

---

# DESIGN INVESTIGATION INTO HOW SOCIAL MEDIA CAN BE EMBEDDED INTO AN ORGANISATION.

**UNIVERSITY OF HUDDERSFIELD**  
**BSC(HONS) WEB TECHNOLOGIES**

Sophie Thomas  
U1556625

Supervisor: Dr Michael O'Grady  
Examiner: Dr Yongrui (Louie) Quin

My name is Sophie Thomas and my dissertation project a design investigation into how social media can be embedded into an organisation.

## INTRODUCTION

The Health Informatics Service is a large organisation with over 200 employees working on a variety of projects for their customers. However, because social media and the ability to share work is not embedded in the organisation, knowing what members of staff are working on that provides value to their customers becomes impossible. This, therefore, means that those projects and the staff members involved do not get the recognition they deserve. This could mean that the morale of staff could be adversely affected as they do not feel as if their work is being noticed.

Throughout this project, research was done which covers topics such as social media, digital marketing, aspects of design and reward techniques. The final product is a fully functioning prototype of the app that shows how staff can share the work they are doing within the organisation and get rewarded for it. Additional assets were created further help explain and show the concept created.



**The Health Informatics Service**



The Health Informatics Service was the client for this project as I currently work there which gave me access to knowledge about the company and their staff.

The Health Informatics Service is a large organisation with over 200 employees working on a variety of projects for their customers. However, because social media and the ability to share work is not embedded in the organisation, knowing what members of staff are working on that provides value to their customers becomes impossible. This, therefore, means that those projects and the staff members involved do not get the recognition they deserve. This could mean that the morale of staff could be adversely affected as they do not feel as if their work is being noticed.

## ETHICAL REVIEW & RISK ASSESSMENT

UNIVERSITY OF HOORFIELD: RISK ANALYSIS AND MANAGEMENT		UNIVERSITY OF HOORFIELD: RISK ANALYSIS AND MANAGEMENT	
PROJECT: CRITICAL INCIDENT ANALYSIS		PROJECT: CRITICAL INCIDENT ANALYSIS	
Project Title: <u>CRITICAL INCIDENT ANALYSIS</u>		Project Title: <u>CRITICAL INCIDENT ANALYSIS</u>	
Project Description: <u>CRITICAL INCIDENT ANALYSIS</u>		Project Description: <u>CRITICAL INCIDENT ANALYSIS</u>	
Project Start Date: <u>25/01/2024</u>		Project Start Date: <u>25/01/2024</u>	
<p><b>STATEMENT OF CRITICAL INCIDENT ANALYSIS</b></p> <p>The purpose of this document is to provide a clear and concise overview of the critical incident analysis process. This document is intended for use by the project team and the project sponsor. It is intended to provide a clear and concise overview of the critical incident analysis process. This document is intended for use by the project team and the project sponsor.</p>		<p><b>UNIVERSITY OF HOORFIELD: RISK ANALYSIS AND MANAGEMENT</b></p> <p>The purpose of this document is to provide a clear and concise overview of the critical incident analysis process. This document is intended for use by the project team and the project sponsor. It is intended to provide a clear and concise overview of the critical incident analysis process. This document is intended for use by the project team and the project sponsor.</p>	
<p><b>CRITICAL INCIDENT ANALYSIS</b></p> <p>The purpose of this document is to provide a clear and concise overview of the critical incident analysis process. This document is intended for use by the project team and the project sponsor. It is intended to provide a clear and concise overview of the critical incident analysis process. This document is intended for use by the project team and the project sponsor.</p>		<p><b>UNIVERSITY OF HOORFIELD: RISK ANALYSIS AND MANAGEMENT</b></p> <p>The purpose of this document is to provide a clear and concise overview of the critical incident analysis process. This document is intended for use by the project team and the project sponsor. It is intended to provide a clear and concise overview of the critical incident analysis process. This document is intended for use by the project team and the project sponsor.</p>	

An ethical review assessment and risk assessment was conducted which identified the risks that would occur during the project and that there were no ethical issues related to this project.

## METHODOLOGY

The PRINCE2 methodology was chosen as it provides detailed stages which can be followed to provide a smooth running of the project. Furthermore, as teams at The Health Informatics Service already use this methodology it means that they will be familiar with the project process. The documentation used in PRINCE2 will aid in defining what is needed for this project and how to go about completing them.

This methodology will be adapted to cater for this being an individual project which means that the roles defined will be merged and undertaken by one person rather than a team of people. Furthermore, as this project is not a team project a lesson's learnt document will only be created at the end of the project to allow for reflection.



The PRINCE2 methodology was chosen as it provided detailed stages which were followed to provide the smooth running of the project. Furthermore, teams at The Health Informatics Service already use this methodology which means that they will be familiar with the project process.

This methodology was adapted to cater for this being an individual project by merging the roles into one and a lesson's learnt document only being created at the end of the project.

## GANTT CHART

Tasks	October	November	December	January	February	March	April	May
Ethical Review Form								
Risk Assessment								
Methodology Research								
Academic Research								
Project/Product Research								
Product Specification, Design & Development Plan								
Screen Design and Prototyping								
User Testing								
Report Hand-In								

As part of the PRINCE2 Methodology a time plan was completed which shows the tasks required for the project and when they should be completed by.

---

## ACADEMIC RESEARCH

Research was conducted in digital marketing, social media optimisation, recognition and persuasion techniques, user experience and usability. All of which provided a good base knowledge and principles.

These principles included;

- The nine rules of engagement as stated by Ryan, D.R (2017) in his book Understanding Digital Marketing: Marketing strategies for engaging the digital generation.
- The ten rules for social media optimisation which were outlined by Shreves, D.S and Krasniak, M.K (2015) in the book Social Media: Optimization for Dummies.
- The six principles of persuasion which were first described in Cialdini's 1984 book Influence: the psychology of persuasion.
- The 10 web usability heuristics which were developed by Jakob Nielsen and Rolf Molich in 1990.

---

Research was conducted in digital marketing, social media optimisation, recognition and persuasion techniques, user experience and usability. All of which provided a good base knowledge and principles.

These principles included;

The nine rules of engagement, the ten rules for social media optimization, the six principles of persuasion and the 10 web usability heuristics.

## PROJECT RESEARCH

Project specific research into competitors, prototyping tools and guidelines were conducted.



Project specific research into competitors, prototyping tools and guidelines were conducted.

Competitor analysis was done on the apps Buffers and Receipt Hog to see what they offer and whether any features they have would be beneficial in this app.

Prototyping tools were considered as this was the end-product for this project. Marvel App and Adobe XD were compared with Adobe XD being most suitable as it allowed for the design and prototyping aspect to happen in one space meaning using another software for creating the design was not needed.

## PRODUCT SPECIFICATION: GANTT CHART

Tasks	October	November	December	January	February	March	April	May
Ethical Review Form								
Risk Assessment								
Methodology Research								
<b>Academic Research</b>								
Digital Marketing								
Social Media								
Persuasion Techniques								
Gamification								
Design / UX								
<b>Project/Product Research</b>								
Competitors								
Prototyping Tools								
NHS Guidelines								
Project Survey								
<b>Product Specification, Design &amp; Development Plan</b>								
Personas								
MoSCoW								
Functional Requirements								
Assumptions and Facts								
Sitemap								
User Journeys								
Screen Design and Prototyping								
User Testing								
Report Hand-in								

Within the PRINCE2 methodology reviewing the progress of task is important. The Gantt chart was updated so show more in-depth tasks that need to be completed for this project.



## PRODUCT SPECIFICATION: PERSONAS

Bryde Town

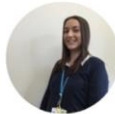


Female , 27 years old , Web Developer

Bryde uses social media often for both her personal accounts and other business accounts. She mainly uses Facebook and Twitter.

She needs this app to allow her to easily share what she is working on, without forcing her to take too much time out of her day. She also wants to be able to see the points she has earned.

Becky Johnson



Female , 27 years old , Team Leader

Becky only uses Facebook for personal use as she finds social media to be a toxic environment.

She needs this app to allow her to share content without her sharing it manually to the social media platforms. She also wants to see the status of the posts she has submitted to get track of whether they were used. As Team Leader she would like to see how members of her team are performing in some sort of leaderboard.

Rob Birkett



Male , 43 years old , Assistant Director

Rob uses social media regularly but only tends to like and share posts rather than creating posts himself. He mainly uses his staff Twitter account and LinkedIn.

As Assistant Director he would like to see staff performance on the app. He would also like to see social media feeds embedded into the app that he can interact with.

Personas were created to further understand what the product should include and aided in knowing whether the app was suitable for The Health Informatics Service.

## PRODUCT SPECIFICATION: MOSCOW

### MUST have

- 1 Fully working app prototype
- 2 Allow staff to submit posts
- 3 Have a login system
- 4 Automatically reward users for submitting posts
- 5 Allow staff to track the points they earn

### SHOULD have

- 1 Login system should use their AD logins (AD login is how staff sign into their PCs)
- 2 App should have validation throughout

### COULD have

- 1 Allow managers to track staff performance
- 2 Leaderboard showing other staff members points

### WOULD have

- 1 Allow teams to be setup
- 2 Show feeds and allow interactions with those feeds on app

A MoSCoW chart which is a prioritisation technique, was created based on the persona needs. This provided direction to the overall application and what was required functionality-wise.

## PRODUCT SPECIFICATION: FUNCTIONAL REQUIREMENTS

**Requirement 1** = The app must be appropriate for the end user to submit content and receive points.

**Requirement 2** = Staff must be able to submit content through the app and see the status of their content (status checkpoint will be shown such as; pending, approved or rejected).

**Requirement 3** = Staff must be able to track their own points and see how far off they are from claiming a reward.

**Requirement 4** = Validation should be provided to the end user throughout the app.

**Requirement 5** = Staff should be able to login using the AD (Active Directory) login details.

The information gathered on the MoSCoW chart is ranked in importance and these were the 5 requirements that came from it.

## PRODUCT SPECIFICATION: ASSUMPTIONS & FACTS

### Assumption 1

The app will make me register / create an account for me to be able to use the app.

**FACT** = The app will use the staff AD login credentials to allow them to login into the app meaning that the end-user will not need to create an account themselves.

### Assumption 2

The app will directly allow me to post to the company social media channels.

**FACT** = The app will allow the end-user to submit content and earn points through the submission but the content will be reviewed by the social media manager before being posted on social media.

### Assumption 3

The app will show me how many coins I have collected and how many coins are needed for different rewards.

**FACT** = The app will show the user how many coins they have currently have, as well as their coin lifetime total. The app will also inform the user how many coins they need for each reward.

After speaking with Bryde, Becky and Rob, the people used for the personas, assumptions were made about the app.

### Assumption 1

The app will make me register / create an account for me to be able to use the app.

**FACT** = The app will use the staff AD login credentials to allow them to login into the app meaning that the end-user will not need to create an account themselves.

### Assumption 2

The app will directly allow me to post to the company social media channels.

**FACT** = The app will allow the end-user to submit content and earn points through the submission but the content will be reviewed by the social media manager before being posted on social media.

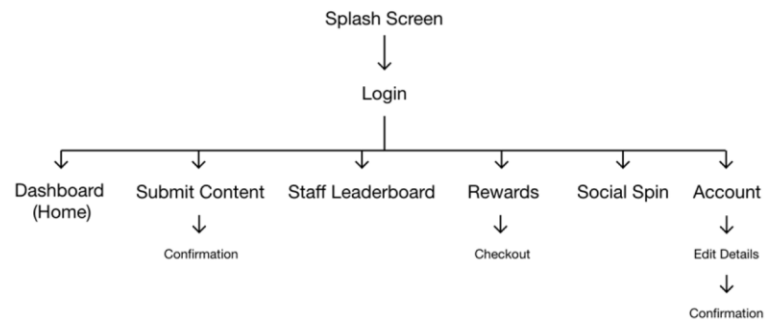
### Assumption 3

The app will show me how many coins I have collected and how many coins are needed for different rewards.

**FACT** = The app will show the user how many coins they have currently have, as well as their coin lifetime total. The app will also inform the user how many coins they

need for each reward.

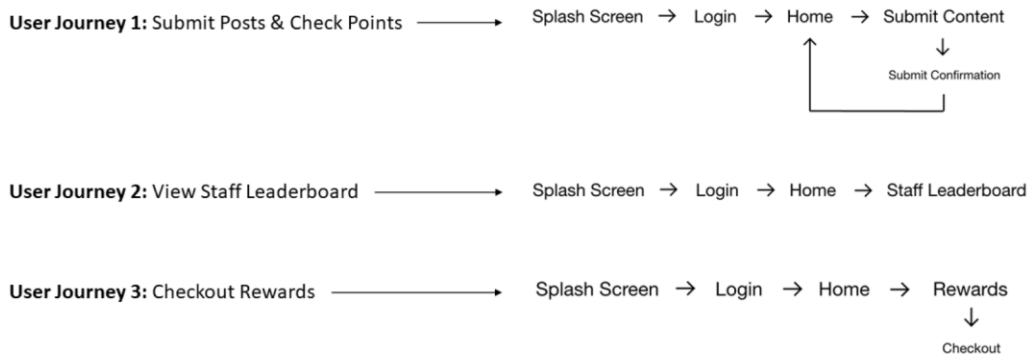
## PRODUCT SPECIFICATION: SITEMAP



A sitemap is a plan of the website's or app's content specifically the pages that will be within that website or app.

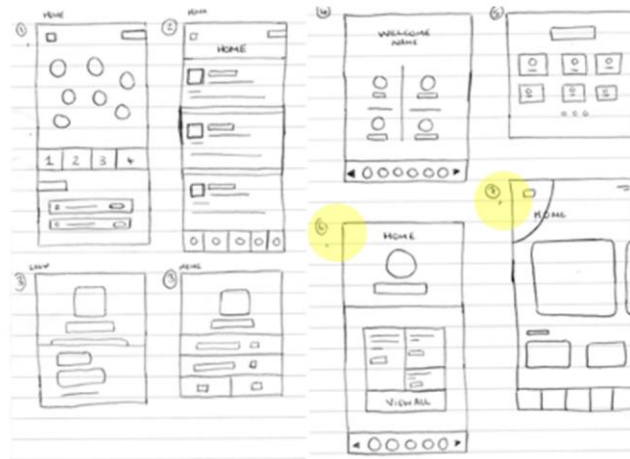
This is the sitemap for the app.

## PRODUCT SPECIFICATION: USER JOURNEY



User journeys were created to show how the different personas could perform specific tasks using the app. It was also used to check how easy it was to complete the task and a way to calculate how many steps it will take for that task to be completed.

## DESIGN OF APP PROTOTYPE: WIREFRAMES



Low fidelity wireframes were created based on the functional requirements and personas which have no style and focuses on where the content will sit rather than the written content and design.

The first stage was sketching out layouts for the home page before going into finer detail of how the other pages would look.

Version 6 and 7 were taken forward and sketched out fully.

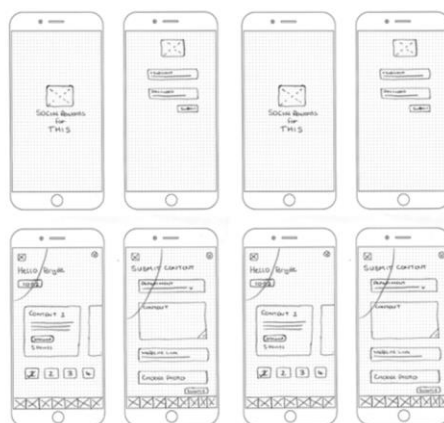


## DESIGN OF APP PROTOTYPE: WIREFRAMES

Wireframe Set 1



Wireframe Set 2



These two sets of wireframes were tested by the staff at The Health Informatics Service to see which was most suitable in terms of content positioning, ease of use and navigation.

Wireframe 2 was deemed most suitable on all three aspects.

---

## FONTS AND COLOURS

As the The Health Informatics Service is an NHS organisation (being hosted by Calderdale and Huddersfield Foundation Trust) the app will follow the NHS Identity guidelines. The two fonts that can be used are:

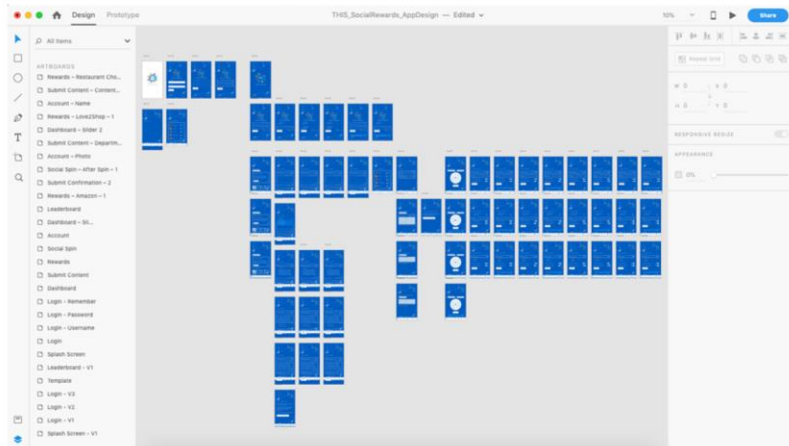
- **Frutiger** - Core NHS Font (weights are Bold, Roman, Roman Italic and Light)
- **Arial** - Secondary NHS Font (weights Regular and Bold)

As the core NHS colours are NHS blue (#005EB8) and White (#FFFFFF) these will be predominately used on the app.

As the The Health Informatics Service is an NHS organisation (being hosted by Calderdale and Huddersfield Foundation Trust) the app will follow the NHS Identity guidelines by using their two fonts Frutiger and Arial and predominately using the NHS Core colours.

## DEVELOPMENT OF APP PROTOTYPE: DIGITAL DESIGNS

(1/5)



The app was fully designed digitally using Adobe XD and in total there was 65 artboards created.

## DEVELOPMENT OF APP PROTOTYPE: DIGITAL DESIGNS

(2/5)

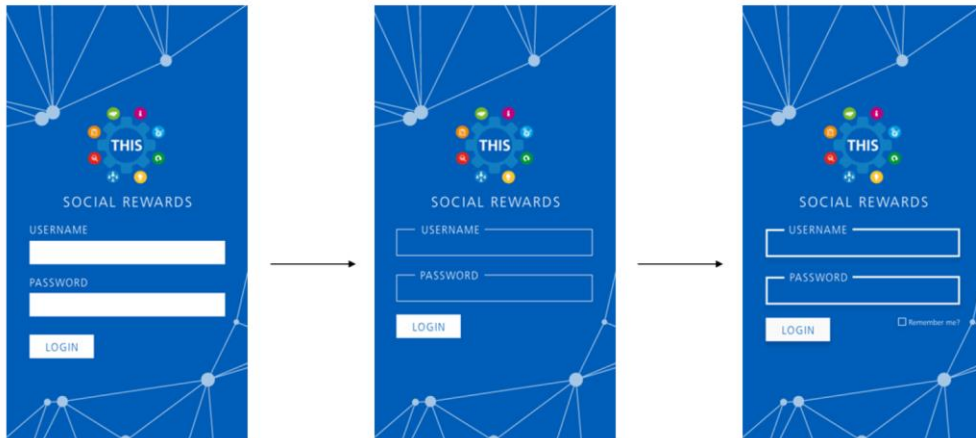


**SPLASH SCREENS** (*version 1 on the left, version 2 on the right*)

The splash screen was designed first which became the base of the app's design. The first version on the left, although was technically on brand, did not stand out and visually felt bland. After taking inspiration from The Health Informatics Service new website (currently still under development), a blue background (NHS Blue) and lines on the top and bottom of the page were added. Adding in these elements will improve the brand overall consistency across their products and enable staff to clearly recognise this is an app for The Health Informatics Service. Also, as the background now has colour, the logo was swapped with the version that has the text 'THIS' in white to avoid the text being not being legible.

## DEVELOPMENT OF APP PROTOTYPE: DIGITAL DESIGNS

(3/5)



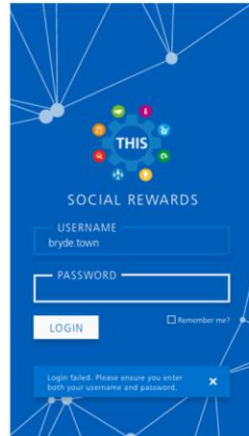
**LOGIN SCREENS** (version 1 on the left, version 2 in the middle and version 3 on the right)

The first iteration of the login screen, although functioned properly, felt like the elements did not align well with the line assets in the background. The second version took the text boxes and rather than having backgrounds instead gave them just a border which provided a clean and modern look.

To further improve the text boxes and allow them to stand out as clickable items, the border width was increased and box shadow was added.

## DEVELOPMENT OF APP PROTOTYPE: DIGITAL DESIGNS

(4/5)



LOGIN SCREEN WITH ON-SCREEN VALIDATION



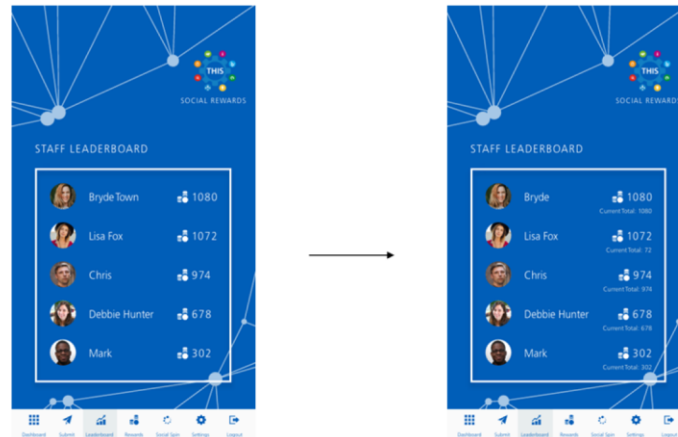
TEMPLATE SCREEN

To give the user validation on their actions a pop-up alert message was designed and used throughout the app design to alert the user an action was unsuccessful.

A template design was created and used as base for the other pages to create more space for the content. This meant the logo was move to the top right of the page and the menu was designed which included both icons and text. Text was included to aid the user in knowing what page they were about to go to next was.

## DEVELOPMENT OF APP PROTOTYPE: DIGITAL DESIGNS

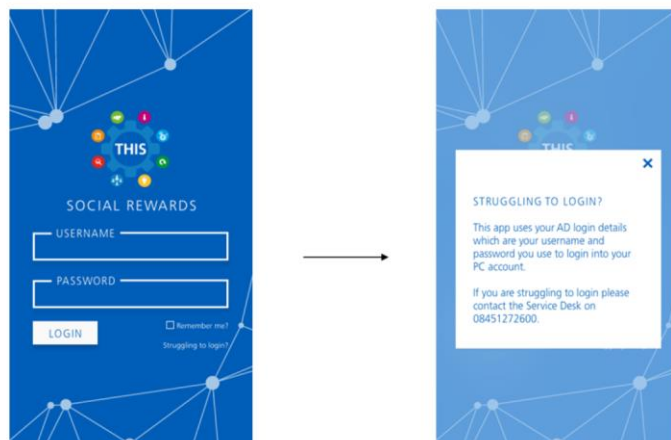
(5/5)



LEADERBOARD SCREENS (version 1 on the left, version 2 on the right)

One significant consideration that was made during the process of designing the app was the leaderboard section, specially the total that is shown. After asking the Webteam for their opinion on this, it was decided that showing both the overall number of coins collected and current amount of coins was most suitable as it allowed them to retain their place on the leaderboard while also knowing if they have traded in coins. This therefore provides more information to the staff members.

## DEVELOPMENT OF APP PROTOTYPE: ITERATIONS (1/2)



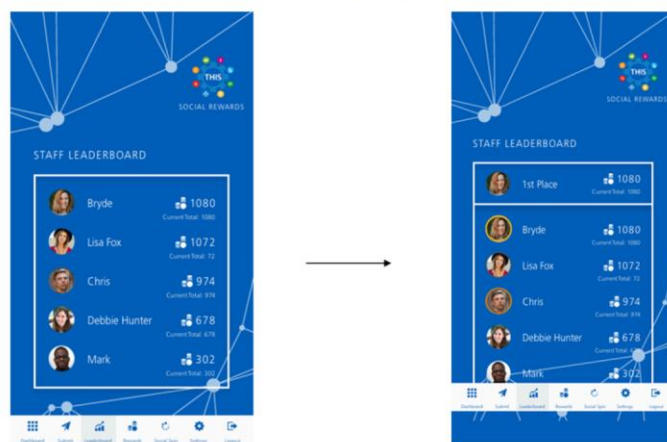
STRUGGLING TO LOGIN SCREENS (login screen on the left, modal on the right)

Following the feedback that was given from the staff at The Health Informatics Service, amendments were made to enhance the overall experience of the app.

A 'Struggling to login?' button was added to the login pages, which once clicked provides a modal box with information regarding logging into the app as from feedback it was clear that users expect to see this and does provide users with information when they are unable to login rather than leaving them in the dark.



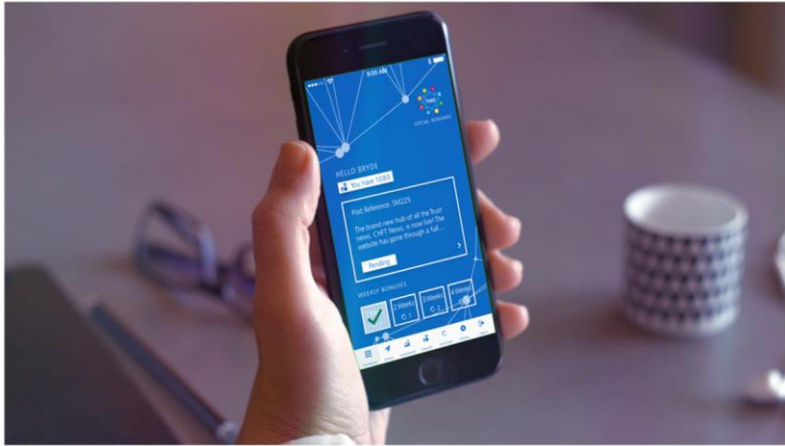
## DEVELOPMENT OF APP PROTOTYPE: ITERATIONS (2/2)



LEADERBOARD SCREENS (version 2 on the left, version 3 on the right)

The leaderboard section was also altered to show the users own position above the leaderboard allowing users to quickly see where they are on the leaderboard without have to scroll through everyone. As well as this, more emphasis was added to the users in 1st, 2nd and 3rd position which was achieved by adding border around the users avatar in the colours that most look like Gold, Silver and Bronze while still compiling with the NHS Guidelines.

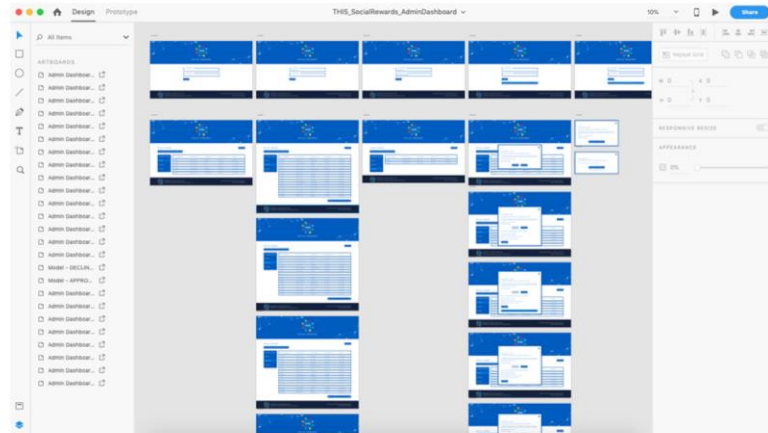
## DEVELOPMENT OF APP PROTOTYPE: PROTOTYPE



<https://xd.adobe.com/view/8b462bcc-4927-4620-45a8-9fe346cc967a-fd77/?fullscreen>

Once all the refinements had been made, the pages were linked together and the final prototype was created.

## DESIGN AND DEVELOPMENT OF WEBSITE PROTOTYPE

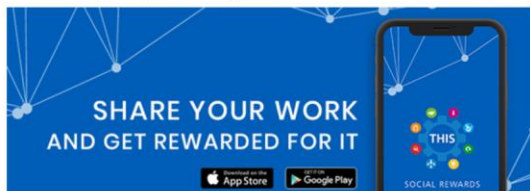


<https://xd.adobe.com/view/42aeb86a-23db-4842-5401-6478facba451-349f/?fullscreen>

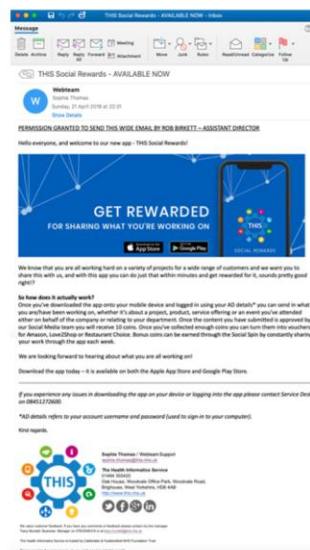
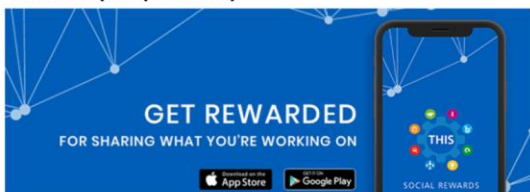
To go alongside the app, an admin dashboard was designed and prototyped using Adobe XD to show how the posts submitted by staff gets processed.

## EMAIL MOCK-UP

Email Graphic (version 1)



Email Graphic (version 2)



To provide staff with more explanation around how and why the app should be used an email mock-up was written as from a recent questionnaire sent to the staff at The Health Informatics Service regarding their blog, found that their preferred method of communication was email.

Version two of the graphic was used in the email as it provided more hierarchy between the text elements and emphasis the reward aspects which is designed to entice the staff to use the app.

---

## SURVEYS

The four survey's, along with the amount of responses, were:

- **THIS Social Media App (21 responses).** This was sent out to gain validation that the idea for this project was something that would be a good fit for an organization like The Health Informatics Service while also giving an insight into what social media platforms those staff members use already and what the app needs to do to make people add this into their daily routine.
- **THIS Social Media App: The Idea (28 responses).** This was sent out to specifically find out which out of two concept ideas for the product was most suitable.
- **THIS Social Media App: Layout (22 responses).** This was sent out to gauge which wireframe layout of the app was most suitable.
- **THIS Social Media App: Prototype (25 responses).** This was sent out to gather feedback on the app design to see whether the app meets the brand guidelines, that it is easy to navigate, what they like the most, what they think could be changed, added or improved on the app and whether they would download it.

Throughout this project four surveys were sent out to the staff at The Health Informatics Service to gather their ideas and opinions on different aspects of the product.

The sample size and results from these surveys were suitable and provided direction for the product as well as suggestions to improve the product.

---

## CONCLUSION

The project was undertaken to investigate how social media can be embedded in an organisation using The Health Informatics Service as the client for this project. Although further development and testing is required and has been the limiting factor on this project due to skill, time and financial restraints it can be seen the end project does provide a suitable solution for The Health Informatics Service to aid in embedding social media into their organisation with very few barriers. The extent of how much this app will get used is however debatable and unknown as the product at this stage is just a prototype and even though the survey sample was suitable it doesn't provide clear results and statistics of usage with it just being a prototype and not a fully developed app.

The project was undertaken to investigate how social media can be embedded in an organisation using The Health Informatics Service as the client for this project. Although further development and testing is required and has been the limiting factor on this project due to skill, time and financial restraints it can be seen the end project does provide a suitable solution for The Health Informatics Service to aid in embedding social media into their organisation with very few barriers. The extent of how much this app will get used is however debatable and unknown as the product at this stage is just a prototype and even though the survey sample was suitable it doesn't provide clear results and statistics of usage with it just being a prototype and not a fully developed app.