Summary: Explored the API for the Paylocity Testing challenge(<https://wmxrwq14uc.execute-api.us-east-1.amazonaws.com/Prod/api/employees>). During this testing The following APIs were tested:

GET Employee List

Add Employee

GET Employee

DELETE Employee

During testing the basic functionality of the above calls were explored and the results of this exploration can be found in the document: API Notes in the accompanying GitHub repo: <https://github.com/SJWhite425/PaylocityTestChallenge>

A possible error observed was:

When editing a non existing user an invalid user is created

Reproduction Steps:

Make a PUT call with an ID number that is not in the current GET ALL list

PUT https://wmxrwq14uc.execute-api.us-east-1.amazonaws.com/Prod/api/employees

Body: {

"id": "1945d706-39f3-49eb-bea8-98abcf766e5f",

"firstName": "Wanda",

"lastName": "Maximoff",

"dependants": 2

}

Response: 200

Response Body:

{

"partitionKey": "TestUser15",

"sortKey": "cef084bc-3668-4e03-91f6-17d383396278",

"username": "TestUser15",

"id": "cef084bc-3668-4e03-91f6-17d383396278",

"firstName": "Wanda",

"lastName": "Maximoff",

"dependants": 2,

"salary": 0.0,

"gross": 0.0,

"benefitsCost": 76.92308,

"net": -76.92308

}

A few issues were observed. A number of misformed calls resulted in 500 errors and the html code for the error page being returned. This may be a suboptimal response. The following calls resulted in returning 500 errors:

Creating a user with a non whole number

Editing a user to have a large number of Dependants

Creating a user with a large number of Dependants

Getting a non-existing user

Editing a user with an invalid character of Dependants

Another issue observed was a 200 response code when deleting a non-existing user, though this may be by design.

**Not Tested:**

Security testing around SQL injections were not tested due to not knowing the status of the testing database. SQL injections could cause issues with other candidates or users performing development work over the weekend. SQL injection testing should be scheduled with database admins to prevent interference with others.