
29        "power": 5
30      }
31    }
32  ]
33 }
```

Get Match By Id

Insider-go-league-API / Matches / **Get Match By ID** Save Share

GET http://34.30.232.220:3000/api/matches/4 Send

Params Auth Headers (7) **Body** Scripts Settings Cookies

none



This request does not have a body



Body 200 OK 172 ms 486 B Save as example

Pretty Raw Preview Visualize **JSON**


```
1 {
2   "data": {
3     "id": 4,
4     "week": 2,
5     "home_id": 2,
6     "away_id": 4,
7     "home_goals": 4,
8     "away_goals": 5,
9     "is_played": true,
10    "home_team": {
11      "id": 2,
12      "team_name": "Manchester United FC",
13      "points": 10,
14      "win": 3,
15      "draw": 1,
16      "lose": 2,
17      "goal_difference": 3,
18      "power": 7
19    },
20    "away_team": {
21      "id": 4,
22      "team_name": "Liverpool FC",
23      "points": 8,
24      "win": 2,
25      "draw": 2,
26      "lose": 2,
27      "goal_difference": -1,
28      "power": 4
29    }
30  },
31  "message": "Match fetched successfully!"
32 }
```

Get Matches By Week





HTTP Insider-go-league-API / Mat... / **Get Matches By Week**  Save  Share





GET  http://34.30.232.220:3000/api/matches/week/6 **Send** 

Params Auth Headers (7) **Body** Scripts Settings [Cookies](#)

none 

This request does not have a body

Body   200 OK 177 ms 827 B  Save as example 

Pretty Raw Preview Visualize **JSON**    

```
1 {
2   "data": [
3     {
4       "id": 11,
5       "week": 6,
6       "home_id": 4,
7       "away_id": 1,
8       "home_goals": 4,
9       "away_goals": 6,
10      "is_played": true,
11 >    "home_team": { ...
20    },
21 >    "away_team": { ...
30  }
31  },
32  {
33    "id": 12,
34    "week": 6,
35    "home_id": 3,
36    "away_id": 2,
37    "home_goals": 1,
38    "away_goals": 4,
39    "is_played": true,
40 >    "home_team": { ...
49    },
50 >    "away_team": { ...
59  }
60  }
61 ],
62 "message": "Matches of week:6 fetched successfully!"
63 }
```

Create a Match

The screenshot shows a REST client interface with the following details:

- URL:** `http://34.30.232.220:3000/api/matches`
- Method:** `POST`
- Body (raw JSON):**

```
1 {
2   "week": 7,
3   "home_id": 3,
4   "away_id": 2,
5   "home_goals": 0,
6   "away_goals": 0,
7   "is_played": false
8 }
```
- Response (Pretty JSON):**

```
1 {
2   "data": {
3     "id": 14,
4     "week": 7,
5     "home_id": 3,
6     "away_id": 2,
7     "home_goals": 0,
8     "away_goals": 0,
9     "is_played": false,
10    "home_team": { ...
19    },
20    "away_team": { ...
29    }
30  },
31  "message": "Match created successfully!"
32 }
```
- Status:** 200 OK, 184 ms, 454 B

Update Match

Maç eğer oynanmış ise herhangi bir güncelleme yapmaz. Bu endpoint'in amacı skoru güncellemek değil, maçın taraflarını güncellemektir.

HTTP Insider-go-league-API / Matches / Update Match Save Share

PUT Send http://34.30.232.220:3000/api/matches/14

Params Auth Headers (9) **Body** Scripts Settings Cookies

raw **JSON** Beautify

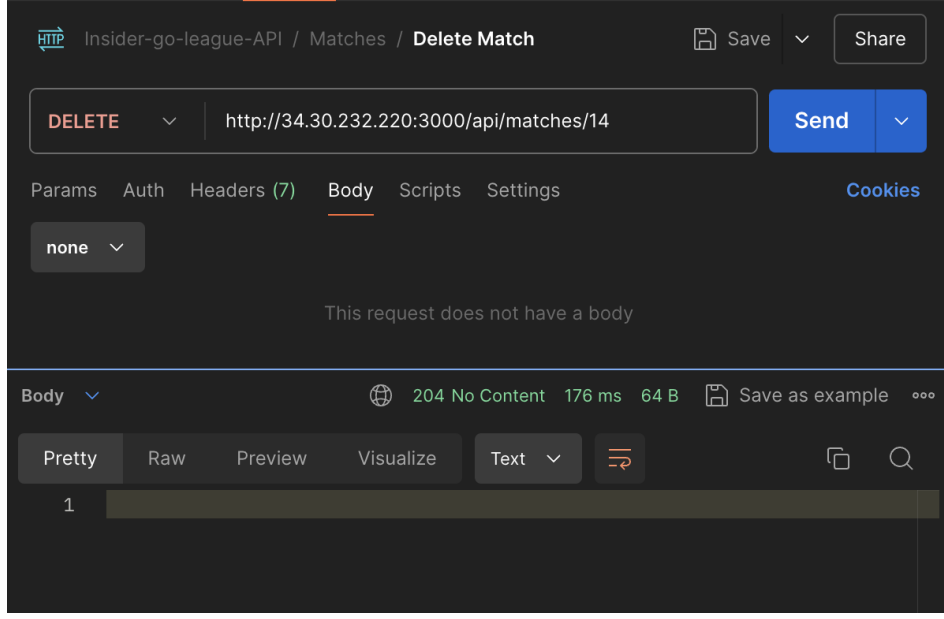
```
1 {
2   "week": 7,
3   "home_id": 4,
4   "away_id": 3,
5   "home_goals": 0,
6   "away_goals": 0,
7   "is_played": false
8 }
```

Body 200 OK 190 ms 453 B Save as example

Pretty Raw Preview Visualize **JSON** Copy Search

```
1 {
2   "data": {
3     "id": 0,
4     "week": 7,
5     "home_id": 4,
6     "away_id": 3,
7     "home_goals": 0,
8     "away_goals": 0,
9     "is_played": false,
10    "home_team": {
19    },
20    "away_team": {
29    }
30  },
31  "message": "Match updated successfully!"
32 }
```

Delete Match



League

Play Week's Matches

Görseldeki Endpoint lig sıralaması, haftanın maçları ve eğer maç haftası 4'ten büyükse gelecek haftaya ait şampiyonluk tahminini içeren bir response döndürür.

Insider-go-league-API / Lea... / Play Matches of Week

Save

Share

GET

http://34.30.232.220:3000/api/league/5

Send

Params

Auth

Headers (7)

Body

Scripts

Settings

Cookies

none

This request does not have a body

Body

200 OK

196 ms

1.54 KB

Save as example

Pretty

Raw

Preview

Visualize

JSON

```
4      {
5        "id": 2,
6        "team_name": "Manchester United FC",
7        "points": 10,
8        "win": 3,
9        "draw": 1,
10       "lose": 2,
11       "goal_difference": 3,
12       "power": 7
13     },
14     { ...
23     },
24     { ...
33     },
34     { ...
43   }
44 ]
45 },
46 "matches": {
47   "matches": [ ...
106 ],
107   "message": "Matches of week:5 played successfully!"
108 },
109 "next-week-predictions": {
110   "message": "6th week predictions for Championship",
111   "predictions": [
112     {
113       "Team": "Liverpool FC",
114       "Percentage": "24%"
115     },
116     {
117       "Team": "Chelsea FC",
118       "Percentage": "24%"
119     },
120     {
121       "Team": "Manchester City FC",
122       "Percentage": "21%"
123     },
124     {
125       "Team": "Manchester United FC",
126       "Percentage": "30%"
127     }
128   ]
129 }
130 }
```

Play All Matches

Görseldeki Endpoint lig sıralaması, tüm maçları ve gelecek haftaya ait şampiyonluk tahminini içeren bir response döndürür.

[HTTP](#) Insider-go-league-API / League / Play All Matches Save Share

GET

http://34.30.232.220:3000/api/league

Send

ParamsAuthHeaders (7)BodyScriptsSettingsCookies

none

This request does not have a body

Body200 OK176 ms4.72 KBSave as example

PrettyRawPreviewVisualizeJSON

```
1  {
2    "league": {
3      "league-leaderboard": [
4        {
5          "id": 2,
6          "team_name": "Manchester United FC",
7          "points": 10,
8          "win": 3,
9          "draw": 1,
10         "lose": 2,
11         "goal_difference": 3,
12         "power": 7
13       },
14       { ...
23     },
24     { ...
33     },
34     { ...
43     }
44   ],
45   },
46   "matches": {
47     "matches": [ ...
396   ],
397   "message": "All Matches played successfully!"
398 },
399 "next-week-predictions": {
400   "message": "Next week match predictions",
401   "predictions": [
402     {
403       "Team": "Liverpool FC",
404       "Percentage": "24%"
405     },
406     {
407       "Team": "Chelsea FC",
408       "Percentage": "24%"
409     },
410     {
411       "Team": "Manchester City FC",
412       "Percentage": "21%"
413     },
414     {
415       "Team": "Manchester United FC",
416       "Percentage": "30%"
417     }
418   ]
419 }
```


Update Match Scores

Görseldeki Endpoint lig sıralaması, sonucu güncellenen maçı içeren bir response döndürür.

[HTTP](#) Insider-go-league-API / Leag... / Update Match scores [Save](#) [Share](#)

PUT

http://34.30.232.220:3000/api/league/change-match/1

Send

Params

Auth

Headers (9)

Body

Scripts

Settings

Cookies

raw

JSON

Beautify

```
1 {  "week": 1,
2   "home_id": 1,
3   "away_id": 2,
4   "home_goals": 0,
5   "away_goals": 3,
6   "is_played": true
7 }
```

Body

200 OK 201 ms 955 B

Save as example

Pretty

Raw

Preview

Visualize

JSON

```
1 {
2   "league": {
3     "league-leaderboard": [ ...
44   ]
45 },
46   "match": {
47     "id": 1,
48     "week": 1,
49     "home_id": 1,
50     "away_id": 2,
51     "home_goals": 0,
52     "away_goals": 3,
53     "is_played": true,
54     "home_team": {
55       "id": 1,
56       "team_name": "Manchester City FC",
57       "points": 7,
58       "win": 2,
59       "draw": 1,
60       "lose": 3,
61       "goal_difference": -3,
62       "power": 6
63     },
64     "away_team": {
65       "id": 2,
66       "team_name": "Manchester United FC",
67       "points": 10,
68       "win": 3,
69       "draw": 1,
70       "lose": 2,
71       "goal_difference": 3,
72       "power": 7
73     }
74   },
75   "message": "Match updated successfully!"
76 }
```

