API Documentation

An Application Programming Interface (<u>API</u>) is a set of abstracted rules that defines an interface to an application which enables it to communicate with other systems. Data can be sent to and received from the application through pre-defined commands. In our case we will be working with a web-based API and the commands to the application will be communicated through Uniform Resource Locators (<u>URLs</u>).

What is a URL?

A URL is a type of Unified Resource Identifier which describes a certain location of a specific resource over the internet.

A Typical URL Example

```
http://www.youtube.com/watch?v=V&cnP-RtRHU
```

The above URL consists of different parts. It describes which protocol should be used for communication (in this case HTTP), which top domain it belongs to (com), and after the question mark it also has a parameter called v. In this case, the parameter is telling YouTube which video we would like to watch. Parameters are always given last in the URL in the format parameters in multiple parameters are sent they are separated with an ampersand (&). The order of the parameters in a URL is not important.

How to Make Requests

When a URL corresponding to our application's location with correct parameters is requested, the application will send back text formatted as a JSON-object (<u>JavaScript Object Notation</u>). This object can then be handled and read using JavaScript.

Request Example

```
\label{limits} http://pub.jamaica-inn.net/fpdb/api.php?username=jorass&password=jorass&action=iou\_get
```

By requesting the above URL you might receive the below response.

Response Example

```
{"type":"iou_get"₁"payload":[{"user_id":"2"₁"first_name":"Jory"₁"last_name":"Assies"₁"assets":"-55"}]}
```

What if something goes wrong?

If the location is correct but parameters are missing or faulty, an error-object will be sent as text formatted as a JSON-object.

Error Example

```
{"type":"error", "payload":[{"code":l, "msg":"Username not found"}]}
```

TIP

If you want to make sure you have got the correct parameters, you can always test your URL directly in a web browser to see if you get any results.

Application Functionality

All requests should be made to the following address:

http://pub.jamaica-inn.net/fpdb/api.php?username=User&password=Password

Username and password are required with every request. To this URL you add the parameter action. The value of this parameter tells the application which functionality you would like to use in the application. The actions are defined below. With some of them, additional parameters are required and these are specified with the action name.

So for example, if you wish to let your user buy a beer through our system, you would request the following URL:

http://pub.jamaica-inn.net/fpdb/api.php?username=jorass&password=jorass&action=purchases_append&=beer_id=2259

Action Descriptions

inventory_get

Role: admin

Gives a list of all drinks available in the system.

purchases_get

Role: user

Gives a list of all purchases made by the specified user.

purchases_get_all

Role: admin

Gives a list of all purchases made by all users.

purchases_append

Role: user

Additional parameter: beer_id

Adds a purchase of one beer to the system for the specified user. The id of the beer purchased beer is a required additional parameter.

payments_get

Role: user

Returns a list of payments made by the specified user.

payments_get_all

Role: admin

Returns a list of payments made by all users.

payments_append

Role: user

Additional parameter: amount

Adds a payment of specified amount to the system for the specified user. The amount is a required additional parameter.

iou_get

Role: user

Returns the total amount that the specified user has at his disposal for buying beer. A negative balance means that the user has a debt.

iou_get_all

Role: admin

Returns all users and amounts they have at their disposal. For users with a negative balance it means that they have a debt.

beer_data_get

Role: user

Additional parameter: beer_id

Returns all information available in the system for a specified beer. This includes name, price, alcohol volume, etc. The id of the beer for inquiry is a required additional parameter.

user_edit

Role: admin

Additional parameters:

new_username, new_password, first_name, last_name, email, phone Updates user information. All user information is required as additional parameters.

inventory_append

Additional parameters:

beer_id, amount, price

Updates the number of bottles available in stock and the price for a particular beer. The id of the beer to be updated is required along with its price and current amount of available bottles.

User Lists

The following users are available through the system.

Administrators

First Name	Last Name	User Name & Password
Ervin	Todd	ervtod
Hiram	Christopherson	hirchr
Jory	Assies	jorass
Saša	Krüger	saskru
Svetlana	Torres	svetor

Users

First Name	Last Name	User Name & Password
Aamu	Stankic	aamsta
Andrea	Darzi	anddar
Ângela	Ková?	ankov
Aquilina	Lyndon	aqulyn
Aubrey	Blackwood	aubbla
Bento	Faucher	benfau
Branko	Tamás	bratam
Cezar	Newman	ceznew
Danna	Schermer	dansch
Dido	Waters	didwat
Domen	Olhouser	domolh
Edric	Augustin	edraug

Einarr Yamauchi einyam Elektra Pickle elepic Eulàlia Coughlan eulcou Eustachius Gorski eusgor Felix Bartoš felbar Felicia Franklin felfra Ferdinánd Crncevic fercrn Giacinta Mikkelsen giamik Golnar Langley gollan Hyram Lapointe hyrlap Jacob Abbatelli jacabb Jancsi Heiman janhei Jeanne Atses jeaats Shizuka Jerry jershi Jove Sitz jovsit Karme Blythe karbly Katrien Fabre katfab Kaye Wang kaywan Kenan Olguin kenolg Krystyna Santiago krysan Lara Schenck larsch Lasse Nicholson lasnic Liam Traverso liatra Livianus Zhao livzha Maiken Honda maihon Mariana Pugliese marpug Marin Stieber marsti Molle Babi? molbab Muhammed Toft muhtof Nika Proulx nikpro Oliver Slusarski olislu Oluwakanyinsola Braun olubra Oluwatoyin Drake oludra Orabela **Panders** orapan Paula Aafjes pauaaf Pompeius Graner pomgra Prabhakar Bartos prabar Régulo Westerberg rewes Schwanhild Joubert schjou Sharma Pet?fi shapet S?d?ka Van sivan Stefan Bernard steber Pender Sulis?aw sulpen Sulayman Street sulstrZimmermann Symeonu symzim Teodora Jensen teojen

Tófa	Heinrich	tohei
Valeria	Pagani	valpag
Yevpraksiya	Owens	yevowe
Zuleika	Gorecki	zulgor