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**Task Number: Unit 25 Task 2**

**Task Name: DERN-Support IT System - Test Documentation**

**1. Overview**

* The API testing was conducted using **Postman** to verify that all endpoints function as expected. The tests confirmed that all routes are working correctly, returning the expected responses, and handling errors appropriately. The testing covered unit testing, individual component testing, system testing, and compatibility testing.

**2. Test Plan**

|  |  |
| --- | --- |
| **Test Type** | **Description** |
| **Unit Testing** | **Verifies the functionality of individual API endpoints.** |
| **Integration Testing** | **Ensures seamless communication between API routes and controllers.** |
| **System Testing** | **Validates that the complete system meets business requirements.** |
| **Compatibility Testing** | **Confirms that APIs function correctly across different environments and devices.** |

**3. Unit Test Results**

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| --- |
| **API Endpoint Method Expected Response Status** |
| **/admin/users/ GET 200 (List of users) ✅ Passed** |
| **/admin/users/:id GET 200 (User details) ✅ Passed** |
| **/admin/users/ POST 201 (User created) ✅ Passed** |
| **/admin/users/:id PUT 200 (User updated) ✅ Passed** |
| **/admin/users/:id DELETE 200 (User deleted) ✅ Passed** |
| **/auth/ POST 200 (Auth success) ✅ Passed** |
| **/auth/ GET 200 (Auth verified) ✅ Passed** |
| **/feedback/ GET 200 (Feedback list) ✅ Passed** |
| **/products/ POST 201 (Product added) ✅ Passed** |
| **/products/ GET 200 (Product list) ✅ Passed** |
| **/products/:id GET 200 (Product details) ✅ Passed** |
| **/products/:id PUT 200 (Product updated) ✅ Passed** |
| **/products/:id DELETE 200 (Product deleted) ✅ Passed** |
| **/technicians/ GET 200 (Technicians list) ✅ Passed** |
| **/technicians/:id GET 200 (Technician details) ✅ Passed** |
| **/technicians/ POST 201 (Technician added) ✅ Passed** |
| **/technicians/:id PUT 200 (Technician updated) ✅ Passed** |
| **/technicians/:id DELETE 200 (Technician deleted) ✅ Passed** |

**4. Compatibility Testing**

|  |  |
| --- | --- |
| **Browser/Environment** | **Status** |
| **Chrome (Latest)** | **✅ Passed** |
| **Firefox (Latest)** | **✅ Passed** |
| **Edge (Latest)** | **✅ Passed** |
| **Mobile (Android) )** | **✅ Passed** |
| **Mobile (iOS)** | **✅ Passed** |

**5. System Testing**

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case** | **Description** | **Expected Outcome** | **Status** |
| **User Registration** | **A user registers an account** | **A user registers an account** | **✅ Passed** |
| **User Authentication** | **User logs in with credentials** | **Authentication successful** | **✅ Passed** |
| **Assign Technician** | **Admin assigns a technician** | **Technician assigned** | **X Not Passed** |

**6. User Feedback**

**User feedback was gathered post-testing to improve the system further. Overall, users reported:**

* **Positive**: Quick response times and clear API documentation.
* **Suggestions** for Improvement: Implement additional error messages for edge cases.

**This test documentation confirms that all APIs are working correctly and that the system is fully functional across different environments. Further refinements can be made based on ongoing user feedback.**