Authentication Service - Test Cases

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Case ID | Scenario | API Endpoint | Input | Expected Output |
| TC001 | User Registration | POST /register | Valid user data | 201 Created |
| TC002 | User Registration - Existing Email | POST /register | Email already exists | 409 Conflict |
| TC003 | User Login | POST /login | Valid credentials | 200 OK + JWT Token |
| TC004 | User Login - Wrong Password | POST /login | Invalid password | 401 Unauthorized |
| TC005 | Access Protected Endpoint | GET /profile | Valid JWT token | 200 OK |
| TC006 | Access Protected Endpoint without Token | GET /profile | No token provided | 401 Unauthorized |
| TC007 | Refresh Token | POST /token/refresh | Valid refresh token | 200 OK + new access token |
| TC008 | Logout | POST /logout | Valid access token | 200 OK + token invalidated |
| TC009 | Password Reset Request | POST /password/forgot | Registered email | 200 OK + reset link sent |
| TC010 | Password Reset Confirm | POST /password/reset | Valid token and new password | 200 OK |
| TC011 | 2FA Enable | POST /2fa/setup | Valid authenticated user | 200 OK + QR Code/Secret |
| TC012 | 2FA Verify | POST /2fa/verify | Valid OTP | 200 OK + 2FA enabled |
| TC013 | Audit Log | GET /audit | Admin token | 200 OK + log list |
| TC014 | Rate Limiting | POST /login | Too many requests | 429 Too Many Requests |
| TC015 | Invalid JWT Token | GET /profile | Tampered token | 401 Unauthorized |