**Test plan for**

**<<WALLET API>>**

*ChangeLog*

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Change Date** | **By** | **Description** |
| 1 |  | Pallavi Gutta | Initial |

# Introduction

The Wallet API facilitates the management of digital wallets, allowing for operations such as managing funds in multiple currencies, checking balances, and reviewing transaction history. Designed for testing purposes.

## Scope

## 1.1.1 In Scope

API Responses with different end points will be tested

### 1.1.2 Out of Scope

Out Of Scope live responses, integration and performance **will NOT be** tested

# Test Methodology

* Agile

# Automation Tools

* Cypress

# Terms/Acronyms

| TERM/ACRONYM | DEFINITION |
| --- | --- |
| API | Application Program Interface |
| AUT | Application Under Test |

# Test Cases

**#TC001**

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| --- | --- | --- | --- | --- | --- | --- |
| **TEST CASE ID** | | TC001\_UserLogin\_retrievetoken | | | **PRIORITY** | |
| **DESCRIPTION** | | Authenticate the user and generate the access token | | | HIGH | |
| **PRE CONDITIONS** | | user should have valid username and password API server is up and running | | | | |
| **BASE URL** | | [**https://challenge.test.local/challenge/api/v1**](https://challenge.test.local/challenge/api/v1) | | **END POINT** | **/user/login** | |
| **Test Steps** | | | | | | |
| 1 | create a post request with valid user name and password | | | | | |
| 2 | Enter 'X-Service-Id' in header | | | | | |
| 3 | Response body should have the schema {  "username": "string",  "password": "string" } | | | | | |
| **Expected Results** | | | | | | |
| 1 | User should be authenticated and access token is retrieved | | **Response Status Code** | | | 200 |
| 2 | JSON response should be received with token,refresh token, expiry and userid as parameters | | **Response Status Description** | | | User token issued |
| 3 | Example Value | Schema {  "token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJzdWIiOiIxMjM0NTY3ODkwIiwibmFtZSI6IkpvaG4gRG9lIiwiaWF0IjoxNTE2MjM5MDIyfQ.SflKxwRJSMeKKF2QT4fwpMeJf36POk6yJV\_adQssw5c",  "refreshToken": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJzdWIiOiIxMjM0NTY3ODkwIiwibmFtZSI6IkpvaG4gRG9lIiwic2NvcGUiOiJyZWZyZXNoIiwiaWF0IjoxNTE2MjM5MDIyfQ.TZg262l54FnzFuSzi8F5J3W9s61iS0L681WnTJ0k8k0",  "expiry": "2024-11-01T01:00:00Z",  "userId": "3fa85f64-5717-4562-b3fc-2c963f66afa6" } | | | | | |

**#TC002**

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| **TEST CASE ID** | TC002\_GetUserInfo\_retrieveWalletId | | **PRIORITY** |
| **DESCRIPTION** | Verify the user info get request is retrieving correct information as specified | | HIGH |
| **PRE CONDITIONS** | API server is up and running should have valid userId | | |
| **BASE URL** | [**https://challenge.test.local/challenge/api/v1**](https://challenge.test.local/challenge/api/v1) | **END POINT** | **/user/info{userId}** |
| **Test Steps** | | | |
| 1 | create a get request with valid user id | | |
| 2 | Add Bearer token authentication | | |
| **Expected Results** | | | |
| 1 | User information for the given userid should be retrieved | **Response Status Code** | 200 |
| 2 | JSON response should be received with wallet ID and other user info | **Response Status Description** | User info retrieved |
| 3 | Example Value | Schema {  "walletId": "3fa85f64-5717-4562-b3fc-2c963f66afa6",  "name": "John Doe",  "locale": "en-US",  "region": "AT",  "timezone": "Europe/Vienna",  "email": "john.doe@example.com" } | | |

**#TC003**

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| --- | --- | --- | --- |
| **TEST CASE ID** | TC003\_GetUserInfo\_AuthorizationFailure | | **PRIORITY** |
| **DESCRIPTION** | Verify the authentication failure when bearer token is not provided in header | | HIGH |
| **PRE CONDITIONS** | API server is up and running should have valid userId | | |
| **BASE URL** | [**https://challenge.test.local/challenge/api/v1**](https://challenge.test.local/challenge/api/v1) | **END POINT** | **/user/info{userId}** |
| **Test Steps** | | | |
| 1 | create a get request with valid user id | | |
| **Expected Results** | | | |
| 1 | User information should not be retrieved | **Response Status Code** | 401 |
| 2 |  | **Response Status Description** | Unauthorized - Authentication required |

**#TC004**

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| --- | --- | --- | --- |
| **TEST CASE ID** | TC004\_GetWalletInfo\_NoTransactions | | **PRIORITY** |
| **DESCRIPTION** | Verify wallet info is retrieved for respective wallet id | | HIGH |
| **PRE CONDITIONS** | API server is up and running should have valid wallet id, only one wallet per user | | |
| **BASE URL** | [**https://challenge.test.local/challenge/api/v1**](https://challenge.test.local/challenge/api/v1) | **END POINT** | **/wallet/{walletID}** |
| **Test Steps** | | | |
| 1 | create a get request with valid walletID | | |
| 2 | Add Bearer token authentication | | |
| **Expected Results** | | | |
| 1 | Wallet information for the given walletID should be retrieved | **Response Status Code** | 200 |
| 2 | JSON response should be received with wallet ID and currencyclip properties. currencyClips property should have an empty array when no transactions are recorded. | **Response Status Description** | Wallet information retrieved |
| 3 | Example Value | Schema {  "walletId": "123e4567-e89b-12d3-a456-426614174000",  "currencyClips": [],  "createdAt": "2024-11-01T00:00:00Z",  "updatedAt": "2024-11-01T00:00:00Z" } | | |

**#TC005**

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| **TEST CASE ID** | TC005\_GetWalletInfo\_multipleTransactions | | **PRIORITY** |
| **DESCRIPTION** | Verify wallet info is retrieved for respective wallet id with details of all transactions | | HIGH |
| **PRE CONDITIONS** | API server is up and running should have valid wallet id, only one wallet per user | | |
| **BASE URL** | [**https://challenge.test.local/challenge/api/v1**](https://challenge.test.local/challenge/api/v1) | **END POINT** | **/wallet/{walletID}** |
| **Test Steps** | | | |
| 1 | create a get request with valid walletID | | |
| 2 | Add Bearer token authentication | | |
| **Expected Results** | | | |
| 1 | Wallet information for the given walletID should be retrieved | **Response Status Code** | 200 |
| 2 | JSON response should be received with wallet ID and currencyclip properties. currencyClips property should have an array with all the different currency transcations | **Response Status Description** | Wallet information retrieved |
| 3 | Example Value | Schema {  "walletId": "3fa85f64-5717-4562-b3fc-2c963f66afa6",  "currencyClips": [  {  "currency": "EUR",  "balance": 100.5015,  "lastTransaction": "2024-11-01T12:34:56Z",  "transactionCount": 5  },  {  "currency": "USD",  "balance": 150.25,  "lastTransaction": "2024-11-01T08:23:12Z",  "transactionCount": 2  }  ],  "createdAt": "2024-11-01T00:00:00Z",  "updatedAt": "2024-11-01T00:00:00Z" } | | |

**#TC006**

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| **TEST CASE ID** | TC006\_GetWalletInfo\_AfterFirstTransaction | | **PRIORITY** |
| **DESCRIPTION** | Verify wallet info is retrieved for respective wallet id with details of all transactions | | HIGH |
| **PRE CONDITIONS** | API server is up and running should have valid wallet id, only one wallet per user | | |
| **BASE URL** | [**https://challenge.test.local/challenge/api/v1**](https://challenge.test.local/challenge/api/v1) | **END POINT** | **/wallet/{walletID}** |
| **Test Steps** | | | |
| 1 | create a get request with valid walletID | | |
| 2 | Add Bearer token authentication | | |
| **Expected Results** | | | |
| 1 | Wallet information for the given walletID should be retrieved | **Response Status Code** | 200 |
| 2 | JSON response should be received with wallet ID and currencyclip properties. currencyClips property should have an array with single entry and transaction count should show 1 | **Response Status Description** | Wallet information retrieved |
| 3 | Example Value | Schema {  "walletId": "3fa85f64-5717-4562-b3fc-2c963f66afa6",  "currencyClips": [  {  "currency": "EUR",  "balance": 100.5015,  "lastTransaction": "2024-11-01T12:34:56Z",  "transactionCount": 5  },  ],  "createdAt": "2024-11-01T00:00:00Z",  "updatedAt": "2024-11-01T00:00:00Z" } | | |

**#TC007**

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| --- | --- | --- | --- |
| **TEST CASE ID** | TC007\_ProcessTransaction\_immediateResponse | | **PRIORITY** |
| **DESCRIPTION** | Verify the transaction is processed with the correct currency and balances | | HIGH |
| **PRE CONDITIONS** | API server is up and running should have valid wallet id, only one wallet per user | | |
| **BASE URL** | [**https://challenge.test.local/challenge/api/v1**](https://challenge.test.local/challenge/api/v1) | **END POINT** | **/wallet/{walletID}/transaction** |
| **Test Steps** | | | |
| 1 | create a post request with valid walletID as parameter | | |
| 2 | Add Bearer token authentication in header | | |
| 3 | Response body should have the schema {  "currency": "string",  "amount": 0,  "type": "credit" } |  |  |
| **Expected Results** | | | |
| 1 | Transaction should be processed and the details should be displayed | **Response Status Code** | 200 |
| 2 | JSON response should be received with transactionId and status. | **Response Status Description** | Transaction processed |
| 4 | Example Value | Schema {  "transactionId": "3fa85f64-5717-4562-b3fc-2c963f66afa6",  "status": "finished",  "outcome": "approved",  "createdAt": "2024-11-15T05:30:00Z",  "updatedAt": "2024-11-15T05:30:00Z" } | | |

**#TC008**

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| **TEST CASE ID** | TC008\_ProcessTransaction\_DelayedResponse | | **PRIORITY** |
| **DESCRIPTION** | Verify the transaction is processed with the correct currency and balances | | HIGH |
| **PRE CONDITIONS** | API server is up and running should have valid wallet id, only one wallet per user | | |
| **BASE URL** | [**https://challenge.test.local/challenge/api/v1**](https://challenge.test.local/challenge/api/v1) | **END POINT** | **/wallet/{walletID}/transaction** |
| **Test Steps** | | | |
| 1 | create a post request with valid walletID as parameter | | |
| 2 | Add Bearer token authentication in header | | |
| 3 | Response body should have the schema {  "currency": "string",  "amount": 0,  "type": "credit" } |  |  |
| **Expected Results** | | | |
| 1 | Transaction should be processed and the details should be displayed | **Response Status Code** | 200 |
| 2 | JSON response should be received with transactionId and status as 'Pending'. | **Response Status Description** | Transaction processed |
| 4 | Example Value | Schema {  "transactionId": "3fa85f64-5717-4562-b3fc-2c963f66afa6",  "status": "pending",  "outcome": "pending",  "createdAt": "2024-11-15T05:30:00Z",  "updatedAt": "2024-11-15T05:30:00Z" } | | |

**#TC009**

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| **TEST CASE ID** | TC009\_ProcessTransaction\_TtansactionUpdate\_beforeTimeout | | **PRIORITY** |
| **DESCRIPTION** | Verify the transaction is updated with the correct status | | HIGH |
| **PRE CONDITIONS** | API server is up and running should have valid wallet id and transaction id Transaction is processed and received pending status | | |
| **BASE URL** | [**https://challenge.test.local/challenge/api/v1**](https://challenge.test.local/challenge/api/v1) | **END POINT** | **/wallet/{walletID}/transaction/{transactionId}** |
| **Test Steps** | | | |
| 1 | create a post request with valid walletID and transaction id as parameter | | |
| 2 | Add Bearer token authentication in header | | |
| **Expected Results** | | | |
| 1 | Transaction status should be updated to approved or denied if the response from external api is received within 30 mins | **Response Status Code** | 200 |
| 2 | JSON response should be received with transactionId and status as 'finished' and outcome as 'approved/denied'. | **Response Status Description** | Transaction processed |
| 4 | Example Value | Schema {  "transactionId": "123e4567-e89b-12d3-a456-426614174000",  "currency": "EUR",  "amount": 100.50,  "type": "credit",  "status": "finished",  "outcome": "approved",  "createdAt": "2024-11-15T05:30:00Z",  "updatedAt": "2024-11-15T05:35:00Z" } | | |

**#TC0010**

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| **TEST CASE ID** | TC0010\_ProcessTransaction\_TtansactionUpdate\_Timeout | | **PRIORITY** |
| **DESCRIPTION** | Verify the transaction is updated with the correct status | | HIGH |
| **PRE CONDITIONS** | API server is up and running should have valid wallet id and transaction id Transaction is processed and received pending status | | |
| **BASE URL** | [**https://challenge.test.local/challenge/api/v1**](https://challenge.test.local/challenge/api/v1) | **END POINT** | **/wallet/{walletID}/transaction/{transactionId}** |
| **Test Steps** | | | |
| 1 | create a post request with valid walletID and transaction id as parameter | | |
| 2 | Add Bearer token authentication in header | | |
| **Expected Results** | | | |
| 1 | Transaction status should be updated to denied if no response received after 30mins. | **Response Status Code** | 200 |
| 2 | JSON response should be received with transactionId and status as 'finished' and outcome as 'denied'. | **Response Status Description** | Transaction processed |
| 4 | Example Value | Schema {  "transactionId": "123e4567-e89b-12d3-a456-426614174000",  "currency": "EUR",  "amount": 100.50,  "type": "credit",  "status": "finished",  "outcome": "Denied",  "createdAt": "2024-11-15T05:30:00Z",  "updatedAt": "2024-11-15T05:35:00Z" } | | |

**#TC0011**

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| **TEST CASE ID** | TC0011\_Transation history | | **PRIORITY** |
| **DESCRIPTION** | Verify the transaction history is retrieved | | HIGH |
| **PRE CONDITIONS** | API server is up and running should have valid wallet id | | |
| **BASE URL** | [**https://challenge.test.local/challenge/api/v1**](https://challenge.test.local/challenge/api/v1) | **END POINT** | **/wallet/{walletID}/transactions** |
| **Test Steps** | | | |
| 1 | create a post request with valid walletID ,page,startDate and endDate as parameters | | |
| 2 | Add Bearer token authentication in header | | |
| **Expected Results** | | | |
| 1 | It should retrieve all transactions with pagination and date limits | **Response Status Code** | 200 |
| 2 | JSON response should be received with transactionId and status as 'finished' and outcome as 'denied'. | **Response Status Description** | Transaction list retrieved |
| 4 | Example Value | Schema {  "transactions": [  {  "transactionId": "3fa85f64-5717-4562-b3fc-2c963f66afa6",  "currency": "string",  "amount": 0,  "type": "credit",  "status": "pending",  "outcome": "approved",  "createdAt": "2025-02-25T19:48:28.891Z",  "updatedAt": "2025-02-25T19:48:28.891Z"  }  ],  "totalCount": 0,  "currentPage": 0,  "totalPages": 0 } | | |

**#TC012**

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| **TEST CASE ID** | TC012\_GetWalletInfo\_multipleTransactions\_withSameCurrency | | **PRIORITY** |
| **DESCRIPTION** | Verify wallet info is retrieved for respective wallet id with details of all transactions | | HIGH |
| **PRE CONDITIONS** | API server is up and running should have valid wallet id, only one wallet per user | | |
| **BASE URL** | [**https://challenge.test.local/challenge/api/v1**](https://challenge.test.local/challenge/api/v1) | **END POINT** | **/wallet/{walletID}** |
| **Test Steps** | | | |
| 1 | create a get request with valid walletID | | |
| 2 | Add Bearer token authentication | | |
| **Expected Results** | | | |
| 1 | Wallet information for the given walletID should be retrieved | **Response Status Code** | 200 |
| 2 | JSON response should be received with wallet ID and currencyclip properties. Transactioncount should be increased and balance should get updated | **Response Status Description** | Wallet information retrieved |
| 3 | Example Value | Schema {  "walletId": "3fa85f64-5717-4562-b3fc-2c963f66afa6",  "currencyClips": [  {  "currency": "EUR",  "balance": 100.5015,  "lastTransaction": "2024-11-01T12:34:56Z",  "transactionCount": 5  } ] } | | |