Podium Documentation

Release v7.4.6

Top Free Games

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CHAPTER 1

Overview

What is Podium? Podium is a blazing-fast HTTP Leaderboard service. It could be used to manage any number of leaderboards of people or groups, but our aim is players in a game.

Podium allows easy creation of different types of leaderboards with no set-up involved. Create seasonal, localized leaderboards just by varying their names.

1.1 Features

- **Multi-tenant** Just vary the name of the leaderboard and you can have any number of tenants using leaderboards;
- Seasonal Leaderboards Including suffixes like year2016week01 or year2016month06 is all you need to create seasonal leaders. I'm serious! That's all there is to it;
- No leaderboard configuration Just start notifying scores for members of a leaderboard. There's no need to create, configure or maintain leaderboards. Let Podium do that for you;
- **Top Members** Get the top members of a leaderboard whether you need by absolute value (top 200 members) or percentage (top 3% members);
- Members around me Podium easily returns members around a specific member in the leaderboard. It will even compensate if you ask for the top member or last member to make sure you get a consistent amount of members;
- **Batch score update** In a single operation, send a member score to many different leaderboards or many members score to the same leaderboard. This allows easy tracking of member rankings in several leaderboards at once (global, regional, clan, etc.);
- Easy to deploy Podium comes with containers already exported to docker hub for every single of our successful builds. Just pick your choice!

1.2 Architecture

Podium is based on the premise that you have a backend server for your game. That means we only employ basic authentication (if configured).

1.3 The Stack

For the devs out there, our code is in Go, but more specifically:

- Web Framework Echo based on the insanely fast FastHTTP;
- Database Redis.

1.4 Who's Using it

Well, right now, only us at TFG Co, are using it, but it would be great to get a community around the project. Hope to hear from you guys soon!

1.5 How To Contribute?

Just the usual: Fork, Hack, Pull Request. Rinse and Repeat. Also don't forget to include tests and docs (we are very fond of both).

CHAPTER 2

Hosting Podium

There are three ways to host Podium: docker, binaries or from source.

2.1 Docker

Running Podium with docker is rather simple. Our docker container image comes bundled with the API binary. All you need to do is load balance all the containers and you're good to go.

Podium uses Redis to store leaderboard information. The container takes parameters to specify this connection:

- PODIUM_REDIS_HOST Redis host to connect to;
- PODIUM_REDIS_PORT Redis port to connect to;
- PODIUM_REDIS_PASSWORD Password of the Redis Server to connect to;
- PODIUM_REDIS_DB DB Number of the Redis Server to connect to;

Other than that, there are a couple more configurations you can pass using environment variables:

- PODIUM_NEWRELIC_KEY If you have a New Relic account, you can use this variable to specify your API Key to populate data with New Relic API;
- PODIUM_SENTRY_URL If you have a sentry server you can use this variable to specify your project's URL to send errors to;
- PODIUM_BASICAUTH_USERNAME If you specify this key, Podium will be configured to use basic auth with this user;
- PODIUM_BASICAUTH_PASSWORD If you specify BASICAUTH_USERNAME, Podium will be configured to use basic auth with this password.
- PODIUM_EXTENSIONS_DOGSTATSD_HOST If you have a statsd datadog daemon, Podium will publish metrics to the given host at a certain port. Ex. localhost:8125]* PODIUM_EXTENSIONS_DOGSTATSD_RATE
 If you have a statsd daemon, Podium will export metrics to the deamon at the given rate

• PODIUM_EXTENSIONS_DOGSTATSD_TAGS_PREFIX - If you have a statsd daemon, you may set a prefix to every tag sent to the daemon

2.2 Binaries

Whenever we publish a new version of Podium, we'll always supply binaries for both Linux and Darwin, on i386 and x86_64 architectures. If you'd rather run your own servers instead of containers, just use the binaries that match your platform and architecture.

The API server is the podium binary. It takes a configuration yaml file that specifies the connection to Redis and some additional parameters. You can learn more about it at default.yaml.

2.3 Source

Left as an exercise to the reader.

CHAPTER 3

Meaning of Leaderboard Names

Leaderboard names carry a lot of semantic weight in Podium. Each leaderboard name is composed of two parts: leaderboard name and an optional season suffix.

3.1 Seasonal Leaderboards

If you want a leaderboard to be seasonal and have an expiration, Podium allows you to do it just by adding a suffix to it.

Let's say you want a weekly leaderboard for your Cario Sisters game. You would name that leaderboard cario-sisters-year2016week01 when reporting scores for the first week, cario-sisters-year2016week02 when reporting for the next week and so on.

Podium will expire the leaderboard in twice as many time as you provisioned your leaderboard to contain. That means a leaderboard with a week of data will be expired within 2 weeks after it's appointed start.

3.2 Available expirations

Podium supports many different expirations:

- Unix timestamps from and to;
- yyyymmdd timestamps from and to;
- Yearly expiration;
- Quarterly expiration;
- Monthly expiration;
- Weekly expiration.

3.2.1 Unix Timestamp Expiration

In order to use this type of expiration use leaderboard names like cario-sisters-from1469487752to1469487753. This means a leaderboard from the first timestamp to the second timestamp.

This kind of leaderboard has the ultimate flexibility, allow for configuration of a leaderboard duration up to the second. Just remember this is UTC timestamps.

3.2.2 yyyymmdd Timestamp Expiration

In order to use this type of expiration use leaderboard names like cario-sisters-from20201010to20201011. This means a leaderboard from the first timestamp to the second timestamp.

3.2.3 Yearly Expiration

In order to use this type of expiration use leaderboard names like cario-sisters-year2016. This means a leaderboard ranging from 1st of January of 2016 to the 1st of January of 2017(not included).

3.2.4 Quarterly Expiration

In order to use this type of expiration use leaderboard names like cario-sisters-year2016quarter01. This means a leaderboard ranging from 1st of January of 2016 to the 1st of April of 2016(not included).

3.2.5 Monthly Expiration

In order to use this type of expiration use leaderboard names like cario-sisters-year2016month03. This means a leaderboard ranging from 1st of March of 2016 to the 1st of April of 2016(not included).

3.2.6 Weekly Expiration

In order to use this type of expiration use leaderboard names like cario-sisters-year2016week21. This means a leaderboard ranging from the 23rd of May of 2016 to the 30th of May of 2016(not included).

This mode is a little odd as it uses week numbers and Week 1 does not start in the first of january. For more information about week numbers, refer to this page.

CHAPTER 4

Podium API

4.1 Healthcheck Routes

4.1.1 Healthcheck

GET /healthcheck

Validates that the app is still up, including the connection to Redis.

- Success Response
 - **–** Code: 200
 - Content:

"WORKING"

• Error Response

It will return an error if it failed to connect to Redis.

- **–** Code: 500
- Content:

```
"<error-details>"
```

4.2 Status Routes

4.2.1 Status

GET /status

Returns statistics on the health of Podium.

- Success Response
 - Code: 200
 - Content:

```
{
    "app": {
        "errorRate": [float] // Exponential]
    ↔Error Rate
    },
}
```

// Exponentially Weighted Moving Average_

4.3 Leaderboard Routes

4.3.1 Create or Update a Member Score

```
PUT /l/:leaderboardID/members/:memberPublicID/score
```

optional query string

- prevRank=[truelfalse]
 - if set to true, it will also return the previous rank of the player in the leaderboard, -1 if the player didn't exist in the leaderboard
 - e.g. PUT /l/:leaderboardID/members/:memberPublicID/score?prevRank=true
 - defaults to "false"
- scoreTTL=[integer]
 - if set, the score of the player will be expired from the leaderboard past [integer] seconds if it does not update it within this interval
 - e.g. PUT /l/:leaderboardID/members/:memberPublicID/score?scoreTTL=100
 - defaults to none (the score will never expire)

Atomically creates a new member within a leaderboard or if member already exists in leaderboard, update their score.

Leaderboard ID should be a valid leaderboard name and memberPublicID should be a unique identifier for the member associated with the score.

· Payload

```
{
  "score": [integer] // Integer representing member score
}
```

- Success Response
 - **–** Code: 200
 - Content:

```
{
  "success": true,
  "member": {
    "publicID": [string] // member public id
    "score": [int] // member updated score
    "rank": [int] // member current rank in leaderboard
    "previousRank": [int] // the previous rank of the player in the_
    eleaderboard, if requests
    "expireAt": [int] // unix timestamp of when the score will be_
    expired, if scoreTTL is sent
  }
}
```

• Error Response

It will return an error if an invalid payload is sent or if there are missing parameters.

- **–** Code: 400
- Content:

```
{
    "success": false,
    "reason": [string]
}
```

- **–** Code: 500
- Content:

```
{
    "success": false,
    "reason": [string]
}
```

4.3.2 Create or Update many Members Score

```
PUT /l/:leaderboardID/scores
```

optional query string

- prevRank=[truelfalse]
 - if set to true, it will also return the previous rank of the player in the leaderboard, -1 if the player didn't exist in the leaderboard
 - e.g. PUT /l/:leaderboardID/scores?prevRank=true
 - defaults to "false"
- scoreTTL=[integer]
 - if set, the score of the player will be expired from the leaderboard past [integer] seconds if it does not update it within this interval
 - e.g. PUT /l/:leaderboardID/scores?scoreTTL=100
 - defaults to none (the score will never expire)

Atomically creates many new members within a leaderboard or if some members already exists in leaderboard, update their scores.

Leaderboard ID should be a valid leaderboard name and publicID should be a unique identifier for the member associated with the score.

• Payload

```
{
  "members": [{
    "publicID": [string] // member public id
    "score": [int], // member updated score
    }, ...]
}
```

- Success Response
 - **–** Code: 200
 - Content:

```
{
  "success": true,
  "members": [{
    "publicID": [string] // member public id
    "score": [int] // member updated score
    "rank": [int] // member current rank in leaderboard
    "previousRank": [int] // the previous rank of the player in the_
    ileaderboard, if requests
        "expireAt": [int] // unix timestamp of when the score will be_
    expired, if scoreTTL is sent
    }, ...]
}
```

· Error Response

It will return an error if an invalid payload is sent or if there are missing parameters.

- Code: 400
- Content:

```
{
    "success": false,
    "reason": [string]
}
```

- **–** Code: 500
- Content:

```
{
   "success": false,
   "reason": [string]
}
```

4.3.3 Increment a Member Score

PATCH /l/:leaderboardID/members/:memberPublicID/score

optional query string

- scoreTTL=[integer]
 - if set, the score of the player will be expired from the leaderboard past [integer] seconds if it does not update it within this interval
 - e.g. PUT /1/:leaderboardID/members/:memberPublicID/score?scoreTTL=100
 - defaults to none (the score will never expire)

Atomically creates a new member within a leaderboard with the given increment as score. If member already exists in leaderboard just increment their score.

Leaderboard ID should be a valid leaderboard name and memberPublicID should be a unique identifier for the member associated with the score.

WARNING: Incrementing a member score by 0 is not a valid operation and will return a 400 Bad Request result.

• Payload

```
{
  "increment": [integer] // Integer representing increment in member score
}
```

- Success Response
 - **–** Code: 200
 - Content:

```
{
  "success": true,
  "member": {
    "publicID": [string] // member public id
    "score": [int] // member updated score
    "rank": [int] // member current rank in leaderboard
    "expireAt": [int] // unix timestamp of when the score will be expired,
    if scoreTTL is sent
  }
}
```

• Error Response

It will return an error if an invalid payload is sent or if there are missing parameters.

- **–** Code: 400
- Content:

```
{
   "success": false,
   "reason": [string]
}
```

- Code: 500
- Content:

```
{
   "success": false,
   "reason": [string]
}
```

4.3.4 Remove a leaderboard

DELETE /l/:leaderboardID

Remove the entire leaderboard from Podium.

WARNING: This operation cannot be undone and all the information in the leaderboard will be destroyed.

leaderboardID should be a valid leaderboard name.

- Success Response
 - Code: 200
 - Content:

```
{
  "success": true,
}
```

- Error Response
 - **–** Code: 500
 - Content:

```
{
   "success": false,
   "reason": [string]
}
```

4.3.5 Get a member score and rank

```
GET /l/:leaderboardID/members/:memberPublicID
```

optional query string

- order=[ascldesc]
 - if set to asc, will treat the ranking with ascending scores (less is best)
 - e.g. GET /l/:leaderboardID/members/:memberPublicID?order=asc
 - defaults to "desc"
- scoreTTL=[truelfalse]
 - if set to true, will return the member's score expiration unix timestamp
 - e.g. GET /l/:leaderboardID/members/:memberPublicID?scoreTTL=true
 - defaults to "false"

Gets a member score and rank within a leaderboard.

Leaderboard ID should be a valid leaderboard name and memberPublicID should be a unique identifier for the desired member.

- Success Response
 - **–** Code: 200
 - Content:

```
"success": true,

"publicID": [string] // member public id

"score": [int] // member updated score

"rank": [int] // member current rank in leaderboard

"expireAt": [int] // unix timestamp of when the member's score will be_

↔erased (only if scoreTTL is true)

}
```

· Error Response

It will return an error if the member is not found.

- **–** Code: 404
- Content:

```
{
   "success": false,
   "reason": [string]
}
```

- Code: 500
- Content:

```
"success": false,
"reason": [string]
}
```

4.3.6 Get multiple member scores and rank

```
GET /l/:leaderboardID/members?ids=publicIDcsv
```

optional query string

- order=[ascldesc]
 - if set to asc, will treat the ranking with ascending scores (less is best)
 - e.g. GET /l/:leaderboardID/members?ids=publicIDcsv?order=asc
 - defaults to "desc"
- scoreTTL=[truelfalse]
 - if set to true, will return the member's score expiration unix timestamp
 - e.g. GET /l/:leaderboardID/members?ids=publicIDcsv?scoreTTL=true
 - defaults to "false"

Gets multiple members' score and ranks within a leaderboard.

If any public IDs are not found, they will be returned in the notFound list in the response. This is so a list of all the desired members (i.e.: player's friends) can be retrieved and only the ones in the leaderboard get returned.

Leaderboard ID should be a valid leaderboard name and publicIDcsv should be a comma-separated list of the desired members Public IDs.

- · Success Response
 - **–** Code: 200
 - Content:

```
"members": [
   {
     "publicID": [string]
                              // member public id
     "rank": [int]
                              // member rank in the specific leaderboard
     "position": [int]
                              // member rank for all members returned in this...
→request
     "score": [int]
"expireAt": [int]
                              // member score in the leaderboard
                              // unix timestamp of when the member's score_
→will be erased (only if scoreTTL is true)
   }
 ],
 "notFound": [
   "[string]"
                              // list of public ids that were not found in...
\hookrightarrow the leaderboard
 ],
 "success": true
```

• Error Response

It will return an error if a list of member ids is not supplied.

- Code: 400
- Content:

```
{
   "success": false,
   "reason": [string]
}
```

- Code: 500
- Content:

```
"success": false,
"reason": [string]
```

4.3.7 Remove members from leaderboard

DELETE /l/:leaderboardID/members?ids=memberPublicID1,memberPublicID2,...

Removes specified members from leaderboard. If a member is not in leaderboard, do nothing.

Leaderboard ID should be a valid leaderboard name and ids should be a list of unique identifier for the members being removed, separated by commas.

- Success Response
 - Code: 200
 - Content:

{
 "success": true,
}

- Error Response
 - **–** Code: 500
 - Content:

```
{
   "success": false,
   "reason": [string]
}
```

4.3.8 Get a member score and rank in many leaderboards

GET /m/:memberPublicID/scores?leaderboardIds=leaderboard1,leaderboard2,...

optional query string

- order=[ascldesc]
 - if set to asc, will treat the ranking with ascending scores (less is best)
 - e.g. GET /m/:memberPublicID/scores?leaderboardIds=leaderboard1, leaderboard2,...?order=asc
 - defaults to "desc"
- scoreTTL=[truelfalse]
 - if set to true, will return the member's score expiration unix timestamp
 - e.g. GET /m/:memberPublicID/scores?leaderboardIds=leaderboard1, leaderboard2,...?scoreTL=true
 - defaults to "false"

Get a member score and rank within many leaderboards.

Leaderboard Ids should be valid leaderboard names separated by commas.

- Sucess Response
 - Code: 200
 - Content:

```
{
   "scores": [
   {
        "leaderboardID": "teste",
        "rank": 1,
        "score": 100,
        "expireAt": [int] // unix timestamp of when the member's score will_
        →be erased (only if scoreTTL is true)
      },
      {
        // unix timestamp of when the member's score will_
    }
}
```

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```
"leaderboardID": "teste2",
    "rank": 1,
    "score": 100,
    "expireAt": [int] // unix timestamp of when the member's score will_
    →be erased (only if scoreTTL is true)
    }
],
    "success": true
}
```

- Error Response
 - Code: 500
 - Content:

{

```
"reason": "Could not find data for member teste3 in leaderboard teste3.", "success": false
```

4.3.9 Get a member rank

GET /l/:leaderboardID/members/:memberPublicID/rank

optional query string

- order=[ascldesc]
 - if set to asc, will treat the ranking with ascending scores (less is best)
 - e.g. GET /l/:leaderboardID/members/:memberPublicID/rank?order=asc
 - defaults to "desc"

Gets a member rank within a leaderboard.

Leaderboard ID should be a valid leaderboard name and memberPublicID should be a unique identifier for the desired member.

- Success Response
 - **–** Code: 200
 - Content:

```
{
  "success": true,
  "publicID": [string] // member public id
  "rank": [int], // member current rank in leaderboard
}
```

• Error Response

It will return an error if the member is not found.

- Code: 404
- Content:

```
"success": false,
"reason": [string]
```

- **–** Code: 500
- Content:

```
{
   "success": false,
   "reason": [string]
}
```

4.3.10 Get members around a member

GET /l/:leaderboardID/members/:memberPublicID/around?pageSize=10

optional query string

- order=[ascldesc]
 - if set to asc, will treat the ranking with ascending scores (less is best)
 - e.g. GET /l/:leaderboardID/members/:memberPublicID/around?pageSize=10? order=asc
 - defaults to "desc"
- getLastIfNotFound=[truelfalse]
 - if set to true, will treat members not in ranking as being in last position
 - if set to false, will return 404 when the member is not in the ranking
 - e.g. GET /l/:leaderboardID/members/:memberPublicID/around?
 getLastIfNotFound=true
 - defaults to "false"

Gets a list of members with ranking around that of the specified member within a leaderboard.

The pageSize querystring parameter specifies the number of members that will be returned from this operation. This means that pageSize/2 members will be above the specified member and the other pageSize/2 will be below.

Podium will compensate if no more members can be found above or below (first or last member in the leaderboard ranking) to ensure that the desired number of members is returned (up to the number of members in the leaderboard).

Leaderboard ID should be a valid leaderboard name and memberPublicID should be a unique identifier for the desired member.

- Success Response
 - **–** Code: 200
 - Content:

```
"success": true,
"members": [
  {
   "publicID": [string] // member public id
   "score": [int], // member updated score
   "rank":
               [int], // member current rank in leaderboard
  },
  {
    "publicID": [string] // member public id
    "score": [int], // member updated score
                       // member current rank in leaderboard
    "rank":
              [int],
  },
  //...
],
```

• Error Response

It will return an error if the member is not found.

- Code: 404
- Content:

```
{
   "success": false,
   "reason": [string]
}
```

- **–** Code: 500
- Content:

```
"success": false,
"reason": [string]
}
```

4.3.11 Get members around a score

GET /l/:leaderboardID/scores/:score/around?pageSize=10

optional query string

- order=[ascldesc]
 - if set to asc, will treat the ranking with ascending scores (less is best)
 - e.g. GET /1/:leaderboardID/scores/:score/around?pageSize=10?order=asc
 - defaults to "desc"

Gets a list of members with score around that of the specified specified in the request. If the score parameter falls outside the leaderboard [minScore, maxScore], it will return the bottom/top rank members in the leaderboard, respectively.

The pageSize querystring parameter specifies the number of members that will be returned from this operation. That means there will be around pageSize/2 (+-1) members with score above the specified score, and pageSize/2(+-1) with score below.

Podium will compensate if no more members can be found above or below (first or last member in the leaderboard ranking) to ensure that the desired number of members is returned (up to the number of members in the leaderboard).

Leaderboard ID should be a valid leaderboard name and score should be a valid number.

- Success Response
 - Code: 200
 - Content:

```
{
 "success": true,
  "members": [
   {
     "publicID": [string] // member public id
                [int], // member updated score
     "score":
     "rank":
                 [int],
                           // member current rank in leaderboard
   },
    {
     "publicID": [string] // member public id
     "score": [int], // member updated score
     "rank":
                [int],
                           // member current rank in leaderboard
   },
    //...
 ],
ļ
```

• Error Response

It will return an error if the leaderboard is not found or the request has invalid parameters.

- Code: 404
- Content:

```
"success": false,
"reason": [string]
}
```

- Code: 400
- Content:

```
{
    "success": false,
    "reason": [string]
}
```

- Code: 500
- Content:

```
{
    "success": false,
    "reason": [string]
}
```

4.3.12 Get the number of members in a leaderboard

GET /l/:leaderboardID/members-count/

Gets the number of members in a leaderboard.

Leaderboard ID should be a valid leaderboard name.

- Success Response
 - **–** Code: 200
 - Content:

```
{
   "success": true,
   "count": [int], // number of members in leaderboard
}
```

- Error Response
 - Code: 500
 - Content:

```
"success": false,
"reason": [string]
}
```

4.3.13 Get the top N members in a leaderboard (by page)

GET /l/:leaderboardID/top/:pageNumber?pageSize=:pageSize

optional query string

- order=[ascldesc]
 - if set to asc, will treat the ranking with ascending scores (less is best)
 - e.g. GET /l/:leaderboardID/top/:pageNumber?pageSize=:pageSize?order=asc
 - defaults to "desc"

Gets the top N members in a leaderboard, by page.

leaderboardID should be a valid leaderboard name, pageNumber is the current page you are looking for and pageSize is the number of members per page that will be returned.

This means that if you want the top 20 members, you'll call /l/my-leaderboard/top/1?pageSize=20 for the first 20, /l/my-leaderboard/top/2?pageSize=20 for members 21-40 and so on.

- Success Response
 - Code: 200
 - Content:

```
{
  "success": true,
  "members": [
    {
        "publicID": [string] // member public id
        "score": [int], // member updated score
        "rank": [int], // member current rank in leaderboard
    },
    {
        "publicID": [string] // member public id
        "score": [int], // member updated score
        "rank": [int], // member current rank in leaderboard
    },
    //...
]
```

- Error Response
 - **–** Code: 400
 - Content:

```
{
    "success": false,
    "reason": [string]
}
```

- Code: 500
- Content:

```
"success": false,
"reason": [string]
```

4.3.14 Get the top x% members in a leaderboard

GET /l/:leaderboardID/top-percent/:percentage

optional query string

- order=[ascldesc]
 - if set to asc, will treat the ranking with ascending scores (less is best)
 - e.g. GET /l/:leaderboardID/top-percent/:percentage?order=asc
 - defaults to "desc"

Gets the top x% members in a leaderboard.

leaderboardID should be a valid leaderboard name, percentage is the % of members you want to return.

The number of members is bound by the configuration api.maxReturnedMembers, that defaults to 2000 members.

• Success Response

- Code: 200
- Content:

```
"success": true,
"members": [
 {
   "publicID": [string] // member public id
   "score": [int], // member updated score
   "rank":
                       // member current rank in leaderboard
              [int],
  },
  {
   "publicID": [string] // member public id
             [int], // member updated score
   "score":
                        // member current rank in leaderboard
   "rank":
              [int],
  },
  //...
]
```

· Error Response

If the percentage is not a valid integer between 1 and 100, you'll get a 400.

- **–** Code: 400
- Content:

```
{
    "success": false,
    "reason": [string]
}
```

- **–** Code: 500
- Content:

```
{
  "success": false,
  "reason": [string]
}
```

4.4 Member Routes

4.4.1 Create or update score for a member in several leaderboards

PUT /m/:memberPublicID/scores

optional query string

- prevRank=[truelfalse]
 - if set to true, it will also return the previous rank of the player in the leaderboard, -1 if the player didn't exist in the leaderboard
 - e.g. PUT /l/:leaderboardID/members/:memberPublicID/score?prevRank=true

- defaults to "false"
- scoreTTL=[integer]
 - if set, the score of the player will be expired from the leaderboards past [integer] seconds if it does not update it within this interval
 - e.g. PUT /1/:leaderboardID/members/:memberPublicID/score?scoreTTL=100
 - defaults to none (the score will never expire

Atomically creates a new member within many leaderboard or if member already exists in each leaderboard, updates their score.

memberPublicID should be a unique identifier for the member associated with the score. Each leaderboardID should be a valid leaderboard name.

• Payload

```
{
    "score": [integer], // Integer representing member score
    "leaderboards": [array of leaderboardID] // List of all leaderboards to update
}
```

- Success Response
 - **–** Code: 200
 - Content:

```
{
  "success": true,
  "scores": [
    {
       "leaderboardID": [string] // leaderboard where this score was set
       "publicID": [string] // member public id
       "score": [int],
"rank": [int],
                                       // member updated score
       "rank": [int], // member current rank in leaderboard
"previousRank": [int] // the previous rank of the player in the_
→leaderboard, if requests
     },
     {
       "leaderboardID": [string] // leaderboard where this score was set
       "publicID": [string] // member public id
       "score": [int], // member updated score
"rank": [int], // member current rank in leaderboard
"previousRank": [int] // the previous rank of the player in the_
→leaderboard, if requests
     },
     //...
  ]
}
```

· Error Response

It will return an error if an invalid payload is sent or if there are missing parameters.

- Code: 400
- Content:

```
{
   "success": false,
   "reason": [string]
}
```

- **–** Code: 500
- Content:

```
{
   "success": false,
   "reason": [string]
}
```

CHAPTER 5

Podium's Benchmarks

You can see podium's benchmarks in our CI server as they get run with every build.

5.1 Running Benchmarks

If you want to run your own benchmarks, just download the project, and run:

```
$ make bench-redis bench-podium-app bench-run
```

5.2 Generating test data

If you want to run your perf tests against a database with more volume of data, just run this command, instead:

\$ make bench-redis bench-seed bench-podium-app bench-run

Warning: This will take a long time running.

5.3 Results

The results should be similar to these:

BenchmarkSetMemberScore-8					30000	284307	ns/op	0.
→ 32 1	MB/s	5635 B/op	81	allocs/op				
BenchmarkSetMembersScore-8					5000	1288746	ns/op	3.
→ 01 1	MB/s	51452 B/op	583	allocs/op				
BenchmarkIncrementMemberScore-8				30000	288306	ns/op	0.	
→ 32 1	MB/s	5651 B/op	81	allocs/op				
BenchmarkRemoveMember-8				50000	202398	ns/op	0.	
⇔ 08]	MB/s	4648 B/op	68	allocs/op				
(continues on next page)								page)

				(cont	inued from p	previous page)
BenchmarkGetMembe	r-8	30000	215802	ns/op	0.	
⇔33 MB/s	4728 B/op	68 allocs/op				
BenchmarkGetMembe	rRank-8	50000	201367	ns/op	Ο.	
⇔28 MB/s	4712 B/op	68 allocs/op				
BenchmarkGetAroun	dMember-8	20000	397849	ns/op	З.	
⇔14 MB/s	8703 B/op	69 allocs/op				
BenchmarkGetTotal	Members-8	50000	192860	ns/op	0.	
⇔16 MB/s	4536 B/op	64 allocs/op				
BenchmarkGetTopMe	mbers-8	20000	306186	ns/op	З.	
⇔85 MB/s	8585 B/op	66 allocs/op				
BenchmarkGetTopPe	rcentage-8	1000	10011287	ns/op	11.	
⇔88 MB/s 51	0300 B/op	77 allocs/op				
BenchmarkSetMembe	rScoreForSeveralL	1000	106129629	ns/op	1.	
⇔03 MB/s 51	6103 B/op	98 allocs/op				
BenchmarkGetMembe	2000	3931289	ns/op	9.		
→13 MB/s 24	3755 B/op	76 allocs/op				