NS HUB EMPLOYEE PORTAL MOBILE APP

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Abstract

The NS Hub building will be completed by the year 2024, open to national servicemen, as well as families and to the public. The building, located along Upper Bukit Timah Road, will include many facilities such as a fitness hub, a childcare centre, food and beverage outlets. Most importantly, it will serve as the central hub for all national service related medical checks and tests, and a medical centre for full-time NS men for medical check-ups. Inevitably, much digital services will be adopted to improve visitor service. This project aims to find out what features are necessary in an employee portal to improve productivity and propose a design for a NS Hub employee portal mobile application.

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The new NS Hub establishment is aimed to be fully built up and completed by 2023, where NS Services will be done with the help of technology and digital transactions through a mobile app [1]. As such, a lot of personal information and data will be handled by the employees on various digital devices. Hence, an employee portal is much needed in order to provide a secure platform for employees to carry out work and also to function as a convenient way for employees to carry out tasks.

A good employee portal should include features that an employee want and will use, and should bring them ease and convenience while at work. This brings up my research question: What features would an employee like in a work portal app?

This project aims to address the key features that are necessary in the NS Hub employee portal application, as well as how these features benefit the employees who will use this app.

Methods

To bring across the key features and layout of the product, I decided to draw a wireframe, as it is a relatively simple process to produce a blueprint for the app showing its basic features, and also effectively displays information of the user experience. A wireframe will help me bring across my desired product without having to spend too much time coding and doing the graphic design, hence my choice of doing a wireframe sketch.

My wireframe was done on the website Uizard [2], which offers wireframing tools to create a prototype for free, and is easy to use to make a decent looking prototype. This eradicates the need to pay for a software to design the app, hence there is no cost to be considered. The only downside is that the software only limits ten screens per project.

As for research, most of the information and results gathered were from online articles and research papers, as they are easily accessible and covers the opinions of a wider range of employees.

Results

An employee portal should be a communications channel and collaboration platform. It helps people work better by combining the best features of wikis, blogs, and document and content management systems. A portal makes it easy for everyone inside an organization to contribute, not just a select few [3].

In order for everyone to be able to contribute, there should be features that an employee at NS Hub can and will use. Some commonly desired feature in an intranet or an organization portal are a storage drive, social features, as well as access to company broadcasts or newsletters [3, 4].

An online storage drive is essential for employees due to its convenience. In recent times, many employees prefer to have a flexible work routine, almost 4 in 10 workers in Singapore felt

that employees should be able to work from home 3 days a week [5]. A cloud storage would allow employees to access any files and documents from anywhere as long as they are logged into their accounts through the employee portal. Based on a study on cloud-based intranets, cloud computing has gained increasing attractiveness as compared to local hosting due to cost reduction, greater flexibility in employee activities, stronger security, and are more optimal in resource application [3, 6].

Apart from a cloud storage, an event and task management system has a fair amount of appeal to workers. It serves as a to do list which can help employees track deadlines and progress of their work and thus boost productivity [4].

Social elements in a portal can also help support internal communication and collaboration [7]. Social features like an in-built messaging system can allow employees to interact and communicate, especially when working on projects, building up a strong company culture [4]. Together with this, document sharing can also help employees complete tasks faster as it saves time and ensures everyone can adjust to requirements to meet their goals [8].

Access to company broadcasts and notices can replace the need to send out announcements via email. A survey in 2018 has shown that only 37 percent of employees read internal email messages [9].

Lastly, customisable settings can help reduce frustration within employees by being able to select their desired user interface for the app [4, 10], as well as language and notification settings.

Discussion

The results can be categorized into four main features that the employee portal should contain – Workspace, Socials, Announcements and Settings. These four categories will also be the four home pages the app will have, so as to provide a clear separator for where each feature lies without overwhelming the user. Each home page will have a navigation footer with four icons representing each section.

Workspace

The key features the employee portal will have in the workspace page are the cloud-based storage drive and the event reminder. The cloud storage drive is essential for employees to access documents regardless of location, which makes it convenient for them especially when working from home, meeting the rising demand of flexible work hours. In order to achieve high security, the cloud will be hosted by MINDEF without the use of any third party services, allowing the storage of confidential information and data. Folders can be created as an option for employees to organise their files in their cloud storage drive.

Event reminders will serve as a reminders page for employees to keep track of upcoming events, deadlines or progress. All events will be sorted in order of time, with the most urgent at the top for ease of reference.

A side feature will be a recently edited tab, where recently edited or viewed files can be seen directly from the home page for quick access, so as to reduce the number of clicks to reach a file that is constantly being edited.

Fig. 1. Wireframe of My Workspace section
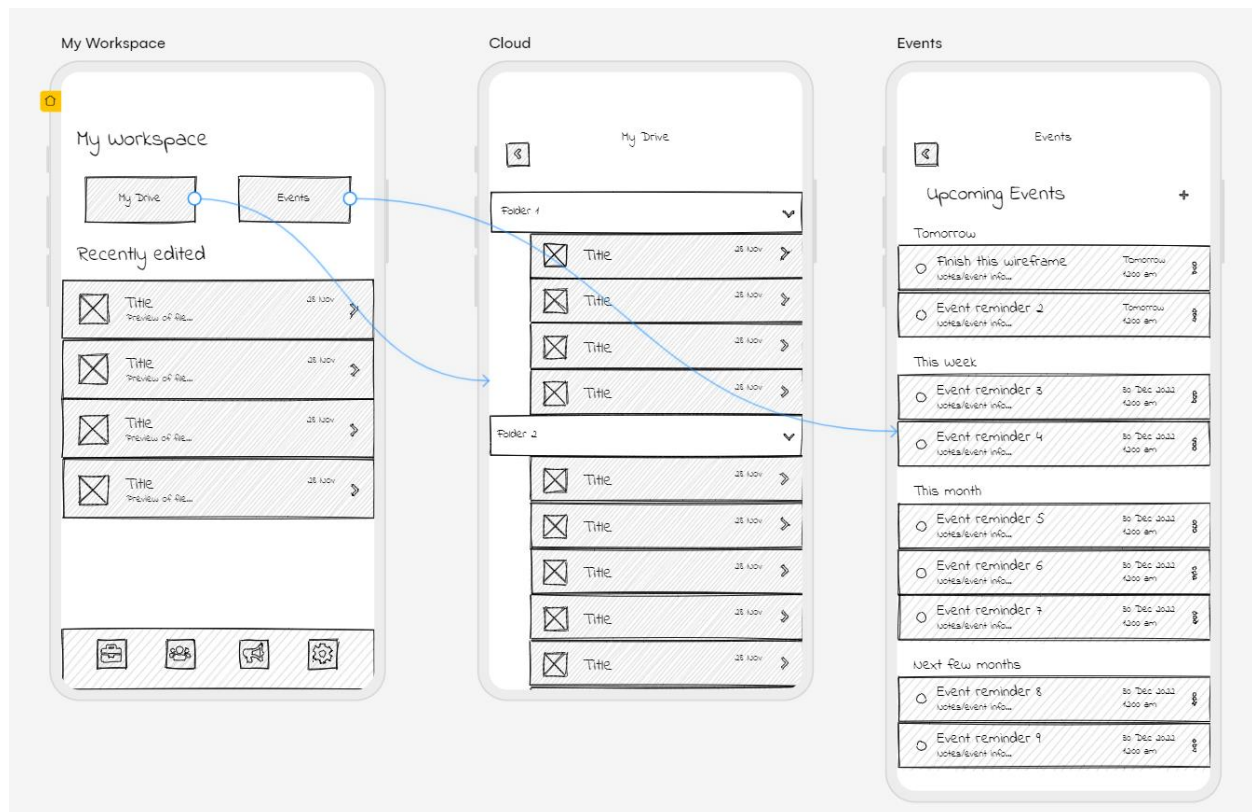
The buttons for the cloud drive and event reminders are at the top of the home page with the recently edited unerneath, allowing for an intuitive and easy to navigate use interface.

Socials

   The socials page will allow employees to have easy communication between colleagues and teammates. This page will include a messaging system for workers to communicate with either a single colleague or with a team, separated by two tabs at the top, named "Contacts" and "Teams". For convenience, there is also a search bar for employees to search for their desired contact via name or department.

   In the message screen, there is also a button on the bottom left to share documents with the recipient. This will bring the user directly to their cloud drive where they can select the document to be shared.

Fig. 2. Wireframe of Socials section
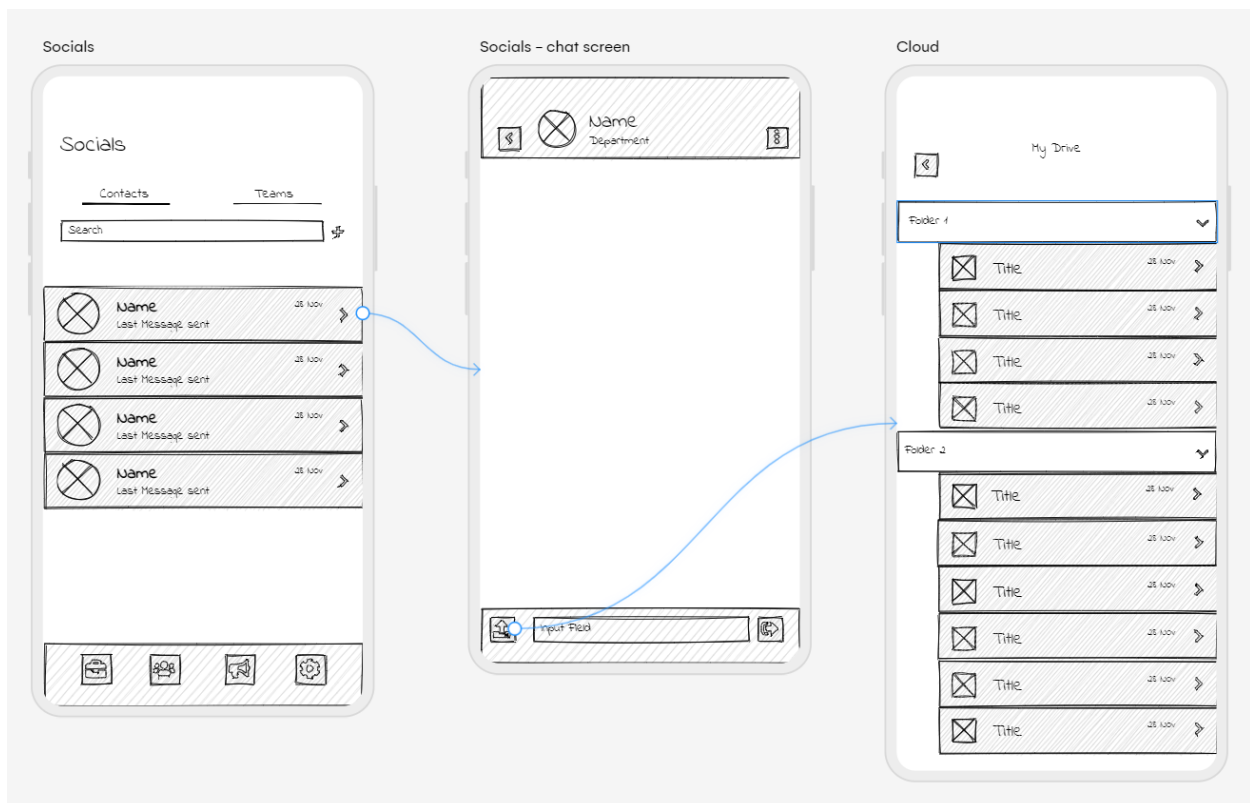
This gives the app a clean and simple look without too many options, yet fulfilling the desired features. The overall user interface in this section is quite similar to other messaging apps, hence it will be intuitive for a first-time user.

Announcements

The announcements page will serve as a noticeboard for the employee portal, where all announcements, broadcasts and notices will be sent for employees to read and access, personalized for each employee. This will replace the need for sending email notifications, where some do not read the message as they are often lost in the inbox. Emails also face the risk of phishing scams, which could cause a data breach, hence strengthening the cybersecurity of NS Hub's digital systems.

This page will have cards with the title of the notice and a small preview, along with the time it was sent out. This gives employees a reference, especially if they have to look for a past announcement.
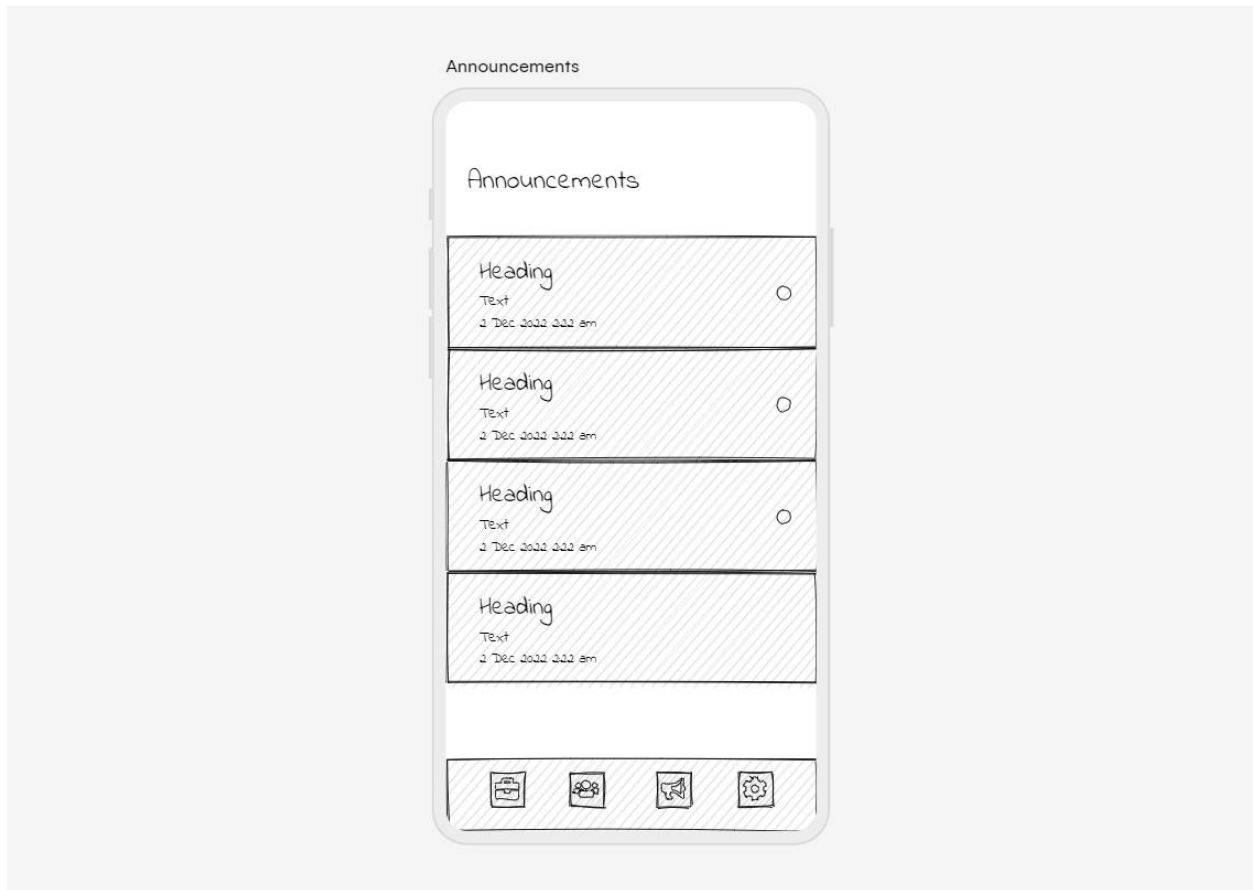
Fig. 3. Wireframe of Announcements section

A smart notification system will also be included to notify employees of the announcements that have not been read, indicated by the dot on the side of the card. This ensures all important messages are not ignored.

Settings

This page contains all the necessary technical features that an employee may require or may choose to use.

The profile page allows employees to check their personal information with the human resources department and make changes if needed. General settings, notification settings and display settings are also included for employees who wish to customize settings such as language, layout, or colour theme of the portal. The helpdesk number and HR information will also be accessible through this page for employees to refer to, if necessary, hence there is no need to go directly to HR for trivial matters.

A feedback page is also provided for employees to give their feedback on the portal's features or the workplace. This reduces the need to report any faults to the respective managements, making it not only convenient for workers, but also the building to keep track of issues and improvements to be made.

Fig. 4. Wireframe of Settings section
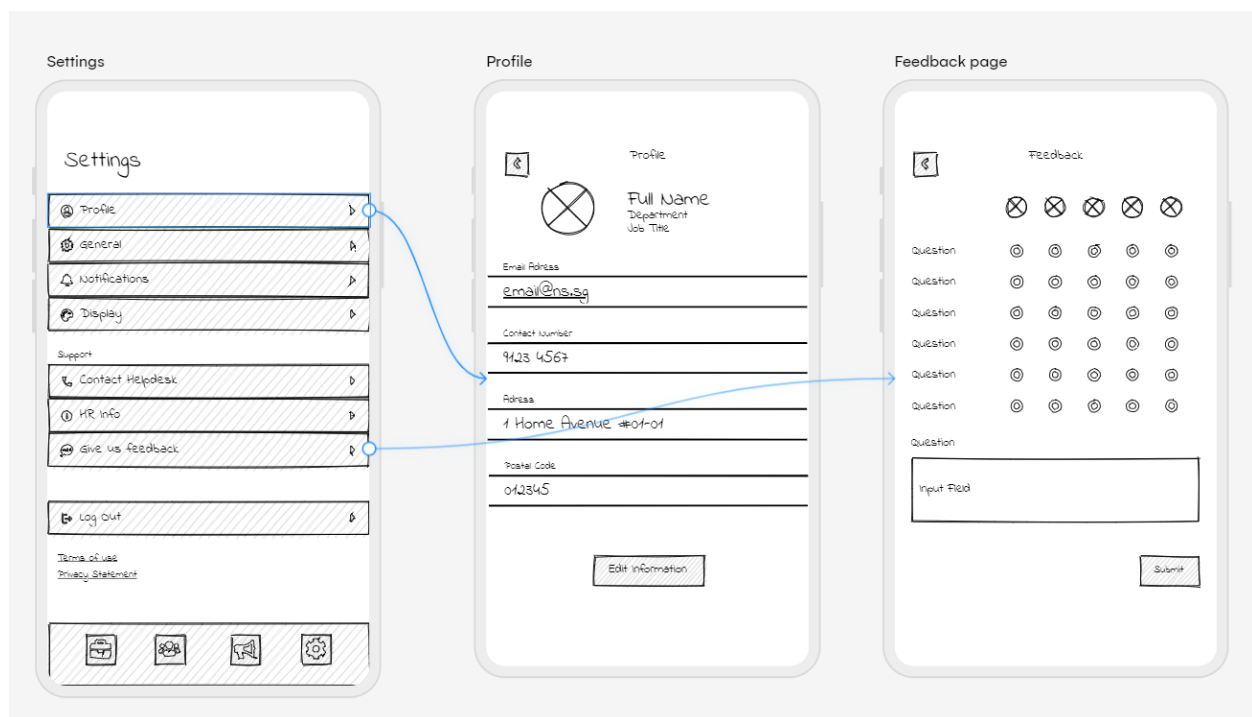
The feedback form comes as a questionnaire so that it is quick to fill in and is not a hassle for employees to make any complaints.

Due to the ten screen limitation set by Uizard, I am only able to design the screens for the profile and feedback form page. There is also an option at the bottom of the settings screen to log out if necessary.

Conclusion

My design of this employee portal app for NS Hub has the key features that a employee would need or desire, ranging from workplace file storage systems to the optional adjustable settings. These features work together in order to create an employee portal app that is accessible for the employees to meet demands such being able to work from home, and can also help to improve productivity and workplace culture.

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