Regression Testing

Regression testing should consist of Automation Regression (E2E) and Manual Regression. In addition, teams must follow proper code review processes, development best practices and QA best practices to prevent defects. Ideally, Projects should have three non-production environments: DEV, QA, and STAGE.

Automated Smoke Testing

- Perform after the deployment of new code or defect fixes
- Ensure no critical defects have been introduced
- Check that builds and deploys are successful
- Test the functionality of existing code
- Perform in any environments
- Should be a subset of the automated regression tests

Automated Regression Testing

- It is the responsibility of each team to create a document that outlines priority features chosen for the Automated Testing Suite.
- It is the preliminary goal to automate 80% of these high value cases. As part of refinement, sprints will be triaged, and any additional high value cases will be added to the Automation document.
- A centralized store of automation result reports will be created and made public to stakeholders.
- A subset of these automated regression tests will be run as smoke tests as a part of the CI/CD process.

Regression Testing (Continued)

Tools needed

- Rally*
- Automation framework to support the application (Protractor/Selenium and Cucumber)*
- Dedicated system for reporting, such as one stop dashboard, etc.

Additional Testing to support Regression

In order for regression testing to be effective, the below listed testing types will further enhance the code quality and prevent defects early on:

- Unit Testing (frontend and backend)
- Integration Testing
- Manual/exploratory Testing
- System Integration Testing
- User Acceptance Testing
- Performance Testing (limited)
- Application Security Testing

*Current tools, but current framework can be evaluated (ie, Cypress)