

Design Assignment

Redesign of UCD IT Services

Group 9

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IS40610: UXD: User-Centered Design

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Table of Contents

(1) Requirements Gathering	3
Questionnaire design and analyze	3
Section A: Demographic Profile	3
Section B: Current interface of IT Services	7
Section C: Proposed System	10
(2) Creative design & Lo-fi prototyping phase	13
Lo-fi Model 1	13
User Scenario	13
Introduction of Lo-fi Model 1	15
Advantages	16
Disadvantages	16
Lo-fi Model 2	17
User Scenario	17
Introduction of Lo-fi Model 2	18
Advantages	20
Disadvantages	20
Final Lo-fi Model	20
(3) Hi-Fi Prototyping phase	21
Quick Tasks	21
Additional Functions	24
Personal Section	27
(4) Evaluation phase	30
Visibility of system status	30
Match between system and the real world	30
User control and freedom	30
Consistency and standards	30
Error prevention	31
Recognition rather than recall	31
Flexibility and efficiency of use	31
Aesthetic and minimalist design	31
Help users recognize, diagnose, and recover from errors	31
Help and Documentation	31
References:	33

(1) Requirements Gathering

The questionnaire records the content of the survey systematically by asking questions and it has many forms (Debois. S, 2019), and we will use an online questionnaire. Online questionnaires are more convenient than paper questionnaires, saving time and manpower. It is easier to statistically process and analyze (Choudhurs. A, 2020). We list relevant questions based on the existing system and user expectations of the proposed system. According to the result of the problem, to find the problem, improve and improve the system function. In order to facilitate the interviewee to choose, the author will design simple and understandable questions to ask. The more users interviewed, the more accurate the results. Most users are willing to be surveyed because they know that they can get better service.

Questionnaire design and analyze

This is the data collected after the questionnaire was issued. It is an important process to extract useful information from analytical data. For the collected data, the author analyzes the results in a visual way such as pie chart and bar chart. The author of each question will analyze these charts.

Section A: Demographic Profile

Demographic profile is the first part of the questionnaire, which is the statistics of the interviewees' gender, age and occupation. And determine whether the interviewee has any experience using the IT services website. Respondents' preference for mobile apps and websites is also the important part.

What's your gender?

100 responses

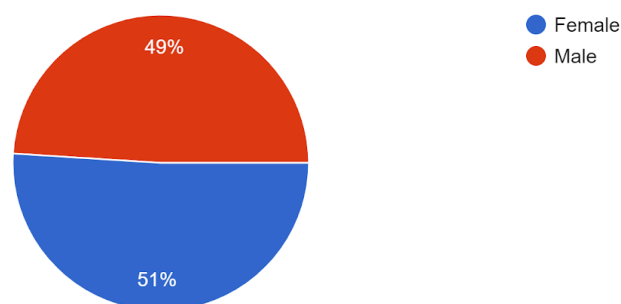


Figure 1-1 gender statistics

Objective: To collect respondents' gender for analysis.

Analysis result: The gender of the interviewees is divided into male and female. There are more male respondents than female respondents in this study, with 49 males (49.0%) and 51 females (51.0%). The results show that more women are interested in the most frequently used interface design and the type of interface

questionnaire they want to see, and they responded to the questionnaire related to this research.

What's your age range?

100 responses

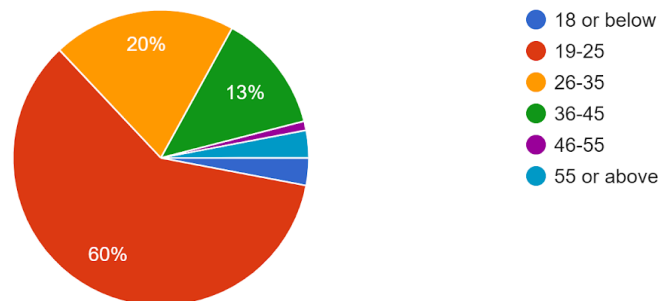


Figure 1-2 age range statistics

Objective: To collect respondents' age range for analysis.

Analysis result: The age of the respondents ranged from under 18 to 55 and above. There are 60 respondents (60.0%) aged 19-25, 20 (20.0%) respondents aged 26-35, and 13 (13.0%) respondents aged 36-45. This shows that Most of the respondents were between 19 and 25 years old.

What's your occupation?

100 responses

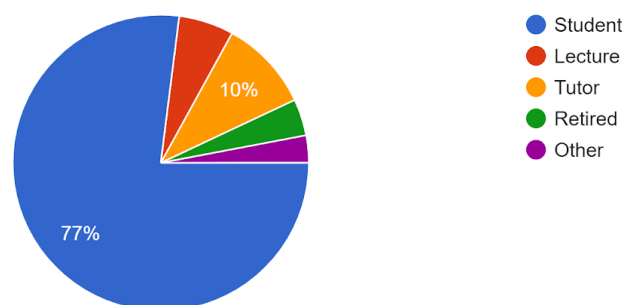


Figure 1-3 occupation statistics

Objective: To collect respondents' occupations for analysis.

Analysis result: The occupations of the interviewees were student, Lecture, Tutor, Retired and Other. In this study, 77 (77.0%) of the respondents whose occupation was a student and 10 (10.0%) whose occupation was Tutor were students and Tutor.

What's your major field of study?

100 responses

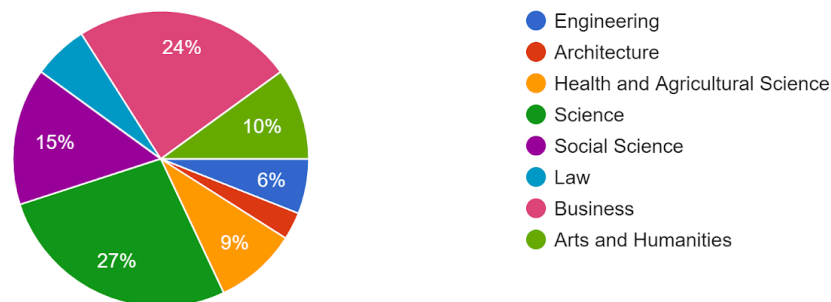


Figure 1-4 major statistics

Objective: To collect respondents' distribution for major.

Analysis result: The main research fields of the interviewees were Engineering, Architecture, Health and Agricultural Science, Science, Social Science, Law, Business, Arts and Humanities. In this study, 24 respondents (24.0%) whose main research field is Business, 27 (27.0%) whose main research field is Science, and respondents whose main research field is Social Science. There are 15 respondents (15.0%), 10 respondents (10.0%) whose main research field is Arts and Humanities, 8 respondents (8.0%) whose main research field is Engineering, and their main research field is Health And Agricultural Science has 9 respondents (9.0%), which shows that most of the respondents who participated in the questionnaire survey are almost evenly distributed in the main research areas of this study.

Do you have any experience in IT?

100 responses

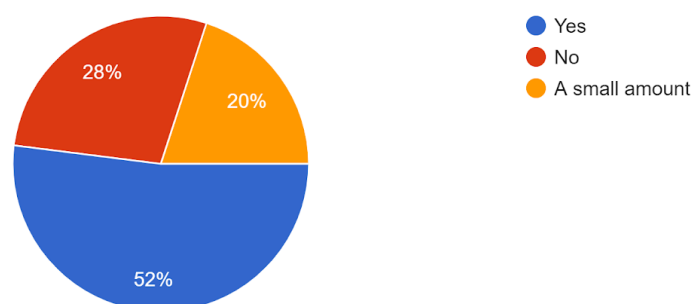


Figure 1-5 IT experience statistics

Objective: To collect respondents' former experience for IT.

Analysis result: Respondents' experience in IT is divided into Yes, No and A small amount. In this questionnaire, 52 respondents (52.0%) had IT experience, and 28 (28.0%) respondents had no IT experience. A small number of respondents with IT

experience was 20 (20.0%). The results showed that more respondents with IT experience responded to the questionnaire related to this research.

Have you used the UCD IT Services Website or Application?

100 responses

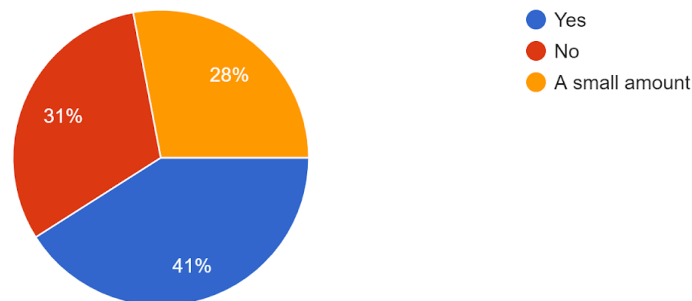


Figure 1-6 UCD IT Services experience statistics

Objective: To get the percentage of respondents who have used UCD IT Services Website or Application.

Analysis result: Whether the respondent has used UCD IT service website or application is Yes, No and A small amount respectively. In this questionnaire, 41 respondents (41.0%) have used the UCD IT service website or application, and 31 respondents (31.0%) have not used the UCD IT service website or application. The few respondents who have used UCD IT service websites or applications are 28 (28.0%). Most of the interviewees are almost evenly distributed in this research whether they have used UCD IT service websites or applications.

Do you prefer to use mobile apps or websites?

100 responses

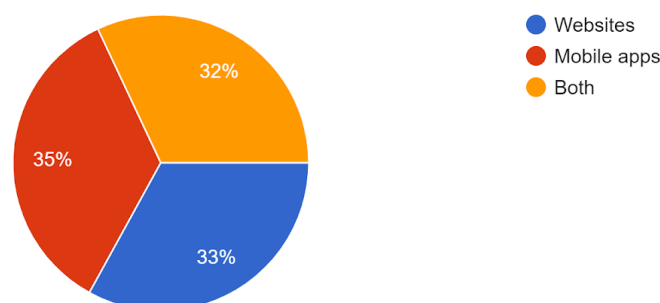


Figure 1-7 Electronic device preference statistics

Objective: To identify respondents 'usage of websites and mobile apps.

Analysis result: For respondents who prefer to use mobile apps or websites, they are Websites, Mobile apps and Both. In this survey, 33 respondents (33.0%) prefer

to use Websites, and 35 respondents (35.0%) Prefer to use Mobile apps. 32 respondents (32.0%) prefer to use both. The minority of respondents who have used UCD IT service websites or applications is 28 (28.0%). This shows that the respondents who participated in the questionnaire survey have a slightly higher preference for mobile applications than Internet use.

Section B: Current interface of IT Services

This is the second part of an online questionnaire about the current interface of IT Services. According to the problems of the current website, the system expected by the user can be designed. After the data is collected, the author will analyze it.

Which website type do you prefer?

100 responses

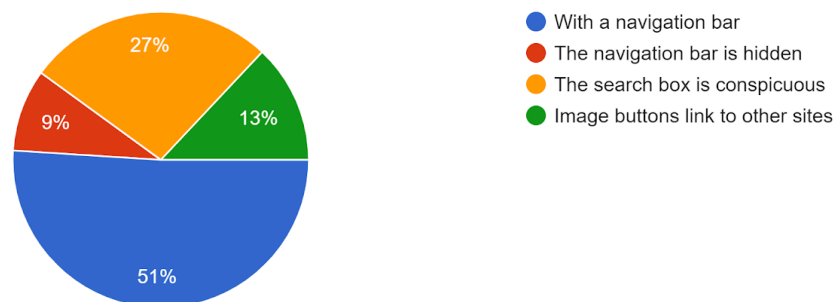


Figure 1-8 website type preference statistics

Objective: To determine whether the website interface types that respondents prefer are diverse. So that the new design can provide users with a more Comfortable and convenient interface.

Analysis result: Regarding which website type the respondents prefer, the website types are 'with a navigation bar', 'The navigation bar is hidden', 'The search box is conspicuous', and 'Image buttons link to other sites'. In this survey, 51 respondents (51.0%) prefer the website type 'With a navigation bar', and 27 respondents (27.0%) prefer the website type 'The search box is conspicuous'. Thirteen respondents (13.0%) prefer the website type of 'Image buttons link to other sites'. Nine respondents (9.0%) prefer the website type 'The navigation bar is hidden'. This shows that half of the respondents who participated in the survey prefer the website type 'with a navigation bar'.

Why do you want the help from IT service?

100 responses

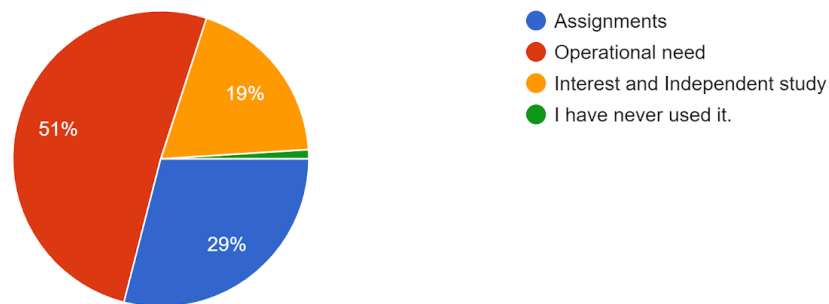


Figure 1-9 user usage statistics

Objective: In order to understand the reasons why respondents need help from IT.

Analysis result: As for why respondents need help from IT services, 29 respondents (29.0%) chose Assignment, 51 respondents (51.0%) chose operational needs, and 19 respondents (19.0%) chose Interest and Independent study, more than half of the respondents need the help of IT services in their operational needs.

How long do you prefer to spend using the IT service each time?

100 responses

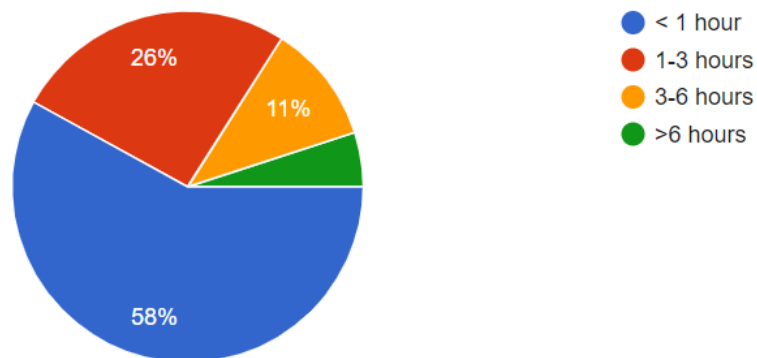


Figure 1-10 user time statistics

Objective: In order to understand respondents' expected time for using IT service.

Analysis result: The time spent using IT services ranged from less than 1 hour to more than 6 hours, of which 58 respondents (58%) were under 1 hour, 26 respondents (26%) were 1 to 3 hours, and 3 to 6 hours With 11 respondents (11%), more than half of the respondents in this study spent less than an hour using IT services.

Do you feel that the interface of the current IT Services page is clear enough?

100 responses

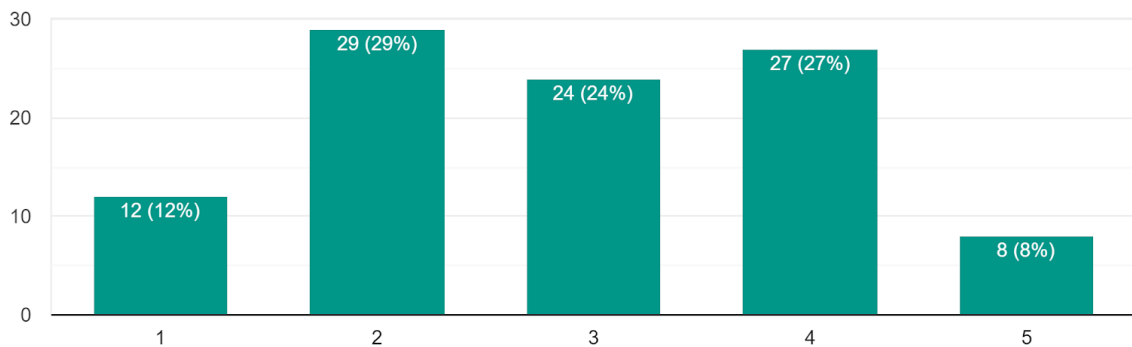


Figure 1-11 Current interface evaluation

Objective: To determine the respondents' views on the current IT Services page.

Analysis result: Regarding whether the interface of the current IT service page is clear enough, 12 respondents (12.0%) chose to be very unclear. 29 respondents (29.0%) chose to be unclear. There were 24 respondents (24.0%) who chose clear. 27 respondents (27.0%) chose clear. 8 respondents (8.0%) chose very clearly. Most of the respondents were neutral to the current IT service interface design in this study.

Do you think the current IT Services page is convenient?

100 responses

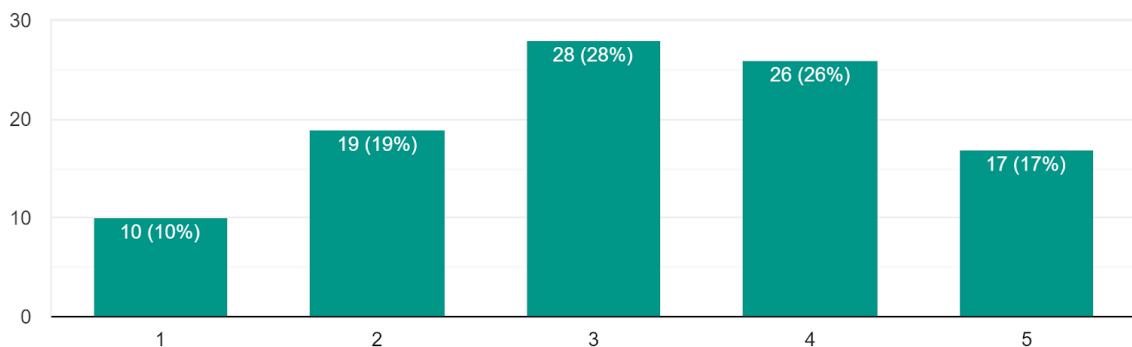


Figure 1-12 Current interface evaluation 2

Objective: To collect respondents' attitudes towards the current IT Services page.

Analysis result: Regarding the convenience of the current IT service page, 10 respondents (10.0%) chose it as inconvenient. 19 respondents (19.0%) chose inconvenience. 28 respondents (28.0%) Choose convenience. 26 respondents (26.0%) chose more convenient. 17 respondents (17.0%) chose very convenient. Most of the interviewees in this study feel convenient for the current IT service page.

Do you think aesthetics is important?

100 responses

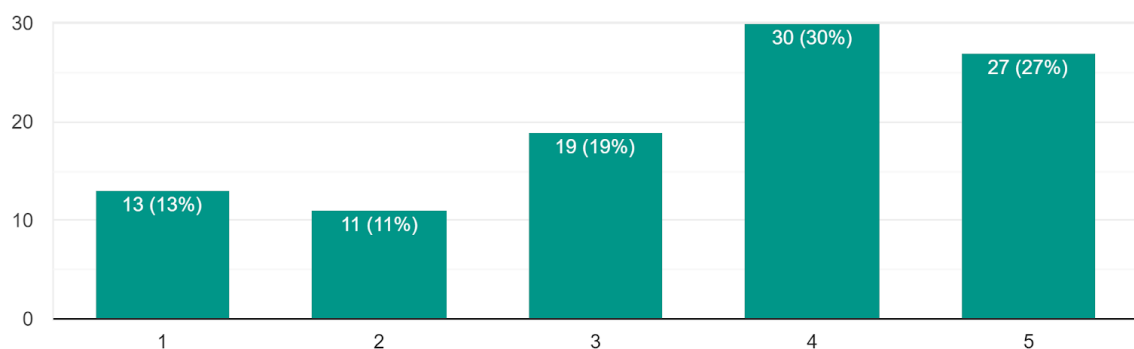


Figure 1-13 how user care about design

Objective: To collect respondents' attitudes towards the aesthetics of the IT Services page.

Analysis result: Regarding whether aesthetics is important, 13 respondents (13.0%) chose very unimportant. 11 respondents (11.0%) chose not to be important. 19 respondents (19.0%) chose important. Thirty respondents (30.0%) chose more important. 27 respondents (27.0%) chose very important. Most interviewees in this study are very concerned about the importance of aesthetics.

Section C: Proposed System

This is the last step of the online questionnaire. This section presents some of the functions of the system initially envisioned by the author to see if users are satisfied and useful with these functions.

Which operating platform are you using?

100 responses

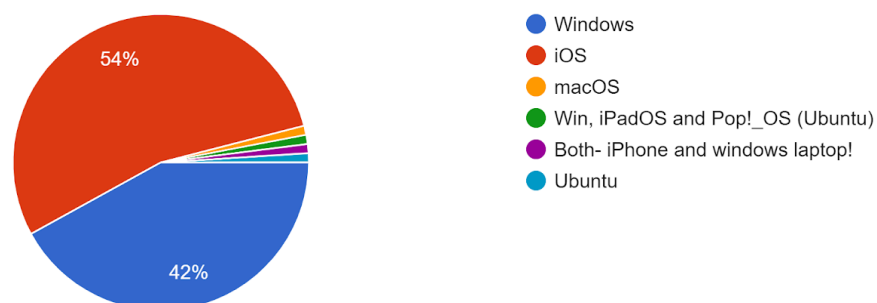


Figure 1-14 OS preferences statistics

Objective: To identify respondents' usage of their operating platform.

Analysis result: Regarding which operating platform the respondents used, in this survey, 54 respondents (54.0%) chose IOS, and 42 respondents (42.0%) chose Android. This shows that most of the respondents participating in the survey use IOS and Android operating platforms.

What do you think are the most important factors affecting the IT Services page?

100 responses

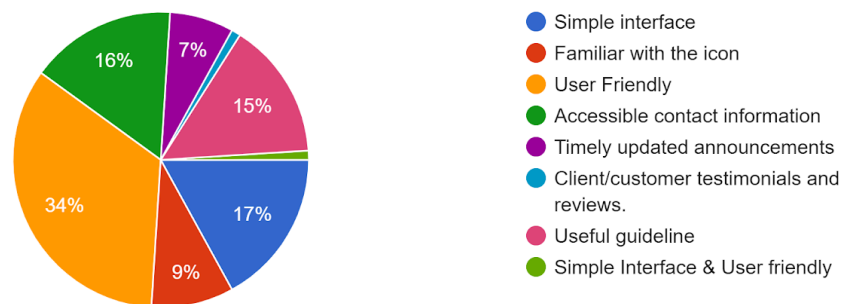


Figure 1-15 interface factor preferences statistics

Objective: Understand the user's views on the website factor, and whether the author should add features and design according to user needs.

Analysis result: Regarding the most important factor affecting IT service pages, 34 respondents (34.0%) chose User Friendly. 16 respondents (16.0%) chose Accessible contact information. 17 respondents (17.0%) Choose Simple interface. 15 respondents (15.0%) choose Useful guidelines. 9 respondents (9.0%) choose Familiar with the icon. 7 respondents (7.0%) choose Timely updated announcements. Respondents in this study believe that the most important factors affecting IT services are user-friendliness, customer reviews, simple interfaces, useful guides, familiar icons, etc.

Do you have any advice for the improvement of IT service?

61 responses

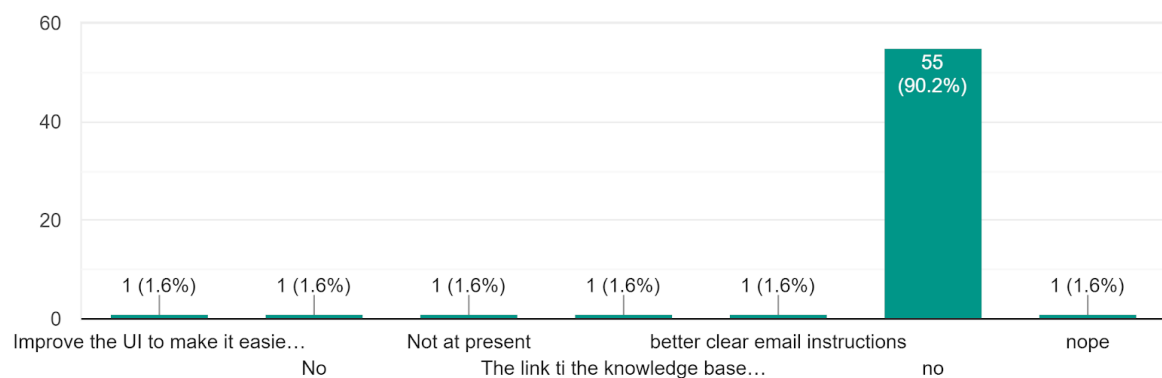


Figure 1-16 Recommend statistical

Objective: To get more advice to improve our IT service.

Analysis result: According to respondents' feedback, we can see that users want a simple interface, and they want to be knowledge-based, with clearer email instructions, etc. Most respondents had no other suggestions.

(2) Creative design & Lo-fi prototyping phase

Lo-fi Model 1

User Scenario

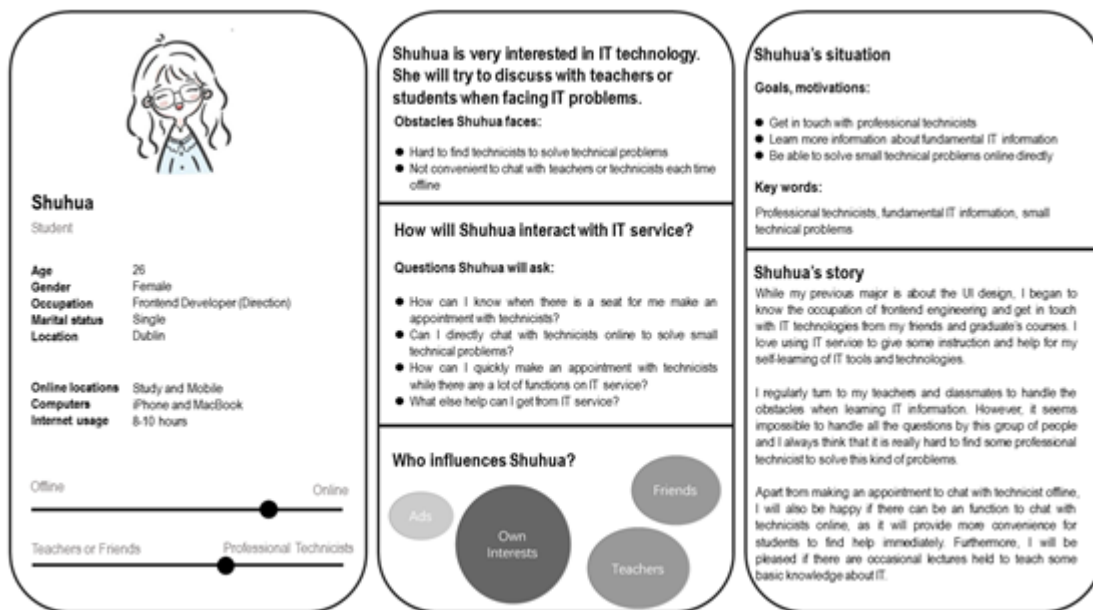


Figure 2-1: User Scenario 1

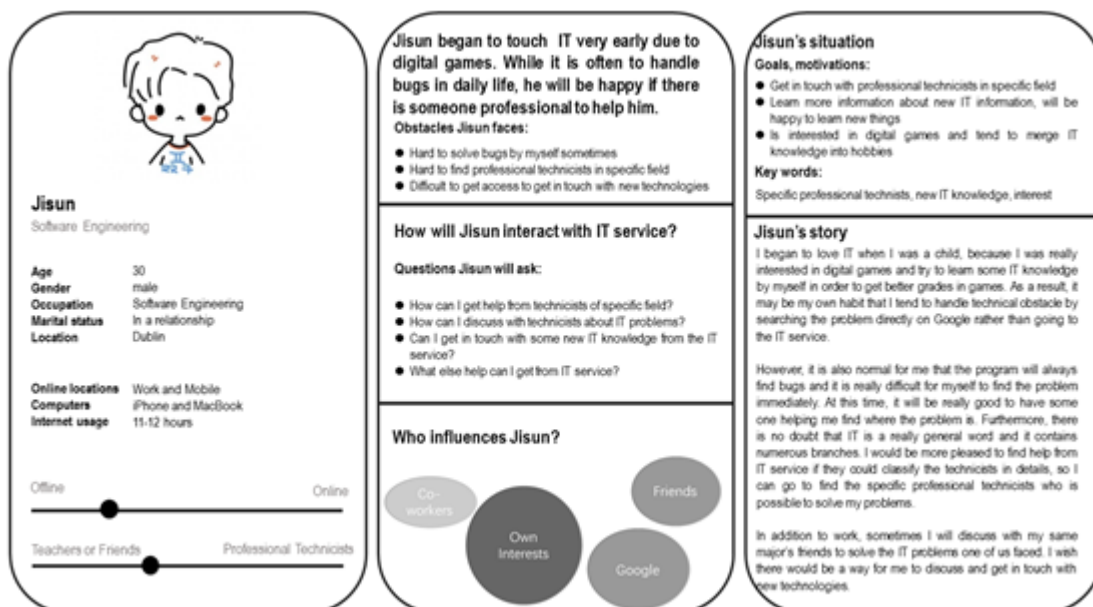


Figure 2-2: User Scenario 2

As shown in the two pictures above, the two roles I took are the student whose major is associated with IT and software engineering because these two kinds of humans

are able to touch IT directly in daily life and have a great need for IT assistance. From the perspective of the student, we realized that students always have difficulty getting in touch with professional technicians and lectures related to fundamental knowledge of IT which could be useful for the IT beginners. In addition to that, students also have a great need to solve simple IT problems online directly because they will have their own lessons in daytime and do not have time to solve the problem face to face. As a result, the lo-fi model 1 below adds the function of making an appointment, informing news about lectures and chatting with technicians online. From the perspective of software engineering, as he has obtained numerous fundamental information about IT, what he needs is about the professional technicians in a specific field and a deep discussion with them face to face. Furthermore, while IT is a general word and is developing every day, he is also interested in touching new fields of IT knowledge if there would be lectures about it. In response to this kind of people's requirement, the allocation of workers in IT service will be more detailed later but it does not show in the software yet. However, the news button will always inform the users if there is a lecture held by IT service.

Introduction of Lo-fi Model 1

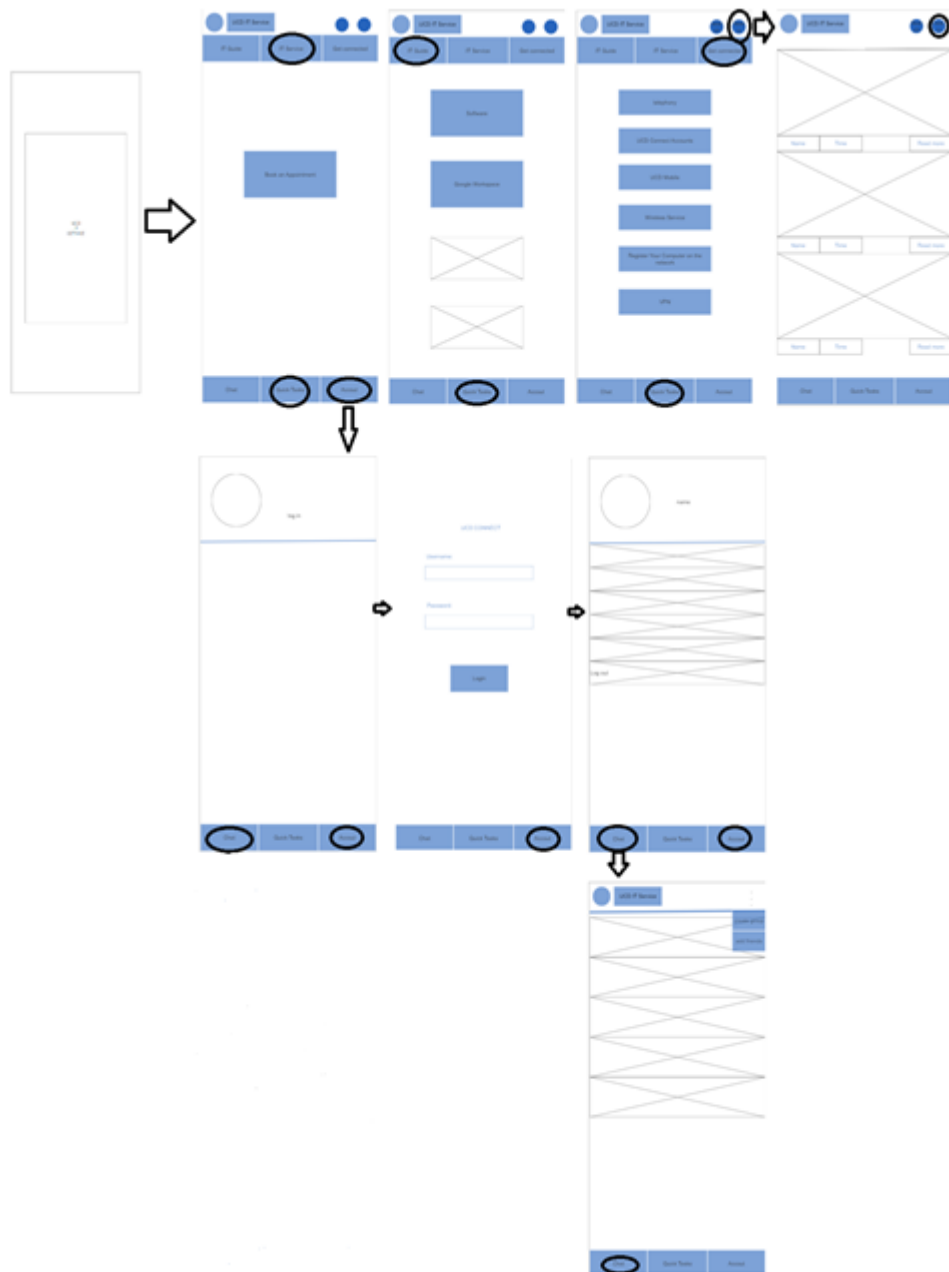


Figure 2-3: Flow chart of Lo-fi Model 1

As shown in the picture 2-3, when going into the software, the first function the user can apply is making an appointment. This allows users to be able to reverse in a very short time and provides a lot of convenience to the users. Apart from the IT service, there will be other quick tasks such as IT Guide and Get connected presented in the upper navigation bar, which allow users to go to other important tasks as quickly as possible.

The news function in the top right corner is created to satisfy the need for paying attention to the activities built by the IT service. If there is new news about the

activities, the icon will have a little change and the users will quickly know the update and click it immediately.

There is also a navigation bar at the bottom of the page. The account function enables users to log in. The chat function makes it possible for users to not only chat with friends about the IT problems they face immediately, but also discuss with specific professional technician to directly solve problems online.

Advantages

The most important advantage for this lo-fi model refers to the convenience. While the design put the function of making an appointment into the first main page, the users are able to get an appointment with IT service in a few minutes and this function is also the most important one brought by IT service. In addition to that, the software also provides other functions such as informing news and directly chatting with technicians online, which are the exact requirements needed from the investigation of two user scenarios. Last but not least, the software also contains other IT services including IT Guide and Get Connected, which can be quickly clicked as they are on the top of pages. This provides convenience for usage too.

Disadvantages

However, this lo-fi model does not contain large amounts of detailed pages. For instance, the chat page has only one subpage, but it could contain more such as add friends' pages. Moreover, the detailed allocation of workers is not shown on the subpage of making an appointment, as I hope this page could be linked directly to the webpage and changes should be done on the webpage with html and CSS. In addition to that, this lo-fi model has magnified the function of making an appointment and it may cause some problems for people who come to IT service not for making an appointment.

Lo-fi Model 2

User Scenario

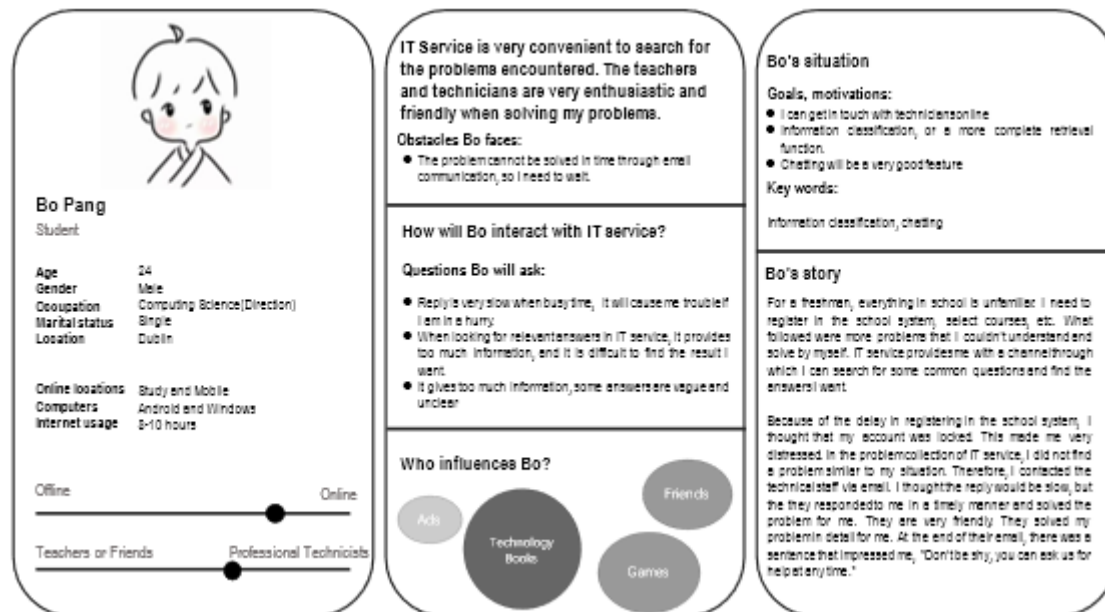


Figure 2-4: User Scenario 3

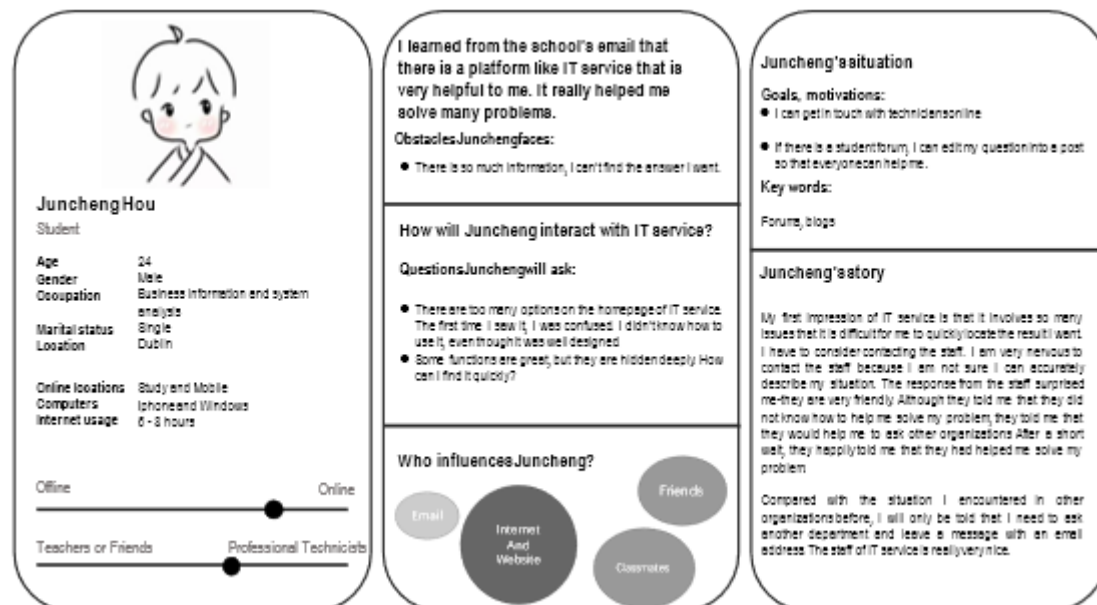


Figure 2-5: User Scenario 4

Interviewed multiple users and selected two representative users to make the above two user scenarios. They put forward their own views and problems encountered when using IT Service. The common point of their views is that there is too much information about IT Service, which makes them unable to quickly locate the information they need. Finally, they had to "contact us" to get help from IT service technicians. As can be seen from their stories, the function of directly talking to the

staff is welcome. Avoid wasting time in retrieving answers from massive amounts of information. Refining the main functions is very helpful for UXD design.

Introduction of Lo-fi Model 2

Lo-fi Model 2 is an interface designed according to ICON, which mainly displays its functions through icons. The advantage of this design lies in the intuitive presentation of the main functions to the user. Distinguish the priority of functions through the size, style, and color of the icon to improve the user's concentration.

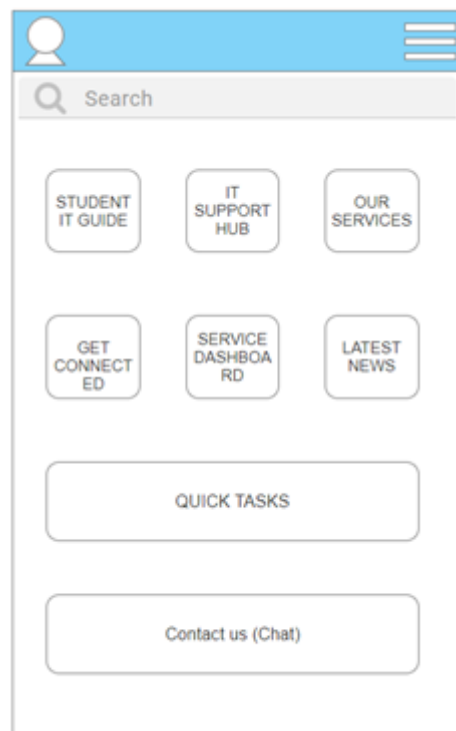


Figure 2-6: Lo-fi Model 2, Home page

The home page presents the core functions to users. Quick Tasks and Contact us are designed as big icons. These two functions are the most frequently used and most popular functions. The large icon style can attract users' attention.

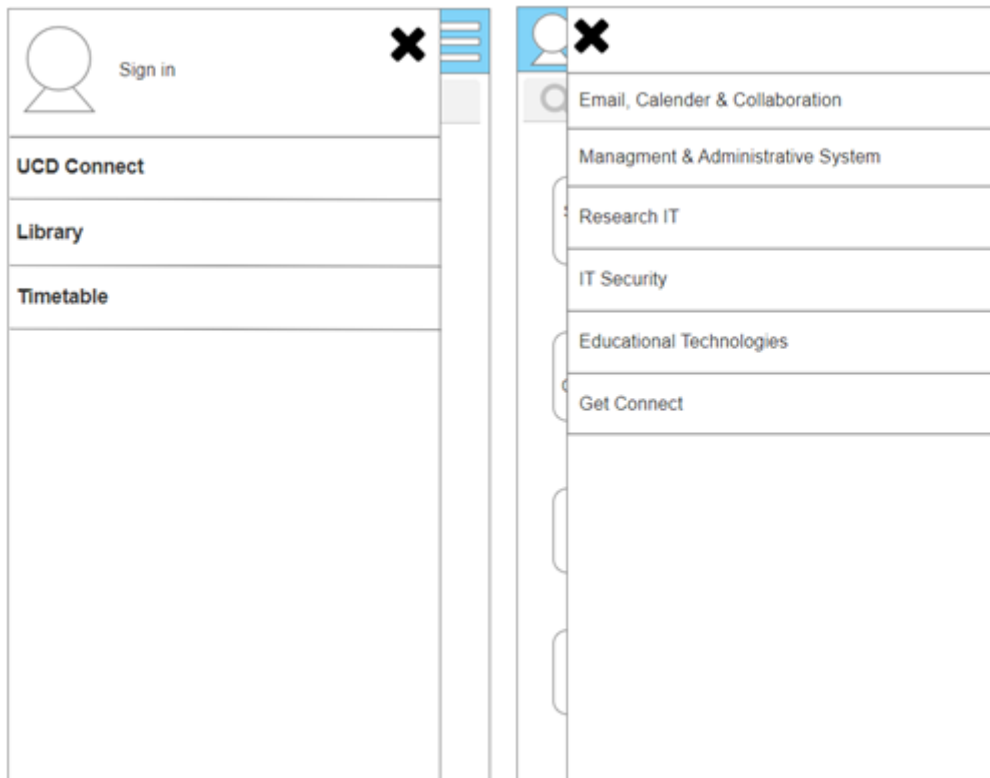


Figure 2-7: Lo-fi Model 2, Secondary menu page.

The above two pages respectively display account information (left) and the list of secondary functions (right). Account information is entered from the left side of the screen by clicking the icon in the upper left corner of the main page. The secondary function list page can enter the screen from the right by clicking on the burger bar in the upper right corner of the main page.

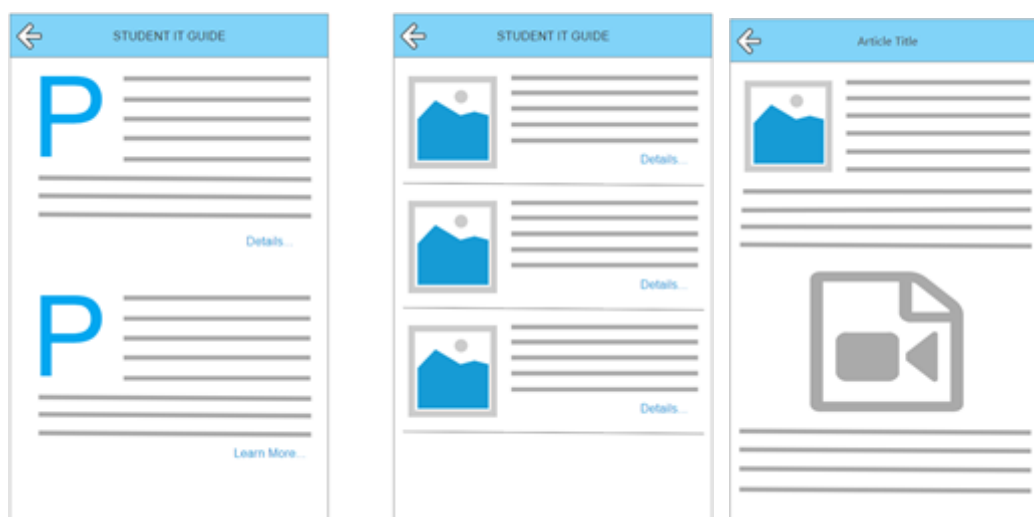


Figure 2-8: Lo-fi Model 2, Information display page.

Here are the information display pages in different situations. The list of information displayed in simple text (left), the list of information displayed in the style of the picture and the introduction (middle), the page when a single article is displayed (right). The article display page contains pictures, text, and video styles.

Advantages

The icon-centric design can also display the main functions on the main page. Beautiful graphics can give users a stronger sense of impact. The buttons on both sides of the top of the main page conform to the user's perception of mobile apps. Users do not need to do too much to know, they will clearly understand their meaning and function. The two main functions (Quick Task, contact us) in the main page are designed to be different from other large icons. This can arouse users' attention to these two core functions. Highlight the importance of these two functions. This lo-fi design is based on the premise of conforming to the user's usage habits, reducing the user's process of adapting to the app, and allowing users to understand the functions of the app more quickly.

Disadvantages

All mobile apps face a challenge-space limitations-the base of the mobile screen that can display information is limited, and there is no way to worry about all the functions. The icon design takes up more screen space and has less space to display. So only some main functions can be displayed. Such a design cannot guarantee to meet the functional requirements of every user.

Final Lo-fi Model

There are initially two lo-fi models separately based on several icons and the navigation bar, according to the two most popular structures shown in the requirements gathering. We finally chose the structure with navigation bar (lo-fi model 1) as the similar demand for all user scenarios is to make an appointment with the IT service.

(3) Hi-Fi Prototyping phase

High-Fidelity prototypes carry the full functionality and operational features of a service or product (Nissinen, 2015). Support for building a user interface that looks complete and may be serviceable (Coyette et al., 2006). Once the Lo-Fi model is complete, what the Hi-Fi prototype needs to do is to enhance the Lo-Fi model and refine some of the details of the interface. Therefore, when people view a Hi-Fi prototype, the quality of the discussion is different from the quality of the discussion when they observe the Lo-Fi model (Coyette et al., 2006). This system, the UCD IT service, has been designed to be functional after the Lo-Fi model, and here are pictures of its Hi-Fi prototype, with a detailed description of its functions.

UCD IT service application starts with the below splash screen. The visual quality of the image was improved from the Lo-Fi model by including UCD logo and background image.



Figure 3-1: Splash Screen

Quick Tasks

The first page is the IT service page (Figure 3-2). The design of the page is mostly based on the Lo-Fi model, with the UCD icon prominently placed on the top left side and six navigation modules on the top and bottom, which can be accessed by

clicking on their respective areas. In the top right corner, a message icon and a search icon are placed to make it easier for users to operate. The main function is to book an appointment with the IT department to serve the user.

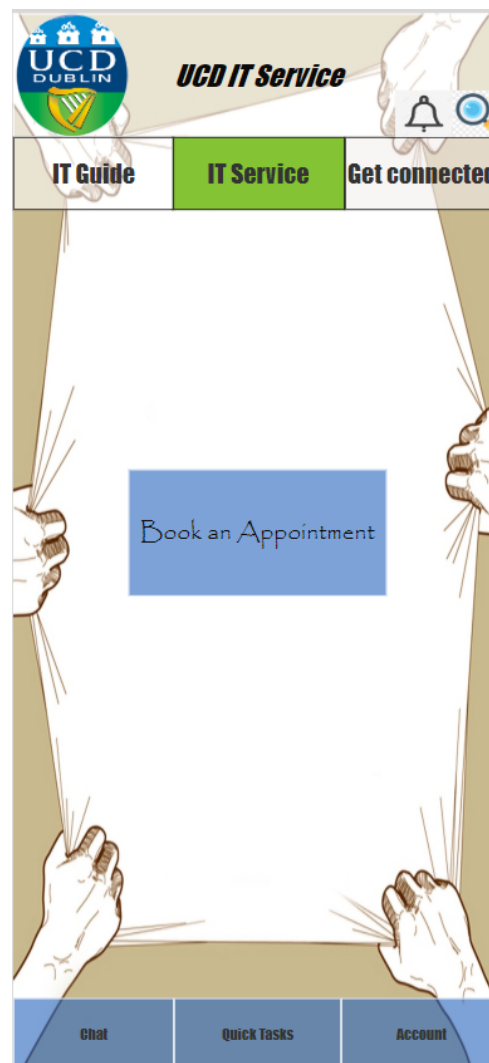


Figure 3-2: IT Service

Click on the IT Guide to go to the Guide page, which adds an additional feature to view common problems compared to the Lo-Fi model, allowing for faster resolution of frequently occurring issues (figure 3-3). The other two features, the availability of the software and the availability of Google Docs, have been retained. The rest of the page design remains the same as the home page, with simplicity being the main focus.

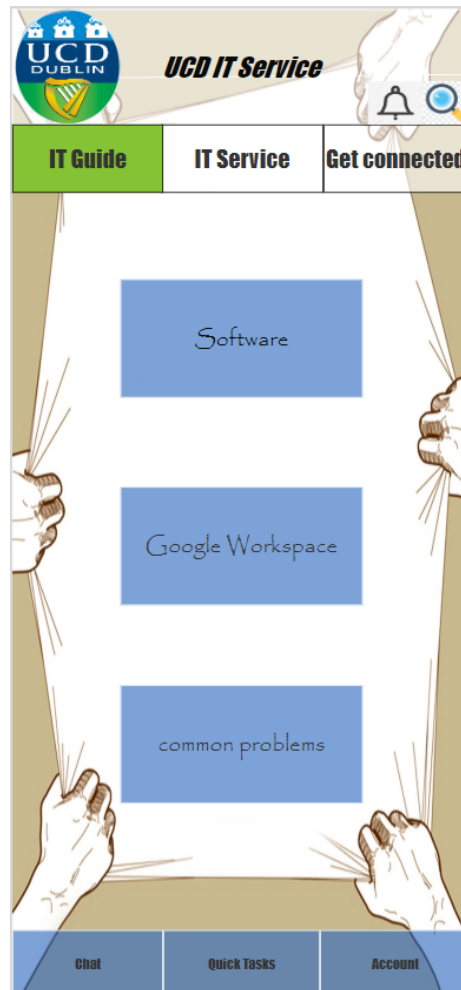


Figure 3-3: IT Guide

Click on Get Connected to go to the contact page (figure 3-4). This page carries over all the features of the Lo-Fi model design and improves the visual quality of the page. The main functions are: providing telephone numbers for IT-related departments and other helpful telephone contacts at the university; faster access to the UCD connect page to log in to your account; direct access to the UCD mobile program to select other services; queries about the university's wireless network; registering your computer; and using the VPN tool provided by the university.

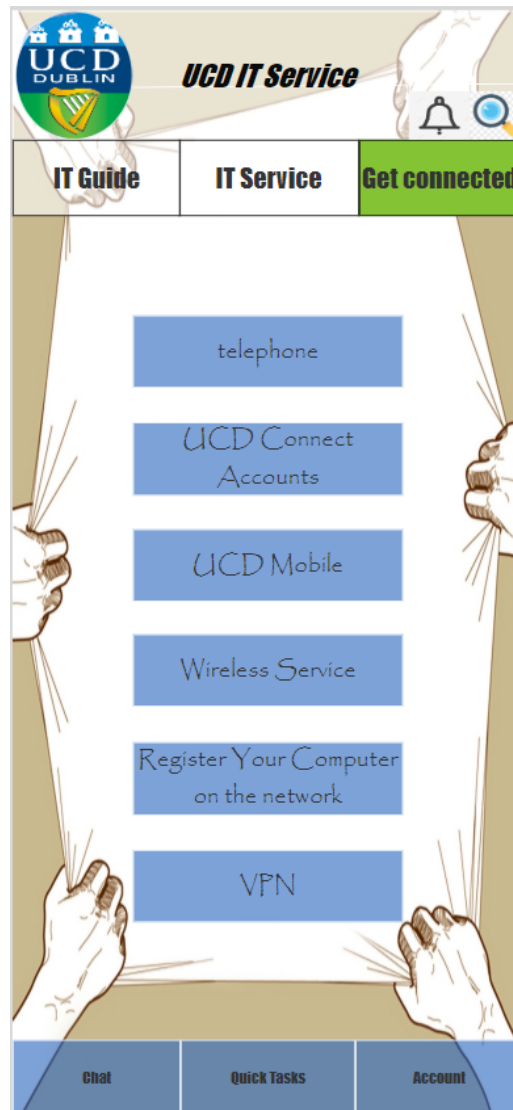


Figure 3-4: Get Connected

Additional Functions

Click on the little bell icon in the top right corner to go to the news page (figure 3-5). This page has undergone minor changes compared to the Lo-Fi model. Click on Read More to the right of the image to go to the details page, click on UCD IT Service above to go back to the home page and click on Past News below to go to a review page of previous news. The main purpose is to highlight more recent news and make it easier for users to view policies and changes to facilities. The background of the page has been changed to a background image related to the news.

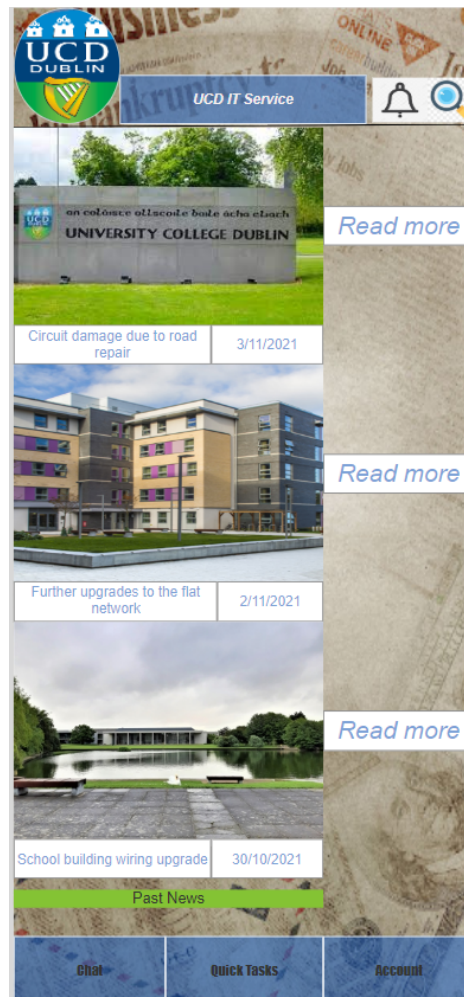


Figure 3-5: News

Click on Chat at the bottom to go to the chat module. In this module you can communicate with your friends and staff (figure 3-6). This page follows the two main features of the Lo-Fi model, creating groups and adding friends. These two functions are prominently placed at the top left and right, which are the most important features of the chat area. The blank page allows you to create a new chat window and save it, unless the user deletes it themselves. Click on Quick Tasks at the bottom to access the three navigation modules on the home page. In the top section set UCD IT Service as the background in the upper section and keep the two icons on the right.



Figure 3-6: Chat

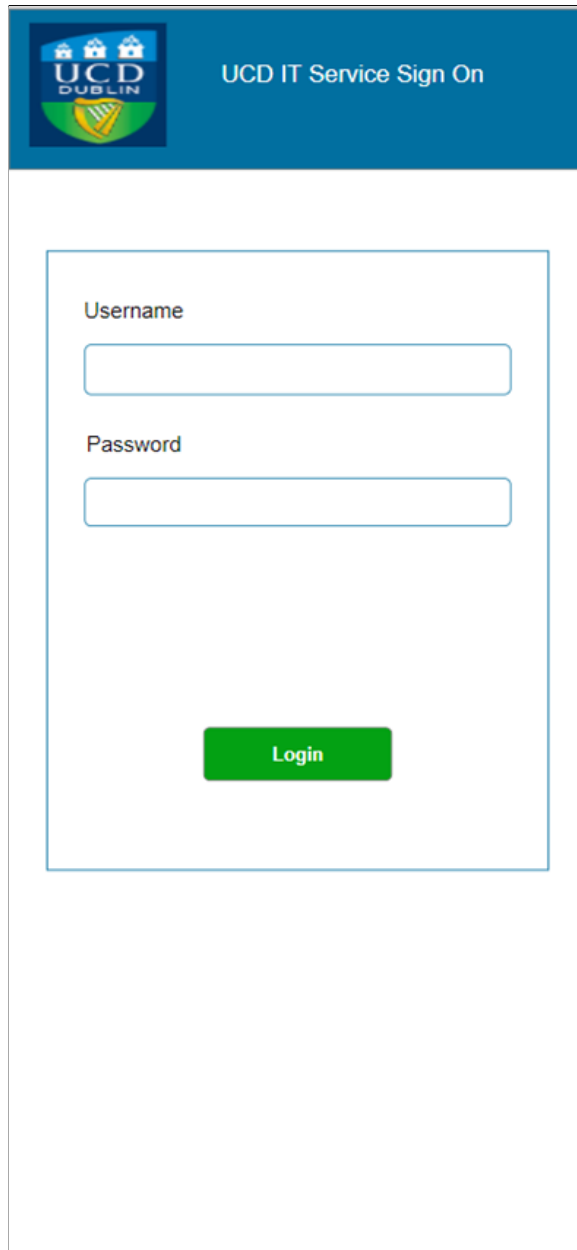
The search icon is used throughout these main feature pages and is mainly responsible for keyword searches when the user does not understand the use of this software, allowing direct display of the feature and access to that feature page. Improve the UCD icon in the Lo-Fi model and click on the icon to go to the UCD website.

Personal Section



Figure 3-7: Pre-login page

Click on the Account button to go to the Pre-login page (figure 3-7). Here visitors can view general information related to UCD IT Services. This page was taken from the Lo-Fi model and additional features were added during Hi-Fi model development. The main functions of this page are: Login to user account; Information on how to get virtual support; Frequently asked questions; Additional information about UCD IT Services and Accessibility statement. On clicking Account (login to access IT services), the user is directed to the login page.



The image shows a login page for UCD IT services. At the top, there is a blue header bar. On the left side of this bar is the UCD Dublin logo, which features a shield with three crowns and a harp. To the right of the logo, the text "UCD IT Service Sign On" is displayed in white. Below the header, the main content area is white. It contains a central login form with a blue border. Inside this form, there are two input fields: the first is labeled "Username" and the second is labeled "Password". Below these fields is a green rectangular button with the word "Login" in white text.

Figure 3-8: Login page

Here the user is navigated to the Login page(Figure 3-8). The design of the page is mostly based on the Lo-Fi model with the UCD logo prominently placed on the top left side. The main function of this page is user login. Users can login to their account by providing their username and password to get easy access to UCD IT services and view their account details. On clicking the login button user is directed to the account page.

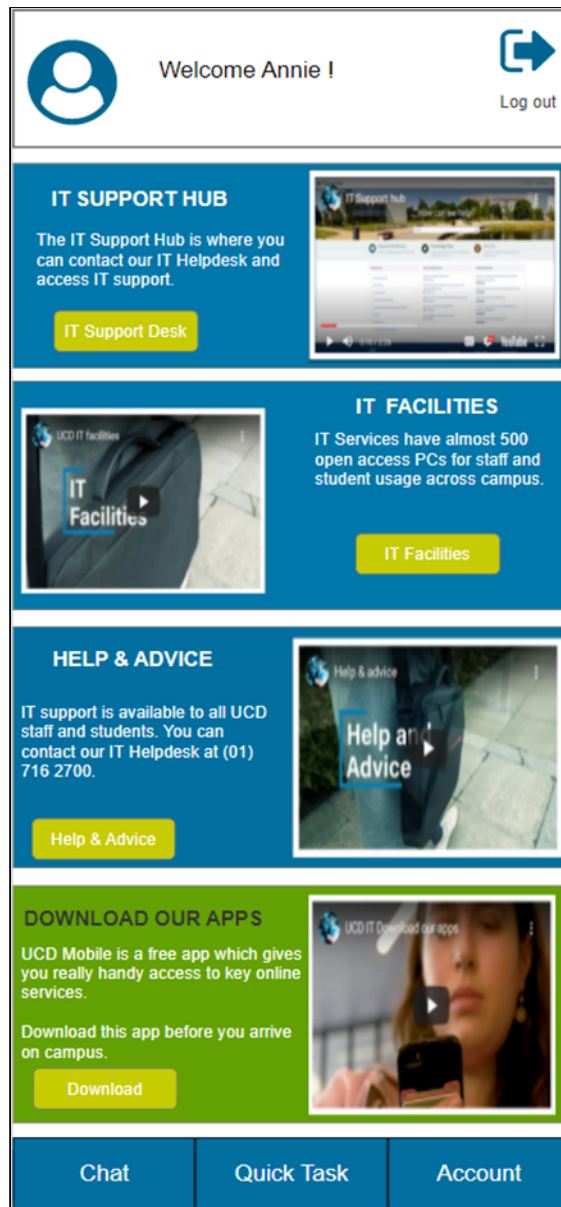


Figure 3-9: Account page

Successfully logged in user is directed to the account page (figure 3-9). In this page the user can get quick and easy access to various UCD IT services. This page was taken from the Lo-Fi model and additional functionalities were added. The log out button is added at the top of the page for quick log out. The main functionality of this page includes: IT support hub, Help and advice, IT facilities where users can explore and get easy access to various UCD IT facilities, and download our apps to download various UCD applications.

(4) Evaluation phase

We will now be evaluating the final version of our design. A heuristic evaluation will be carried out of the interface designed followed by a discussion of our results. We will then comment on the future work that will need to be prioritized for future development of the interface based on the results of our heuristic evaluation.

To start, we will perform a heuristic evaluation. We will firstly define what is meant by a heuristic evaluation before carrying one out. According to Jakob Nielsen, a heuristic evaluation is “a usability engineering method for finding the usability problems in a user interface design so that they can be attended to as part of an iterative design process. Heuristic evaluation involves having a small set of evaluators examine the interface and judge its compliance with recognised principles (the heuristics)” (Nielsen, 1995). The results of our heuristic evaluation will be discussed under these mentioned principles proposed by Jakob Nielsen as they are still widely used today. These usability heuristics are called “heuristics” because “they are more in the nature of rules of thumb than specific usability guidelines.” (Nielsen, 2005). The headings under which we will discuss our results are Visibility of system status, Match between system and the real world, User control and freedom, Consistency and standards, Error prevention, Recognition rather than recall, Flexibility and efficiency of use, Aesthetic and minimalist design, Help users recognize, diagnose, and recover from errors and Help and Documentation.

Visibility of system status

All pages were clearly labeled and there was an indication as to which page you are currently on with titles and visual markers on the headers.

Match between system and the real world

The terminology and icons used appear to be clear and easy to understand. The system speaks using language that is familiar to the user such as words, phrases, and concepts that the user would interpret easily, rather than system-oriented terms that are meaningless to the user. It also follows real-world conventions; this makes the information appear more natural and in a logical order.

User control and freedom

The ability to move between in and out and back and forth between pages is possible. Perhaps a possible “emergency exit” button to leave an unwanted state, rather than forcing the user to shut down the app on mobile or refresh the page if on desktop. Essentially supporting undo and redo button configurations.

Consistency and standards

The design uses the same words and layout throughout the application, removing any element of confusion for the user. It also follows standard platform conventions.

Error prevention

It is better to have a detailed design which prevents errors from occurring in the first place rather than having a clear error message. By presenting users with a confirmation option before they commit to an action aided in the elimination of error-prone conditions.

Recognition rather than recall

All objects and actions are directly visible to the user at all times. This requires the user to have to remember any information from a previous page to the next. Each instruction is clearly demonstrated and visible to the user making information retrieval an easy experience.

Flexibility and efficiency of use

Perhaps adding an accelerator, which is a feature that speeds up an interaction or process. These may go unnoticed by novice users, but for the expert user it can enhance their interaction. Through the implementation of accelerators, the application can cater to both experienced and inexperienced users.

Aesthetic and minimalist design

The design can be described as minimalistic where dialogue is only added where absolutely necessary. Each additional piece of unnecessary detail competes with relevant information decreasing its visibility. Therefore, information that is not of vital importance was omitted, leaving a sleek, aesthetic design.

Help users recognize, diagnose, and recover from errors

The error messages should be expressed in colloquial languages that are specific to the problem and provide solutions on how to solve the solution. Luckily there have been no error messages occurring.

Help and Documentation

Even though it is possible to freely navigate without documentation. It may be necessary to provide documentation on how to use the site and other possible user tasks. A series of steps should be demonstrated that are both clear and concise.

We have detailed the results of our heuristic evaluation and identified that there are several design changes and issues that need to be prioritized for future development of our interface which we will now discuss.

To be included in future work should be some type of emergency exit button which was suggested in our heuristic evaluation. This could come in the form of a home button or perhaps an undo and redo button. Furthermore, functionality has proved to be crucial as 51% of survey respondents wished to use the IT Services for

operational needs. A provision must be made for this, illustrating why our “Book an Appointment” feature is highlighted so prevalently. We are constantly on the lookout for further functional components to be added to our design to ensure our future design is based upon the operational needs of the user. As such, the addition of an emergency exit button can only increase the functionality of our design, catering for the desired functional needs of the user.

Our design has been constructed with a focus on Windows and iOS users in mind. This is due to the fact that nearly all of our responders (96%) are accessing the application on these platforms, based on the results of our survey. As a result, we believe future work should include accelerators as suggested in our heuristic evaluation but with a focus on these platforms initially. An example of an accelerator that could be added to our mobile application is the ability to hold down the screen on a conversation within our chat function to prompt the user with another menu. This menu will allow the user to reply, delete, mute notifications etc.

Aesthetics was considered pivotal as 76% of survey respondents scored it as 3/5 or above for importance. Currently our design can be described as minimal and sleek through our heuristic evaluation which suits today’s concept of what is considered aesthetically pleasing. A focus must also be placed on the user friendliness and a simple interface as survey respondents deemed these as the most crucial import factors affecting the IT Services page. As we progress, we must constantly strive to remove unnecessary dialogue, decluttering our design while maintaining the user friendly design we have achieved. Future design development must continuously call into question how the aesthetics of our design can be improved, ensuring our design concepts stay relevant and modern to the current era.

In conclusion, we have detailed what a heuristic evaluation is and gave clear definitions by Jakob Nielsen. We then discussed the results of our heuristic evaluation under the ten most common usability heuristics. We examined design changes and issues that need to be prioritised for future developments based off results of our heuristic evaluation and our survey and ultimately decided upon three main changes/issues. Firstly, we should look at an “emergency exit” feature in future. Next, an emphasis must be placed on constructing accelerators for both mobile and desktop versions and finally huge significance is placed on the aesthetics of the design so we must continually monitor this going forward.

References:

- Choudhurs. A .(2020), Questionnaire Method of Data Collection: Advantages and Disadvantages
- Coyette, A., Vanderdonckt, J., & Limbourg, Q. (2006). SketchiXML: An Informal Design Tool for User Interface Early Prototyping. *In Proceedings of RISE 2006 Workshop on Rapid User Interface Prototyping Infrastructures Applied to Control Systems. RUIPICAS.*
- Debois. S. (2019), 10 Advantages and Disadvantages of Questionnaires
- Nielsen, J. (1995). How to conduct a heuristic evaluation. *Nielsen Norman Group*, 1, 1-8.
- Nielsen, J. (2005). Ten usability heuristics.
- Nissinen, T. (2015). User experience prototyping—a literature review. *University of Oulu*, Oulu.