

# Quality Assessment

The quality of the mobile development, dashboard, and integration of all applications under a single sign-on and user interface is extremely important so that Longhorn Bank can become a more efficient company and reduce TAT. There are several different metrics to be looked at to make sure that the quality is maintained throughout each part of the project.

- **Availability:** The services provided will have a 99.9% availability to ensure consistent access to all features
- **User Interface:** The following will need to be achieved to meet quality standards:
  - All systems contain a consistent UI
  - Usability: Easy to navigate
  - Accessibility: All interfaces are accessible and considerations have been taken for those with disabilities
- **Single Sign-On:** The following will need to be achieved to meet quality standards:
  - Only one login needed for all applications
  - Connectivity: SSO is attached to all internal applications
- **Mobile Development and Dashboard:**
  - Infrastructure: New servers will be dedicated to mobile development and dashboard platform
  - Network: Security measures including firewalls to allow remote access for all employees using mobile devices
- **Disaster recovery:** There are many different scenarios that could disrupt daily business process and all cannot be stopped, but measures will be taken to make sure that they are mitigated. A disaster recovery plan will be created to combat the unexpected which will include the following:
  - Redundant Servers: There are back-up servers if one or several servers go down without notice
  - Patch Management: Active patch management to fix problems as they arise
  - Monitoring Usage: We want to make sure to avoid circuit overloads
  - Point of Failure: There will be no single point of failure that causes the entire system to crash

To make sure that the quality requirements that we have state above are achieved, we have several tests to be performed.

- **A/B Testing:** This is where we will display two instances of a part of the project that we want to test and compare the results. This will be used for the user interface to find which one performs better.

- **Usability Testing:** Real users will be used to see how easy the user interface is to navigate. Certain tasks will be required of the users while we observe and take notes of the different problems and experiences.
- **Network Testing:** Various checks will be made to ensure that the availability of the system holds up to 99.9%. Individual applications will be tested to make sure firewalls are in place and all intrusion detection software is up to date and running. Routine server checks will make sure that certain servers are not under a heavy workload.
- **Unit Testing:** Individual parts of each application will be tested. Automated testing will be set up as manual testing would take too much time. The unit that is tested must meet the anticipated design and behave as it should. Once all unit testing has been completed, then the team can move on to system testing.
- **System Testing:** One of the most critical parts since our project requires a large integration of applications. All applications must have a uniform user interface and accessed by a single sign-on. The mobile development should have the same features and the dashboard must be able to read and display information from all applications. The system must comply with all of these requirements for it to pass this test.
- **Acceptance Testing:** We will evaluate how well the system complies with all of the business requirements previously stated and if it will be approved for deployment. It must be tested in a real world environment by the users of Longhorn Bank before final integration can take place.