ELMAZ SAFINA

STE Assessment - Bug Challenge

Statement

1st bug with some details that I would attach to a defect, next ones simplified.

UI

Bug #UI-1: Employee first and last names do not match table headers

Steps to reproduce:

- 1. Go to {X} web-page {link}
- 2. Click "Add Employee" button



3. Input data as on the screenshot



Actual Result:



Expected result:

- "ThisIsFirstName" matching First Name column
- "ThisIsLastName" matching Last Name column

In API values are matching keys, hence the issue is in UI, not in API:

```
1
2
         "partitionKey": "TestUser192",
         "sortKey": "d63cc926-8fd6-44dd-a7ff-30fbffa20c0c",
3
         "username": "TestUser192",
4
         "id": "d63cc926-8fd6-44dd-a7ff-30fbffa20c0c",
5
         "firstName": "ThisIsFirstName",
 6
         "lastName": "ThisIsLastName",
7
8
         "dependants": 0,
         "expiration": "2022-05-23T21:18:11+00:00",
9
         "salary": 52000.0,
10
         "gross": 2000.0,
11
         "benefitsCost": 38.46154,
12
         "net": 1961.53845
13
                                                                                               Potential
14
```

solution: swap column names

Environment: xyz Tenant: if applicable Admin user: if applicable

Recording: link

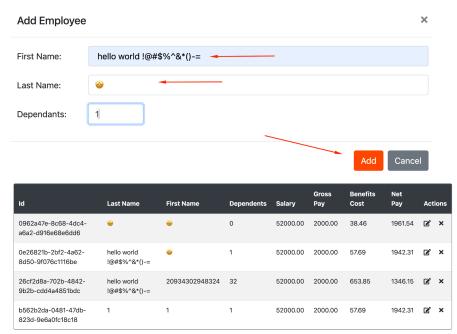
Screenshot: attached

Bug #UI-2: Missing user-friendly error messages in UI

See Bug #API-1: Create employee with ANY first or last name Steps to reproduce:

- 1. Go to {X} web-page {link}
- 2. Click "Add Employee" button
- 3. Input data as on the screenshot

Actual:



Expected: User friendly error message that clarifies what was wrong and how to fix the issue.

API

Bug #API-1: Create employee with ANY first or last name

No validation around first and last name string values, except length.

API accepts any non-blank string name, any unicode chars, including special symbols and emojis.

Also, please make sure to trim input.

Actual:

```
POST
                   https://{{baseUrl}}/{{apiVersion}}/employees
          Authorization
                         Headers (11)
                                                  Pre-request Script
Params
                                        Body •
                                                                     Tests •
                                                                                Settings
 none
          form-data
                       x-www-form-urlencoded
                                                          binary
                                                                    GraphQL
                                                                                 JSON
                                                  raw
    1
    2
             "firstName": "🍅",
             "lastName": " hello world !#*~+&^%{}[]/>< "
    3
             "dependants": 0
    4
    5
                           Test Results
                                                                                         (A) 200 OK
      Cookies
               Headers (11)
Body
  Pretty
            Raw
                    Preview
                                Visualize
                                             JSON
    1
    2
            "partitionKey": "TestUser192",
            "sortKey": "aed7522a-4883-4c3a-ab75-55fc3b94d4eb",
    3
             "username": "TestUser192",
    4
             "id": "aed7522a-4883-4c3a-ab75-55fc3b94d4eb",
    5
            "firstName": "🍑",
    6
            "lastName": " hello world !#*~+&^%{}[]/>< ",
    7
    8
             "dependants": 0,
            "salary": 52000.0,
    9
             "gross": 2000.0,
   10
            "benefitsCost": 38.46154,
   11
            "net": 1961.53845
   12
   13
```

Expected: Response with validation error message, something like "Should be a string matching pattern [XYZ]". Please clarify constraints with Product.

Potential solution: Validation annotation that verifies if values matching regex.

Bug #API-2: POST API endpoint may return 201 instead of 200

Depends on API design and common development standards.

However I would expect POST API endpoints to return 201 CREATED status code.

By the way, DELETE could return 204 NO CONTENT when removing a resource instead of 200 OK.:)

Bug #API-3: Cents should have 2 digits after floating point

Cents should be rounded and formatted to 2 digits after floating point Actual:

```
1
2
         "partitionKey": "TestUser192",
         "sortKey": "5e517684-d956-4c63-8496-13cfe28b453e",
3
         "username": "TestUser192",
4
         "id": "5e517684-d956-4c63-8496-13cfe28b453e",
         "firstName": "John",
 6
7
         "lastName": "Doe",
8
         "dependants": 0,
9
         "salary": 52000.<u>0,</u>
10
         "gross": 2000.<u>0</u>,
11
         "benefitsCost": 38.46154,
12
         "net": 1961.<u>53845</u>
13
```

Expected:

```
partitionKey": "TestUser192",
    "sortKey": "5e517684-d956-4c63-8496-13cfe28b453e",
    "username": "TestUser192",
    "id": "5e517684-d956-4c63-8496-13cfe28b453e",
    "firstName": "John",
    "lastName": "Doe",
    "dependants": 0,
    "salary": 52000.00,
    "gross": 2000.00,
    "benefitsCost": 38.46,
    "net": 1961.54
}
```

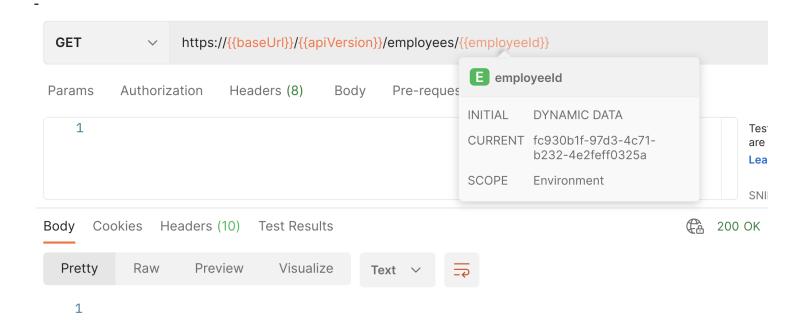
Bug #API-4: GET, PUT and DELETE invalid employee ID should return 404 NOT FOUND

API should return 404 NOT FOUND response status code and error message stating that resource {id} not found Actual:

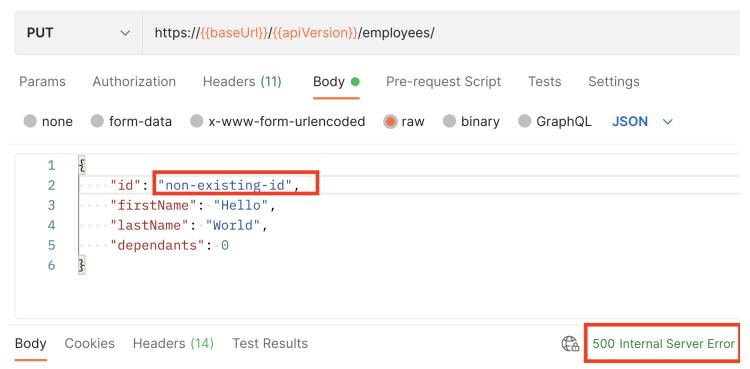
For non existing id



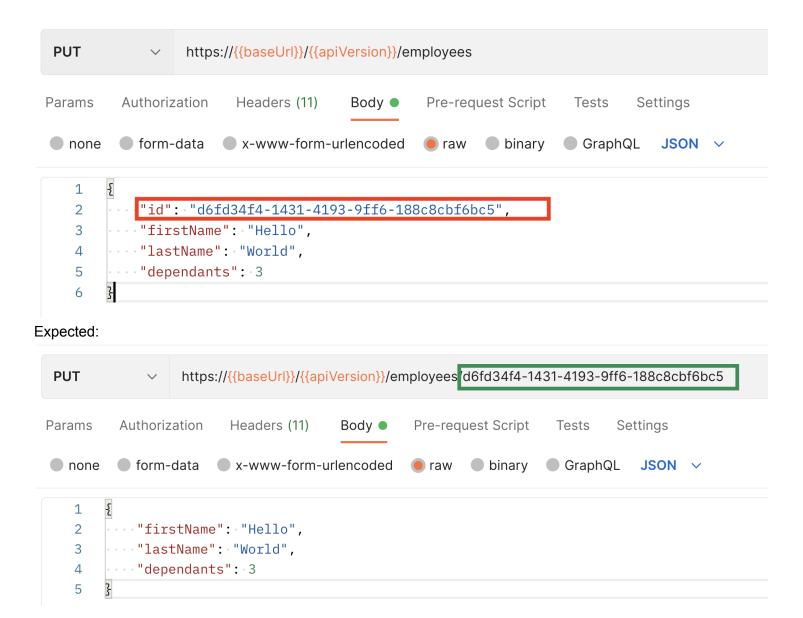
- For removed resource



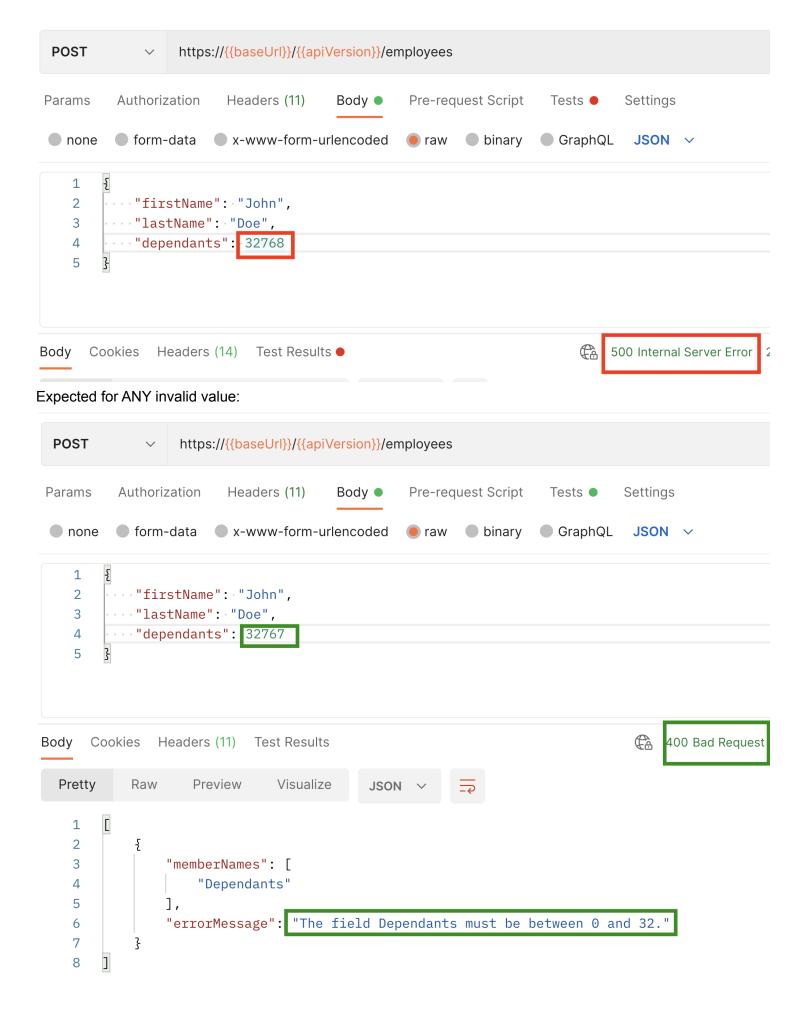
- for PUT request



Bug #API-5: PUT request should send employee ID in Path Params Actual:



Bug #API-6: Dependants returns 500 when value over- or under flows When dependant value is greater than short max value 32,767 (overflow), or less than -32,768 (underflow) then response status code is 500.



Bug #APP-1: Total benefit cost mismatch

I'm creating a bug, at the same time I would imagine that last month's calculation would correlate that mismatch. Actual (result of calculation for 0 (zero) dependents):

- In UI: 38.46 x 26 = 999.96

- In API: 38.46154*26 = 1000.00004

Expected: total benefit cost = \$1000