EXERCISE 1

CrowdTwist allows clients to build in Single Sign On functionality through a series of registration and authentication APIs. The purpose of this implementation is to allow clients to seamlessly integrate CrowdTwist Registration and Authentication in to their existing 'My Account' creation and workflow.

Client X is having a hard time with the CrowdTwist Authentication API. The steps to creating a successful API call are below, as well as a sample of the error the client is receiving.

Please note – it is NOT necessary to run this API call (credentials are invalid anyway). The instructions alone should provide the main reason why is receiving this error.

Please prepare a response back to the client with the steps that were taken to troubleshoot and what may be the root cause of the issue.

API URL

https://[url.of.program]/http/v2/auth-sign-in?api_sig=[api signature]

Proper 200 OK Response – POST Request

{   "redirect_url": <url to send the user to>,   "verified": "verified" }

Assembling API Signature

Step One: Sort Keys in alphabetical key/value pair arrays by keys

Step Two: For each parameter, assemble the key/value pair in this format 'key=value'

Step Three: Concatenate the assembled strings with a '&' delimiter

Step Four: Append you API Key provided by your account manager to the end of the concatenated string. We'll use – QWERTYUIOP – for this exercise.

Step Five: Hash the result using MD5 algorithm

Required Parameters

Username – username of user to verify

Redirect URL – URL to send the user back to after hitting our page

Verified – No need to send user's password information. Setting this value to '1' will authorize the client/third party to authenticate user record

Example:

Base URL - https://rewards.crowdtwist.com/http/v2/auth-sign-in?api_sig=[api signature]

API Key: QWERTYUIOP

Post Fields

Redirect: http://www.crowdtwist.com

Username: srush-crowdtwist

Verified: 1

Array:

redirect=http://www.crowdtwist.com&verified=1&username=srush-crowdtwistQWERTYUIOP

API Signature Generated: 75fbb6a1e802af31f4ee4d5455a2468d

Final Base URL: https://rewards.crowdtwist.com/http/v2/auth-sign-in?api_sig=75fbb6a1e802af31f4ee4d5455a2468d

Sample of Failed Post Request…

POST ⌄ | https://rewards.crowdtwist.com/http/v2/auth-sign-in?api_sig=75fbb6a1e802af31f4ee4d5455a2468d

| Authorization | Headers (1) | Body | Pre-request script | Tests |

( ) form-data   ( ) x-www-form-urlencoded   ( ) raw   ( ) binary

✓ redirect	http://www.crowdtwist.com
✓ verified	1
✓ username	srush-crowdtwist
Key	Value

Body   Cookies   Headers (11)   Tests   Status **200 OK**   Time **7609 ms**

Pretty Raw Preview   JSON ⌄

```
1  {
2    "error": "invalid api_sig"
3  }
```