

Topic: The topmost priority of the North Carolina Department of Health and Human Services (the Department) is the health and well-being of the individuals they serve. Your team is assigned to work on the usability testing of a SAAS application targeted for healthcare systems to be used by the served population. Think through the target audience, discuss and present the test plan for ensuring better usability of the mobile and web app. Focus on what constitutes usability to the target audience, and how your proposal addresses those concerns.

What is an SAAS application:

SAAS application stands for Software as a Service application. It is a type of software application hosted in the cloud and delivered to users over the internet. SAAS applications are maintained by a third party provider, so the users don't have to install or maintain the software and infrastructure. Accessible through multiple devices such as computers, tablets, or even smartphones.

Popular SAAS Products:

- Google workspace
- Slack
- Spotify
- Netflix
- Zoom

What to look for in the Usability testing:

- Efficiency: It is efficiently able to process tasks for users and provide relevant information
- Effectiveness: Confirm that the application works without any errors
- Accessibility: It is accessible to all users seen as the targeted audience
- Learnability: Users of all age are able to quickly learn how to use the application with all the features and functionality

Targeted audience:

- Department healthcare professionals
- Department administrators
- Patients
- Other staff members

Introduction

This test plan outlines the approach for conducting usability testing on a Software as a Service (SAAS) application designed for healthcare systems, with the primary focus on improving the user experience for the served population. The North Carolina Department of Health and Human Services (NCDHHS) is committed to prioritizing the health and well-being of the individuals they serve, and this usability testing will help ensure that the mobile and web app meets the highest standards of usability and user satisfaction.

Objectives

- To evaluate the overall usability of the SAAS application.
- To identify usability issues and areas for improvement.
- To assess the mobile and web app's user interface, navigation, and accessibility.
- To gather feedback from the target users (healthcare professionals and served population).
- To ensure that the application aligns with the NCDHHS mission of improving health and well-being.

Test Participants

- Healthcare professionals (e.g., doctors, nurses, social workers).
- Served population (patients and beneficiaries of NCDHHS services).
- Designated usability test moderators.

Test Environments

- Controlled testing lab with observation facilities.
- Participant's natural environment (remote testing).
- Mobile devices (iOS and Android) and various web browsers.

Test Scenarios

- **Healthcare Professional**
 - User Registration: Evaluation of time taken for registering and onboarding process for healthcare professionals.
 - Accessing Patient Information: Test how efficiently healthcare professionals can access and update patient records.
 - Task Assignments: Assess the process of assigning tasks and tracking progress.
 - Communication: Evaluate the communication and collaboration features among healthcare professionals.

- Data Entry and Reporting: Test the ease of data entry and generating reports.
- **Served Population**
 - User Registration: Evaluation of time taken for registering and onboarding process for served population.
 - Access to Health Information: Test the user's ability to access their health information and appointments.
 - Communication with Healthcare Providers: Evaluate the communication features with healthcare professionals.
 - Medication Management: Test how well users can manage their medications and appointments.
 - Feedback and Support: Assess the ease of providing feedback or seeking support.

Testing Methodology

- Moderated Testing: In-person and remote usability tests conducted by trained moderators.
- Think-Aloud Protocol: Participants are encouraged to verbalize their thoughts and actions during testing.
- Surveys and Questionnaires: Collect qualitative and quantitative feedback.
- Task Success Metrics: Evaluate the success rate and completion time for each scenario.
- Observation: Record and analyze user interactions, facial expressions, and feedback during testing.

Data Collection

- Record session videos and screen captures.
- Collect survey responses, feedback, and task success rates.
- Document usability issues, suggestions, and user comments.

Data Analysis

- Analyze videos, surveys, and user comments to identify usability issues.
- Categorize issues by severity (critical, major, minor) and priority.
- Create usability testing reports with actionable recommendations.

Iterative Testing

- Make necessary design and functionality changes based on the initial usability testing findings.
- Conduct additional rounds of usability testing to validate improvements.

Timeline

- Preliminary Testing: 4 weeks
- Analysis and Recommendations: 2 weeks
- Design and Development Changes: As needed
- Follow-up Testing: 4 weeks (after design changes)

Reporting

- Present usability testing reports to the NCDHHS project stakeholders.
- Prioritize and schedule necessary improvements based on the reports.

Conclusion

This usability testing plan aims to ensure the mobile and web app for healthcare systems, targeted at the served population, meets the highest standards of usability. By involving healthcare professionals and the served population, we will gather valuable feedback and insights to create a user-friendly and accessible application that aligns with the NCDHHS mission.

- Build App
 - Integrate low levels of testing before first release
- First Release
 - Gather people in a controlled environment
 - Ask them to test in any and every way possible
 - Get feedback in all different ways
 - Verbal
 - Video
- Fix all the bugs and implement feedback
- Second Release
 - Repeat First Release
- Fix the remaining bugs and prepare for full launch
- Know the audience you will launch to
 - Teach them all the features
 - Have people to teach at all times
 - Make sure it is easy to use for them
 - Product does its job
 - Health App: Base it on other similar apps
 - Look in all different places for ways to better
 -
- Full Release
 - Have people ready to fix whatever issues arise

Krishang Patel, Jimitkumar Patel, Sandeep Singh

- Nothing is fully 100 percent
- Advertise it showing it does its purpose and more
 - Give them a reason to use it

Sources:

<https://www.techtarget.com/searchcloudcomputing/definition/Software-as-a-Service>