



Developers implement capabilities expressed by each Feature/User Story by creating one to many individual programs, functions, procedures, etc. known as units. A **Unit** is the smallest testable part of any software. As each unit is constructed, it is validated through **Unit Testing** to ensure that it performs according to its intended purpose or specification. **Integration Testing** follows where individual units are combined and tested as a group. The purpose of this level of testing is to expose faults in the integration between integrated units.

Minimally the **Definition of Done** for this stage must include the following for each Feature/Story to be developed:

- Coding has completed.
- Unit and Integration testing have been completed.
- The Solution Specifications have been completed.
- The developers have shared the Unit and Integration test results with the System and User Test teams and received a formal sign-off.

• System Test –

The primary objective of System Testing is to verify that the new functionality (what the system produces) and/or other non-functional requirements (how well the system produces) as expressed by each Feature/User Story have been satisfied by the system-under-test. A secondary objective is to use test cases to try to expose problems in the system. Both objectives are to be accomplished before the system is delivered to the End User. This stage includes testing of the change(s) introduced by the release (aka **Progression Testing**) as well as **Regression testing** of the existing functionality to verify the impact of the change(s). The specific types of testing employed are determined by the functional and non-functional requirements as well as the entities that the system interacts with (i.e. **System Context**).

Minimally the **Definition of Done** for this stage must include the following for each Feature/Story to be developed:

- Test cases have been executed.
- Acceptance criteria have passed with the exception of any having associated defects that have been deferred to some future date (includes both Progression and Regression).
- Test execution documentation/evidence capture has been completed.

• User Acceptance Test –

User Acceptance Test (UAT) provides a realistic and adequate exposure of the application to all reasonable expected events and business process transactions, with business user participation in planning and review sessions, and approval of results where practical. Included is an End-to-End testing of the business process(es) where the application exists within the process(es). This stage also includes a coordinated test with all upstream/downstream systems that are connected to the application to ensure that the interfaces and or interactions are functioning as expected and not adversely impacted by the application changes. UAT, like System Test, will employ varied types of tests.