**API Task**

1. **API Tests**

**1.  Authenticate User Tests**

|  |  |
| --- | --- |
| **ID** | **Test Case** |
| AU01 | Valid credentials |
| AU02 | Invalid email format |
| AU03 | Non-existent email |
| AU04 | Wrong password |
| AU05 | Empty email field |
| AU06 | Empty password field |

**2.  Create User Tests**

|  |  |
| --- | --- |
| **ID** | **Test Case** |
| CU01 | Valid user data |
| CU02 | Missing name |
| CU03 | Missing email |
| CU04 | Missing password |
| CU05 | Invalid email format |
| CU06 | Email already exists |
| CU07 | Password too short |
| CU08 | Special characters in name |

**3. Get User Tests**

|  |  |
| --- | --- |
| **ID** | **Test Case** |
| GU01 | Valid token |
| GU02 | Invalid token |
| GU03 | Missing token |

**4. Patch User Tests**

|  |  |
| --- | --- |
| **ID** | **Test Case** |
| PU01 | Update all fields with valid data |
| PU02 | Update only name |
| PU03 | Update only email |
| PU04 | Update only password |
| PU05 | Update with invalid email format |
| PU06 | Update with email that already exists |
| PU07 | Update with invalid token |
| PU08 | Empty request body |

**5. Delete User Tests**

|  |  |
| --- | --- |
| **ID** | **Test Case** |
| DU01 | Valid token |
| DU02 | Invalid token |
| DU03 | Missing token |

**6.  Delete All Users Tests**

|  |  |
| --- | --- |
| **ID** | **Test Case** |
| DA01 | Valid admin key |
| DA02 | Invalid admin key |
| DA03 | Missing admin key |

1. **Bug Report**

**Authentication Endpoint**

**Bug #1: Authentication API returns 401 instead of 400 for invalid email format**

|  |  |
| --- | --- |
| **Field** | **Value** |
| **Bug ID** | BUG-001 |
| **Description** | When attempting to authenticate with an invalid email format, the API returns a 401 Unauthorized status code instead of the expected 400 Bad Request. Email format validation is not working correctly. |
| **Expected Result** | 400 Bad Request status code with message about incorrect email or password |
| **Actual Result** | 401 Unauthorized status code |
| **Severity** | Medium |
| **Priority** | High |

**Bug #2: Authentication API returns 401 instead of 400 for empty email field**

|  |  |
| --- | --- |
| **Field** | **Value** |
| **Bug ID** | BUG-002 |
| **Description** | When attempting to authenticate with an empty email field, the API returns a 401 Unauthorized status code instead of the expected 400 Bad Request. |
| **Expected Result** | 400 Bad Request status code |
| **Actual Result** | 401 Unauthorized status code |
| **Severity** | Medium |
| **Priority** | High |

**Bug #3: User API returns 401 instead of 400 for empty password field**

|  |  |
| --- | --- |
| **Field** | **Value** |
| **Bug ID** | BUG-003 |
| **Description** | When attempting to authenticate with an empty password field, the API returns a 401 Unauthorized status code instead of the expected 400 Bad Request. |
| **Expected Result** | 400 Bad Request status code |
| **Actual Result** | 401 Unauthorized status code |
| **Severity** | Medium |
| **Priority** | High |

**Create User End Point**

**Bug#4: User API returns 401 instead of 400 when name is missing**

|  |  |
| --- | --- |
| **Field** | **Value** |
| **Bug ID** | BUG-004 |
| **Description** | When creating a user with a missing name field, the API returns a 401 Unauthorized status code instead of the expected 400 Bad Request. Required field validation is not working as intended. |
| **Expected Result** | 400 Bad Request status code |
| **Actual Result** | 401 Unauthorized status code |
| **Severity** | Medium |
| **Priority** | High |

**Bug#5: User API returns 401 instead of 400 when email is missing**

|  |  |
| --- | --- |
| **Field** | **Value** |
| **Bug ID** | BUG-005 |
| **Description** | When creating a user with a missing email field, the API returns a 401 Unauthorized status code instead of the expected 400 Bad Request. Required field validation is not working as intended. |
| **Expected Result** | 400 Bad Request status code |
| **Actual Result** | 401 Unauthorized status code |
| **Severity** | Medium |
| **Priority** | High |

**Bug#6: User API returns 401 instead of 400 when password is missing**

|  |  |
| --- | --- |
| **Field** | **Value** |
| **Bug ID** | BUG-006 |
| **Description** | When creating a user with a missing password field, the API returns a 401 Unauthorized status code instead of the expected 400 Bad Request. Required field validation is not working as intended. |
| **Expected Result** | 400 Bad Request status code |
| **Actual Result** | 401 Unauthorized status code |
| **Severity** | Medium |
| **Priority** | High |

**Bug#7: User API returns 401 instead of 400 for invalid email format**

|  |  |
| --- | --- |
| **Field** | **Value** |
| **Bug ID** | BUG-007 |
| **Description** | When creating a user with an invalid email format, the API returns a 401 Unauthorized status code instead of the expected 400 Bad Request. Email format validation is not being triggered properly. |
| **Expected Result** | 400 Bad Request status code |
| **Actual Result** | 401 Unauthorized status code |
| **Severity** | Medium |
| **Priority** | High |

**Bug#8: User API returns 401 instead of 409 when email already exists**

|  |  |
| --- | --- |
| **Field** | **Value** |
| **Bug ID** | BUG-008 |
| **Description** | When creating a user with an email that already exists in the system, the API returns a 401 Unauthorized status code instead of the expected 409 Conflict. Duplicate email checking logic is not executing properly. |
| **Expected Result** | 409 Conflict status code |
| **Actual Result** | 401 Unauthorized status code |
| **Severity** | Medium |
| **Priority** | High |

**Bug#9: User API returns 401 instead of 400 for password too short**

|  |  |
| --- | --- |
| **Field** | **Value** |
| **Bug ID** | BUG-009 |
| **Description** | When creating a user with a password that's too short, the API returns a 401 Unauthorized status code instead of the expected 400 Bad Request. Password length validation is not functioning as intended. |
| **Expected Result** | 400 Bad Request status code |
| **Actual Result** | 401 Unauthorized status code |
| **Severity** | Medium |
| **Priority** | High |

**Get Users**

**Bug#10: Get User API returns 403 instead of 401 for invalid token**

|  |  |
| --- | --- |
| **Field** | **Value** |
| **Bug ID** | BUG-010 |
| **Description** | When attempting to get user information with an invalid authentication token, the API returns a 403 Forbidden status code instead of the expected 401 Unauthorized. |
| **Expected Result** | 401 Unauthorized status code with message matching "invalid token" or "unauthorized" |
| **Actual Result** | 403 Forbidden status code |
| **Severity** | Medium |
| **Priority** | High |

**Bug#11: Get User API returns 403 instead of 401 for missing token**

|  |  |
| --- | --- |
| **Field** | **Value** |
| **Bug ID** | BUG-011 |
| **Description** | When attempting to get user information without providing an authentication token, the API returns a 403 Forbidden status code instead of the expected 401 Unauthorized. |
| **Expected Result** | 401 Unauthorized status code with message matching "missing token" or "unauthorized" |
| **Actual Result** | 403 Forbidden status code |
| **Severity** | Medium |
| **Priority** | High |

**PATCH USER BY TOKEN**

**Bug#12: Update User API returns 403 instead of 200 for update only name operation**

|  |  |
| --- | --- |
| **Field** | **Value** |
| **Bug ID** | BUG-012 |
| **Description** | When attempting to update username filed with valid data and authentication, the API returns a 403 Forbidden status code instead of the expected 200 OK. |
| **Expected Result** | 200 OK status code with updated username |
| **Actual Result** | 403 Forbidden status code |
| **Severity** | High |
| **Priority** | High |

**Bug#13: Update User API returns 403 instead of 200 for update only email operation**

|  |  |
| --- | --- |
| **Field** | **Value** |
| **Bug ID** | BUG-013 |
| **Description** | When attempting to update email filed with valid data and authentication, the API returns a 403 Forbidden status code instead of the expected 200 OK. |
| **Expected Result** | 200 OK status code with updated email |
| **Actual Result** | 403 Forbidden status code |
| **Severity** | High |
| **Priority** | High |

**Bug#14: Update User API returns 403 instead of 200 for update only password operation**

|  |  |
| --- | --- |
| **Field** | **Value** |
| **Bug ID** | BUG-014 |
| **Description** | When attempting to update password filed with valid data and authentication, the API returns a 403 Forbidden status code instead of the expected 200 OK. |
| **Expected Result** | 200 OK status code with updated username |
| **Actual Result** | 403 Forbidden status code |
| **Severity** | High |
| **Priority** | High |

**Bug#15: Update User API returns 403 instead of 400 for update with invalid format or empty request body**

|  |  |
| --- | --- |
| **Field** | **Value** |
| **Bug ID** | BUG-015 |
| **Description** | When attempting to update user data with invalid inputs (invalid email format or empty request body), the API returns a 403 Forbidden status code instead of the expected 400 Bad Request |
| **Expected Result** | 400 Bad Request status code |
| **Actual Result** | 403 Forbidden status code |
| **Severity** | Medium |
| **Priority** | High |

**Bug#16: Update User API returns 403 instead of 409 when update a user's email to one that already exists**

|  |  |
| --- | --- |
| **Field** | **Value** |
| **Bug ID** | BUG-016 |
| **Description** | When attempting to update a user's email to one that already exists in the system, the API returns a 403 Forbidden status code instead of the expected 409 Conflict. Duplicate email checking is not working properly. |
| **Expected Result** | 409 Conflict status code |
| **Actual Result** | 403 Forbidden status code |
| **Severity** | Medium |
| **Priority** | High |

**Bug#17: Update User API returns 403 instead of 401 for invalid token**

|  |  |
| --- | --- |
| **Field** | **Value** |
| **Bug ID** | BUG-017 |
| **Description** | When attempting to update a user with an invalid authentication token, the API returns a 403 Forbidden status code instead of the expected 401 Unauthorized. |
| **Expected Result** | 401 Unauthorized status code |
| **Actual Result** | 403 Forbidden status code |
| **Severity** | Medium |
| **Priority** | High |

**Delete All Users**

**Bug#18: Delete All Users API returns 403 instead of 401 for missing admin key**

|  |  |
| --- | --- |
| **Field** | **Value** |
| **Bug ID** | BUG-018 |
| **Description** | When attempting to delete all users without providing an admin key, the API returns a 403 Forbidden status code instead of the expected 401 Unauthorized. This indicates an inconsistency in how authentication failures are handled across the API. |
| **Expected Result** | 401 Unauthorized status code with message matching "Authentication required" or "Missing admin key" |
| **Actual Result** | 403 Forbidden status code |
| **Severity** | Medium |
| **Priority** | Medium |

**Delete Users End Point**

**Bug#19: Delete User API returns 403 instead of 401 for invalid token**

|  |  |
| --- | --- |
| **Field** | **Value** |
| **Bug ID** | BUG-019 |
| **Description** | When attempting to delete a user with an invalid authentication token, the API returns a 403 Forbidden status code instead of the expected 401 Unauthorized. This indicates an inconsistency in how authentication failures are handled across the API. |
| **Expected Result** | 401 Unauthorized status code |
| **Actual Result** | 403 Forbidden status code |
| **Severity** | Medium |
| **Priority** | Medium |

**Bug#20: Delete User API returns 403 instead of 401 for missing token**

|  |  |
| --- | --- |
| **Field** | **Value** |
| **Bug ID** | BUG-020 |
| **Description** | When attempting to delete a user without providing an authentication token, the API returns a 403 Forbidden status code instead of the expected 401 Unauthorized. This continues the pattern of inconsistent authentication error handling. |
| **Expected Result** | 401 Unauthorized status code |
| **Actual Result** | 403 Forbidden status code |
| **Severity** | Medium |
| **Priority** | Medium |