Presentation Group 1 (SaaS in Healthcare)

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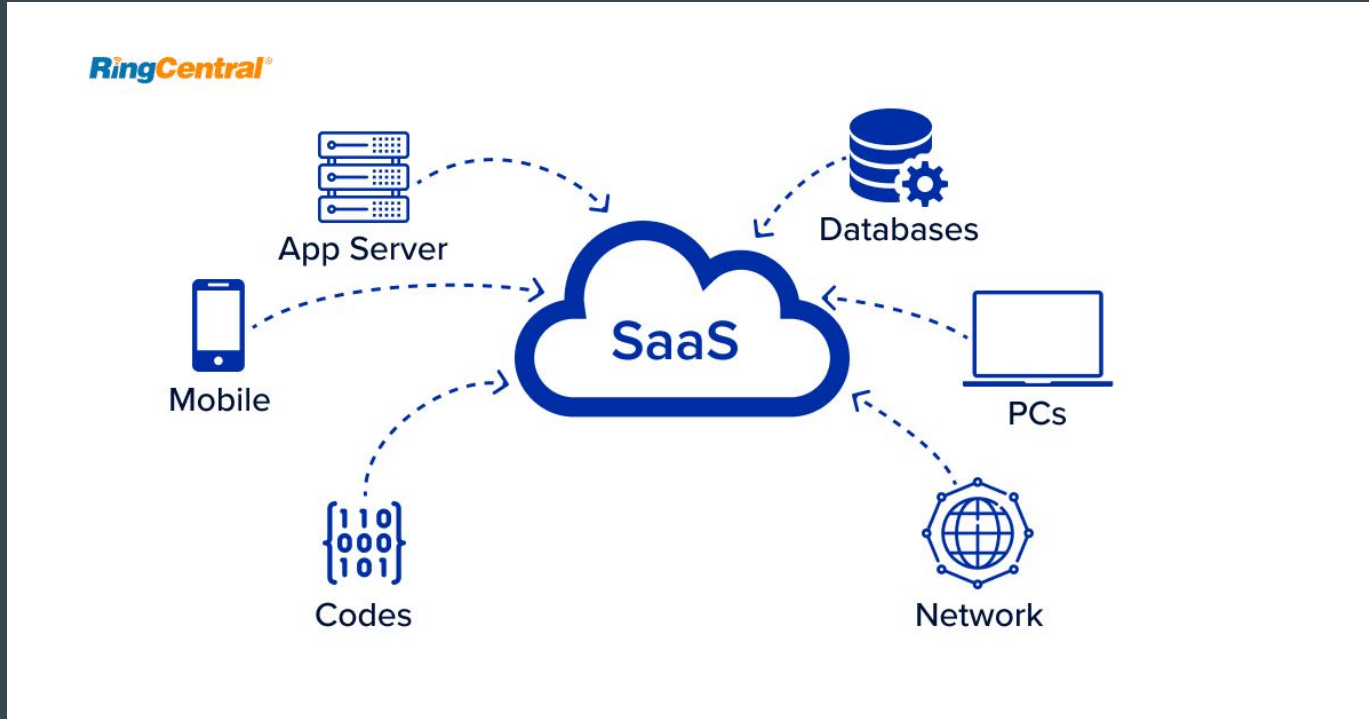By: Vraj Shah, Isaiah Bartlett, Nicholas Digioia-Celentano

Topic

1. 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 SaaS?

- One of the three main categories of cloud computing
  - Software as a service (SaaS)
  - Infrastructure as a service (IaaS)
  - Platform as a service (PaaS)

10 Popular Use Cases of SaaS Application Development

Salesforce — Zoom — Google Applications — Slack — Hubspot
Shopify — SAP Concur — Adobe Creative Cloud — Netflix — Atlassian Jira

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How Does SaaS Work?

Advantages and Disadvantages of SaaS

- Advantages
  - Payment Options
  - Scalable usage
  - Automatic updates
  - Accessibility
  - customization

- Disadvantages
  - Uncontrollable issues
  - Versioning Control
  - Switching vendors
  - Security

Why Use SaaS in Healthcare?

- Cost effectiveness
  - Much cheaper to maintain, since there's no maintenance cost
  - Fairly low initial investment
  - Easy to upgrade, when necessary

- Data backups
  - Normally, it is the responsibility of the healthcare provider to back up data on-site
  - With SaaS platforms, data backups are kept continuously
  - If necessary, all healthcare data can be recovered

What are the Disadvantages?

- Government Regulations
  - Different countries have different healthcare regulations
    - HIPAA (US), GDPR (EU), and PIPEDA (Canada)
  - SaaS provider might be located in a country other than your own
  - This could cause issues complying with healthcare regulations
  - Failure to comply with regulations results in heavy fines and jail time

- "Loss of Control"
  - Data is now in the hands of a third-party
  - System outages and downtimes can prevent access to data
  - In healthcare, this can be a matter of life and death

What Constitutes "App Usability"? A Few Examples

- Error Free
  - Give the user a comfortable, error-free experience, devoid of major bugs and crashes
  - Even the best UX designs will fail if there are errors

- Ease of Use
  - Users should be able to immediately achieve their goal when using the app
  - Users should also be able to easily follow and understand the UI

- Visibility
  - Minimize the user's need to remember details from one screen to another
  - Necessary information should be able to be accessed at all times

Target Audience

- Anyone seeking health care

Usability Testing of Healthcare App as a SAAS

- A way to login to view information about your health and then logout
- Security
  - Using Biometrics
  - oAuth 2.0
  - 2 factor auth
- View your health records
  - A clean UI which shows information about yourself such as age, gender, and etc.
- Next Appointments
  - Integrated with google calendar or device calendar
- Charts and graphs of your health
  - A quick way to see how healthy you are and what needs work
- A way to share your health information to other doctors or other professionals who require it.
  - This makes it easier then having to fill out forms everytime you go an appointment

Demo Application

[Link to figma](#)

Sources

- https://www.techtarget.com/searchcloudcomputing/definition/Software-as-a-Service
- https://www.givainc.com/blog/index.cfm/2022/7/13/advantages-disadvantages-cloud-computing-in-health-sector
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Q&A

- Thank you all for listening!

- Any questions?