Endless Medical API User Guide

Overview

While you'll be able to use the API through one of wrapper libraries, it is advised that you get familiar with the underlying HTTP REST methods first.

The Endless Medical API is session-based API. Only GetFeatures and GetOutcomes endpoints can be accessed without valid SessionID. The first thing user has to do is to initialize the API Session, where he receives SessionID. This SessionID is further used to interact with the API.

Methods that change data are used via POST method, while methods that do not change any data are accessed via GET.

Method parameters are passed via query string.

API returns JSON responses. If the request succeeded it will contain status field with value "ok", otherwise it will contain value of "error", error message will be provided in the error field.

sample success response would look like this:

{"status":"ok"}

sample error response would look like this:

{"status":"error","error":"SessionID parameter missing"}

Connectivity

API Server can be accessed via api.endlessmedical.com address.

API prefix is /v1/dx/

a sample request would be:

http://api.endlessmedical.com/v1/dx/GetFeatures

Metadata Endpoints

Endless Medical API operates on Features provided by the User, and using these Features it produces Outcomes.

GetFeatures

A list of Features is provided by GetFeatures endpoint:

GetFeatures

Successful response will look like below:

```
{"status":"ok","data":["Age","BMI","Temp",...]}
```

GetOutcomes

A list of Outcomes is provided by GetOutcomes endpoint:

GetOutcomes

Successful response will look like below:

```
{"status":"ok","data":["CAPPNA","HCAP","PE",...]}
```

Session EndPoints

InitSession

To initialize the session and receive SessionID, you will need to call:

InitSession

Successful response will look like:

```
{"status":"ok","SessionID":"wtolgvrY0eVdkeCP"}
```

AcceptTermsOfUse

To use EndlessMedical API you are required to confirm that you agree with our Terms of Use. You'll need to call this endpoint:

POST AcceptTermsOfUse?SessionID=<Your Session ID>&passphrase=<Terms of Use passphrase>

In order for the API to recognize your agreement the passphrase has to be exactly:

"I have read, understood and I accept and agree to comply with the Terms of Use of EndlessMedicalAPI and Endless Medical services. The Terms of Use are available on endlessmedical.com"

UpdateFeature

To set or update value for a specific features, you'll need to call:

POST UpdateFeature?SessionID=<Your Session ID>&name=<feature name>&value=<feature value>

DeleteFeature

To delete a specific feature, you'll need to call:

POST DeleteFeature?SessionID=<Your Session ID>&name=<feature name>

GetSuggestedTests

Once you've provided some initial features, you can call the API to get suggestions which tests has to be done in order to improve diagnosis accuracy.

GetSuggestedTests?SessionID=<Your Session ID>

Successful response will look like:

```
{"status":"ok","Tests":[...]}
```

GetSuggestedFeatures_PatientProvided and GetSuggestedFeatures_PhysicianProvided

Using those endpoints you can ask API which features would need to be provided in order to improve diagnosis accuracy.

GetSuggestedFeatures_PatientProvided?SessionID=<Your Session ID>

GetSuggestedFeatures_PhysicianProvided?SessionID=<Your Session ID>

Successful response will look like:

```
{"status":"ok","SuggestedFeatures":[...]}
```

Analyze

After you are content with provided features, you can ask the API to Analyze all features. You have to call Analyze endpoint:

Analyze?SessionID=<Your Session ID>

Successful response will look like:

```
{"status":"ok","Diseases":[{"Subarachnoid hemorrhage
(SAH)":"0.2500035402178764"},{"Anemia in
male":"0.1317775279283524"},...],"VariableImportances":[{"Subarachnoid
hemorrhage
(SAH)":[["Anisocoria","0.204484643067072"],["BrainCTNonContrastForSAH","0.203
648485323278"],...]},{"Anemia in
male":[["HGBlevel","0.51581213124986"],["Gender","0.123629294320306"],...]},.
..]}
```