# **Usability Audit**

## **Prior data analysis**

## **Audit Summary**

Bugs and Reliability:

Users across multiple reviews faced issues with authentication, encountering error messages like "error communicating with server". Numerous users reported the app's inconsistent performance, describing it as barely functional, rarely working, and failing to authenticate. This led to instances of being locked out and wasted time during login attempts. A user highlighted issues with WIFI connectivity, stating that the app uses WIFI but often struggles to connect. This was noted within task review as well.

## Proximity and Location Accuracy:

Users experienced difficulties with the app recognizing location services, leading to challenges in accessing doors and gates. Some mentioned proximity errors, with the app incorrectly indicating being too close or too far from their destination. There were calls for implementing NFC technology to enhance functionality.

#### Authentication Challenges:

Users mentioned the inconvenience of constantly having to authenticate the device, even after multiple attempts. This often required signing out, restarting the app, or fully restarting the device. This was an issue observed during task analysis as well. Users reported issues with the app repeatedly logging them out and then preventing re-authentication, with messages suggesting waiting a few days before trying again. This was an issue also found during examination by the team.

User Interface visuals: Some users expressed dissatisfaction with the outdated interface, some describing it as reminiscent of the late 1990s.

Low Success Rate and Ineffectiveness:

Users reported a low success rate, with instances where the app worked only once out of multiple attempts. This was also observed during task analysis. The app isn't

consistent when a user tries to open a door. This results in users having multiple attempts

#### Feature support:

Users expressed frustration over the absence of features such as a home screen widget, fingerprint recognition, and overall app support. Some emphasized the need for updates to align with evolving technology. From reviews taken from the Apple store; Users requested additional features such as integrating the virtual access card into Apple Wallet, supporting 3D Touch, and improving the overall intuitive interface. These common issues highlight a range of technical challenges affecting the app's reliability, functionality, and user experience.

### Application failure impact:

A user shared a specific incident of being locked out of their dorm at 2 am, attributing the issue to the app's failure to verify credentials. This had a significant impact on their ability to give a final presentation. This was not the only example of a user being hindered from their practices due to the app's malfunctions, but this is an example of a significant problem having harsh consequences. Users shared instances where the app's failures resulted in being locked out of dorms, difficulty in performing essential tasks like laundry, and the overall negative impact on their daily routines. Multiple users mentioned the app's failure to open specific doors, particularly room doors, leading to instances of being locked out and inconveniences in daily activities. This might be an issue on the campus' end, but it is still a concern to be raised.

#### **User experience survey results**

Link to survey spreadsheet:

https://docs.google.com/spreadsheets/d/1ypP9qwfGLROH7zanBTmkVcx7l\_vUYhUTme HpDHBPBRg/edit?usp=sharing

#### Data too large to insert.

From the data gathered we found that most users don't use the app very frequently. It can be assumed that they use their card instead. Some common belief that our survey attendee share with other reviewers is the distaste for the app's visuals. With a small dataset, the strengths of some attributes cannot be determined with some wild assumptions. Our data does confirm a few things, most people don't use the app or very

infrequently, they do not hold the app in a high regard interns of general experience using it, the app does not work consistently when users attempt to complete their task, the app isn't too hard to navigate, and the app's functions are very useful. Even though the application has problems, the purpose and use of the app is appreciated amongst users.

#### Structured task analysis overview

From the data gathered we have found some interesting results amongst our survey attendees. Here is an overview of the result from task analysis.

#### Task experience:

**Task 1**: Login using school credentials

Common issues: Users found issues with logging in. The clarity of what information is required confuses users.

Task 2: Open a door (any door)

Common issues: The app constantly asks for permissions from the user to proceed and in some cases, the app would not function as intended.

**Task 3:** Open the E1 North Entrance without using search

Common issues: None

**Task 4**: Using the search feature, open Kaplan West Main Door

Common issues: None

Task 5: Without connecting to wifi, open door Crown Lower Level exterior East

Common issues: The application is adamant it needs wifi to function, yet the app's lack of function forces users to manually correct problems surrounding this using phone settings.

The app's complaints may be a problem with specific locations, devices, or personnel. The user question didn't have nearly as many issues with the application as others from the examined reviews or surveys. It could be the app's inconsistent nature, which was a critique common in many reviews. Because of this, task analysis cannot be taken as a definite experience for a user of CBORD mobile ID application.