Phase 10: Quality Assurance Testing

Quality Assurance (QA) is the final validation phase that ensures the *NeuroWell* system works as intended, meets requirements, and provides a secure, error-free experience for users.

1. Purpose of QA Testing

- Ensures that all features implemented are functioning correctly.
- Validates that integrations, workflows, security rules, and UI behave as intended.
- Identifies and corrects errors before deployment.
- Improves reliability, security, and user satisfaction.

2. Test Case Preparation

For every Salesforce feature implemented in *NeuroWell*, prepare detailed test cases covering functionality and security.

Examples of features to test:

- Object Record Creation (Patient, Session, Counselor, Wellness Data records)
- Approval Processes (e.g., session approval workflows)
- Automatic Task Creation (e.g., tasks for follow-up sessions)
- Flows (Screen, Auto-launched, Record-Triggered)
- Apex Triggers
- Validation Rules

3. Test Case Structure

Each test case should follow a structured format:

Section Details

Use Case / Scenario Describe the feature or workflow being tested.

Test Steps Step-by-step actions with input data.

Input Details The exact data or action performed during testing.

Section Details

Expected Output The expected system behavior.

Actual Output The actual result after testing, with screenshots.

Conclusion Whether the test passed or failed and reasons if failed.

4. Example Test Case for NeuroWell

Section	Details
Use Case / Scenario	Validate creation of a Patient Record with wellness details.
Test Steps	 Login as Admin. Navigate to "Patients" tab. Click "New Patient". Fill mandatory fields (Name, Email, Contact Number, Wellness Score, etc.). Save.
Input Details	Name: John Doe Email: john.doe@example.com Wellness Score: 78
Expected Output	Patient record is created successfully, Wellness Score is displayed, and a confirmation message is shown.
Actual Output	Patient record created successfully; Wellness Score displayed correctly.
Conclusion	Test Passed – Patient record creation works as expected.

5. Testing Best Practices

- Cover **positive testing** (valid data) and **negative testing** (invalid data, boundary cases).
- Validate **security rules** such as role-based access and field-level permissions.
- Test data integrations (API callouts, Named Credentials, Platform Events).
- Check automation such as workflow rules, process builder, and flows.

- Ensure **UI consistency** across Lightning Pages and Components.
- Use real data where possible while masking sensitive data for privacy compliance.

Conclusion of the QA Phase

- Summarize findings: number of test cases passed vs failed.
- Highlight any issues and how they were resolved.
- Confirm system readiness for deployment to production.
- Final project conclusion: state whether NeuroWell meets objectives, its strengths, and any future improvements.