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Description automatically generated

DCA Testing

API

2023-03-22

Table of Contents

1. Purpose……………………………………………………………………………………………………………………………… 2
2. Overview……………………………………………………………………………………………………………………………. 2
3. Scope…………………………………………………………………………………………………………………………………. x
   1. Login……………………………………………………………………………………………………………… x
   2. Signup/User.Add……………………………………………………………………………………..……. x
   3. ResetPassword ………………………………………………………………………………………….…. x
   4. User.Del ………………………………………………………………………………………………….……. x
   5. Data.Get ………………………………………………………………………………………………………. x
4. Results………………………………………………………………………………………………………………………………. x
5. Analysis……………………………………………………………………………………………………………………………… x
6. **Purpose**

The API is the main connection between the frontend, and backend. This allows the client(user) to use a responsive, interactive site that presents realtime data. If this connection is not working or returning unexpected results or errors, the user’s experience will decrease in value and or be no more than a static html page. Currently the API has endpoints for user and data.

1. **Overview**

The API turns a static page on the internet, into an interactive webpage that allows a user to do as little work as possible. Even from the first point of contact; the login page. The user is presented with the task of logging in, signing up or resetting their password. If any of these tools(endpoints) are broken or unregistered, the user’s experience will be degraded.

Once logged in, any configurations the user selects will affect the async data get functionality. If this endpoint fails, the graphs/data analysis will not be updating, and a user may not be getting the flow/volume insights they expect.

* Screenshots/pictures

1. **Scope**

The entirety of the API endpoints will be tested. Each endpoint for data, and user functionality will be tested through the browser/POST. All of these endpoints will be tested rigorously.

3.1 Login

https://{Domain}/api.php?Cmd=Login&Email=&Password=

Text

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Expected results is an empty error array, the current time, the command requested, and a UserInfo array containing the UserId, Email and new SessionKey.

Unexpected results would be errors in the error array.

3.2 Signup/User.Add

https://{Domain}/api.php?Cmd=Signup&Email=&Password=

A picture containing text

Description automatically generated

Expected results is an empty error array, the current time, the command requested, and a UserInfo array containing the UserId, Email and new SessionKey.

Unexpected results would be errors in the error array.

3.3 ResetPassword

https://{Domain}/api.php?Cmd=ResetPassword&Email=&Password=&PasswordOld=

Graphical user interface, text, application

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Expected results is an empty error array, the current time, the command requested

Unexpected results would be errors in the error array.

3.4 User.Del

https://{Domain}/api.php?Cmd=User.Del&Email=&Password=

Graphical user interface, text

Description automatically generated

Expected results is an empty error array, the current time, the command requested

Unexpected results would be errors in the error array.

3.5 Data.Get

https://{Domain}/api.php?Cmd=getdata

A picture containing timeline

Description automatically generated

Expected results is an empty error array, the current time, the command requested, and a data array containing Total, Month, Hour, Min15, and Min1.

Unexpected results would be errors in the error array.

1. **Results**

|  |  |  |  |
| --- | --- | --- | --- |
| Number of Test Cases Planned | Number of Test Cases Executed | Number of Tests Cases Passed | Number of Test Cases Failed |
| 18 | 0 | 0 | 0 |

Tests were carried out for each scope one at a time, three times each, for a total of 18 test cases.

1. **Analysis**

All test cases were passed without issue. Every endpoint returned an expected value and was repeatable. This ensures the user’s experience is as expected everytime.