NTU Recruitment Day App

Project proposal

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# **Executive Summary**

The proposed application for the project is a mobile application for recruitment fair hosted by NTU for their students, where various companies will come and advertise job/placement opportunities. This allows the students to interact with different companies and gather more information on the type of job they are interested in. Currently, there is no platform available to the students where they can look into the companies coming beforehand or know which companies will be attending the Job/Recruitment fair, thus they cannot visit all of them on the day. Another issue students face is they do not know the location of the companies. This is very true, especially for students in the first year as they are un familiar with the campus, thus they may struggle to get around to locate the company they want to inquire about. In addition to this, there is no way to find out if the companies present offer placement opportunities or just job opportunities, as well as if they offer graduate schemes.

The proposed application will tackle this issue by providing the solution to all problems mentioned. The application will include a feature for the students to view all the companies that will be attending the recruitment fair. They will be able to filter the companies according to the job/opportunities they provide, so for example, if a Software Engineering student wanted to look for all the companies that will be coming to the recruitment fair, offering job/placements related to programming, they will be able to do so by using the dropdown option provided at the top. The options given would categorise the companies into their respective fields and by the jobs being provided, such as, IT, Business, Sports, Science etc. All the programming related courses, i.e. Computer Science, Software Engineering etc will be grouped under ‘IT’ and all sport related courses will be under ‘Sports’. The application will then display all the companies/opportunities related to the selected category. There will also be a map feature implemented in the application to allow students to see where they currently are on the campus. In addition to this, when they click on a job opportunity, there will be a button which will show the location of the company providing that opportunity on the map when clicked. They can also add the opportunities to ‘Bookmarks’ so they don’t lose track of the companies/opportunities they were interested in and would like to inquire about on the day. The students will be able to use a QR scanner to register their attendance. They will also have the option to “apply” for the job opportunity from within the application which will give them instructions on how to apply. The students will be able to change the campus map from settings depending on which campus the event is being held in.

The application will be managed by the admins. They will have a sperate interface compared to normal users (admin dashboard). They will be able to manage all user (admin and students), delete users, add new users (admin and students) and edit users. They will also be able to add opportunities being offered by different companies.

# **Software and Hardware Development options**

This proposed project will a mobile application for phones ran on android platform. The reason for choosing to do the project as a mobile application because it will make it easier for the user as they will always have all that information available to them on the go. Mobile phones are small, convenient and don’t weigh much so they can easily fit in pockets or bags; compared to desktop which the users can’t carry with them, or tablets that weigh a lot and have big (screen) sizes so can be difficult to fit in the bag or pockets. It allows users to make notes and set reminders which can be very helpful to make sure everything is going according to the schedule and the user doesn’t miss or lose track any tasks. Mobile phones allow you to capture photos and videos using the camera which is something not possible for desktop. Users can then instantly share them to social media platform, send to friends/family through messages/emails or share with other users through Bluetooth. Bluetooth is a feature available in mobile phones which is used for linking electronic devices together and allowing them to communicate with each other, allowing to send, receive small files. However, it only works when the target mobile phone is relatively close by (within the range of user’s phone). Mobile phones allow users to communicate with other users through text messages which is not restricted by location using the SMS functionality. Mobile phones are the future for technology, and have every functionality and features available on desktop, tablets and even hand-held gaming devices such as Nintendo. Mobile phone also allows users to install and play games which are usually available on other platforms such as Nintendo, PSP etc by using emulators. There are also games available exclusive to mobile platforms. Mobile phones can be great for organizing and managing the users schedule with the calendar feature. It will send notification/alerts to remind users when its time to perform certain tasks or if its time for a certain event. All mobile phones come with GPS feature which is used by applications for location tracking and displaying maps. It is a useful functionality which allow apps such as Google Maps to help us with directions to our destination. In addition to this, it also gives live updates on your location and surroundings such as roadworks, accidents or nearly facilities such as restaurants, hotels and stadiums etc. Users can now do online banking and shopping using their phones. They can store their card details inside their mobile phones and by using the NFC (Near field Communication which allows data transfer between devices) tags, they can use their phones to pay for groceries etc instead of using their bank card.

The project will aim to target Android platform instead of iPhone (IOS). The main reason for this is because according to the statistics, Android share 87.0% of the market while IOS shares only 13.0% (Melissa 2019). Android is an open-source linux-based operating system developed by google. Android OS isn’t just used for mobile phones, but for other devices too such as watches, fridges, car stereo etc (Marziah 2019). Compared to IOS, there are a variety of mobile phone companies which use Android as their OS where as only iPhone use IOS for their phones. This shows that the project will be able to influence a large number of audiences, compared to IOS and more people will have access to it. In addition to this, to develop mobile applications, you have to pay for their IDE whereas android is free.

# **Usability and Guidelines**

The target audience for this project will be university students who are interesting in going to the recruitment fair to inquire about different job/placement opportunities and talk to companies to find out more information. The font will be big and bold for the main headings such as opportunity title so that it stands out from the rest of the text and easier to read for the user. All the headings will be bold to make it stand out but will be different sizes depending on how important the information they’re trying to highlight is. The navigation bar will be placed on the top where the user will have to click the ‘burger button’ to display it. It will contain icons next to the options provided to make it look more professional and easier to tell the user what the option given is about using very few words. The buttons will a different colour so the user can easily identify them as they will stand out and not confuse them with regular text. The project will follow developer guide provided by Google as well as ‘Material Design’ guide to give the application a more modern look and feel. This project is based on an event help by NTU and thus is being created to help the students as well as staff. Therefore, it will follow NTU colour scheme throughout the application as it will then give it a brand ownership, meaning users will be able to tell this application belongs to NTU.

# **Requirements and Constraints**

The application will have the following requirements and constraints:

|  |  |  |
| --- | --- | --- |
| Functional Requirements | **Students** | **Admin** |
| Login to the application |  |  |
| Change their password from settings |  |  |
| Create new users | X |  |
| Delete users | X |  |
| View job opportunities |  |  |
| Filter the opportunities |  |  |
| Add opportunities to bookmarks |  |  |
| Remove opportunities from bookmarks |  |  |
| Add new opportunities | X |  |
| Remove opportunities | X |  |
| View campus map |  |  |
| View opportunities location on campus map |  |  |
| User QR scanner |  |  |
| Use search bar to search for specific opportunity |  |  |
| Change campus map location from settings |  |  |
| View admin dashboard | X |  |
| Edit user details | X |  |
| Edit opportunities | X |  |

## Constraints

* The application will need user’s permission to access their location otherwise the map features won’t work.
* The job opportunities will need to be constantly updated
* The QR scanner won’t work without the user’s permission
* The admin will have to manually add the users
* The map functionality might not work properly when the application is being used indoor due to poor GPS signals
* There will need to be a constant maintenance for the database to make sure everything is up to date
* Will require internet connection to access the data in the database

# **Proposed Idea and Impact**

The aim of this project is to allow students to have an easier time during the recruitment fair where they are aware of all the opportunities and companies which will be visiting beforehand so they may not miss their chance to visit the company they wanted to visit but couldn’t as they weren’t aware of their location. They are aware which companies offer placements opportunities they offer, and which companies offer job opportunities or the type of opportunities (course related or not) so the students interested can visit the companies they are interested in and not go around asking every person at the booth if they offer i.e. placement. This will reduce chances of booth stalls being crowded and allow students efficiently visit every booth without making a queue. Students will be able to have access to the information beforehand so they can do some research on the company prior to the event day. They will be able to add the ones which interest them to bookmarks so they don’t lose track of them and on the event, day can visit them straight away without wasting time. They will find it easier to navigate throughout the campus with the help of the university map feature. In addition to this, they can get direction to the company booth by using the ‘show on map’ feature which will show the students how to get to the booth from their current location. This feature will be helpful for the 1st year students who are unfamiliar with the campus and will find it hard to navigate around.

This will allow staff to manage everything more easily as can keep track of all the companies/opportunities and student data more efficiently as they can access to all this information through the database. Once a company has been registered, it will be easier for the following year as the staff can just edit some minor (new) details and list them again. They can also keep track of the students who have attended through the application’s bar scanner feature. The staff will be able to add new opportunities with ease by clicking the ‘add’ button where they will be asked for opportunity/company details, and then select the courses it is related to and then click ‘create’ which will then list the opportunity. The admin will be able to add more admin users to allow other members of the employability staff to manage the users and the companies which will result in the workload being lessened on 1 person. Since this is a mobile application, they will be able to access it from anywhere compared to using desktop computers.

# **App Features**

|  |  |  |
| --- | --- | --- |
| Feature | Persona(s) | Outcome |
| Login Page | NTU Staff (Admin)  Students (Regular users) | Each member will have their own account. The admin user will have an additional option in the navigation menu to access to the admin dashboard. |
| Map function | Students (Regular users) | Will be able to see campus map and view location of opportunities on the campus map |
| QR scanner | Students (Regular users) | Will be able to register for the event |
| Link to database | NTU Staff (Admin)  Students (Regular users) | User and company/opportunity details will be stored in an external database. When the admin creates and deletes a user, the database will be updated. |
| Bookmarks page | Students (Regular users) | The users will be able to add/remove opportunism to bookmarks to view later |
| Attach an image | NTU Staff (Admin) | The admin will have an option to add images related to the opportunity, whether its company images or job-related images. |

# **Evaluation of Paper prototype**

## **Test User 1**

Name: Tyler (3rd year student)

**Pros:**

* The colour scheme is really good which matches NTU guidelines
* Very simple and easy to use interface
* The text is clear and bold for headings, easier to read as it stands out
* The bookmarks can be really helpful so you can keep track of all the opportunities you found interesting

**Cons:**

* Doesn’t have a clear navigation menu as it’s a little confusing
* Hard to find opportunities related to your course
* Chances of an external user (not from NTU) making an account using the application and getting access to all the data

**Improvements:**

* Create a better navigation menu
* Add a feature which will allow the users to filter the opportunities
* Only admin can create new users

## **Test User 2**

Name: Elliot (3rd year student)

**Pros:**

* The application design is good, and UI is simplistic
* Really like the idea of having campus map and changing between different campuses depending on which campus you are at
* Having pictures is really interesting as you get a visual representation of the job or the company
* Simplistic and easy to use navigation bar

**Cons:**

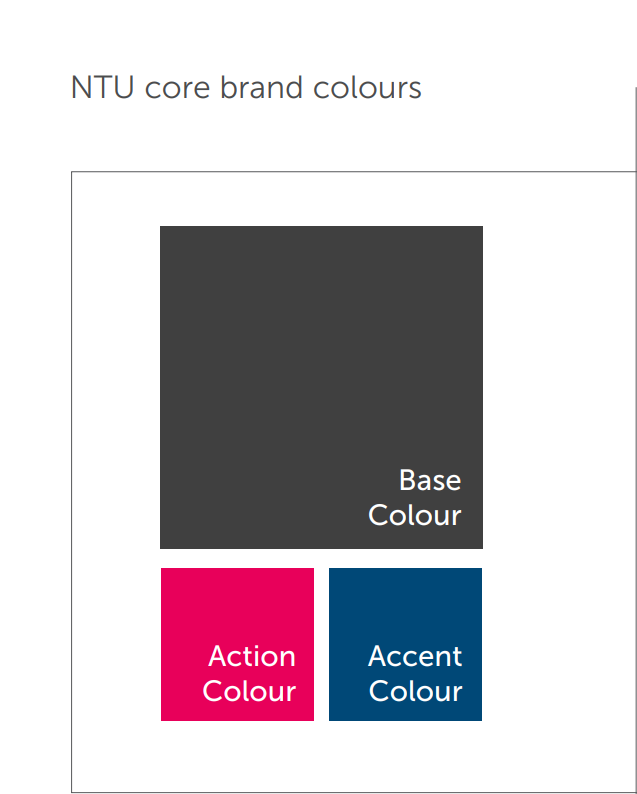
* How will the admin give students their passwords after creating new users?
* How will the admin access the admin dashboard and prevent the normal users to have access to it?

**Improvements:**

* Have a functionality where after the user has been created, the application will generate a random password which will be emailed to the students
* Have an extra option on the navigation menu for admins to access the admin dashboard

# **Appendices**

## Project Reboot Digital Style Guide

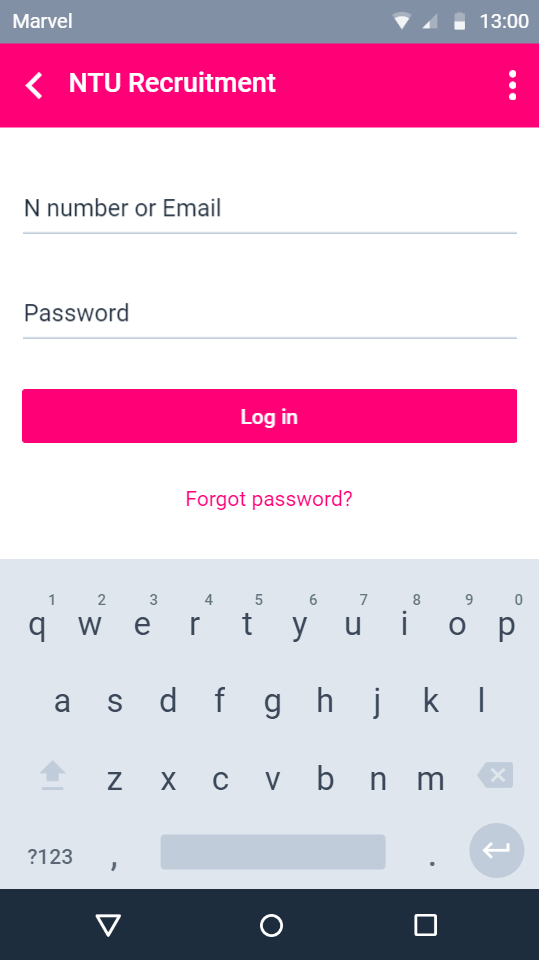
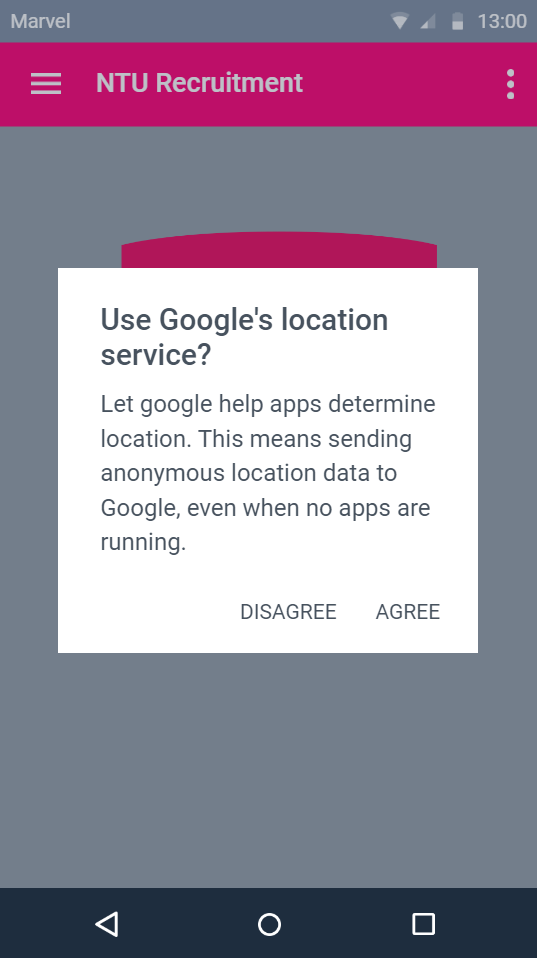


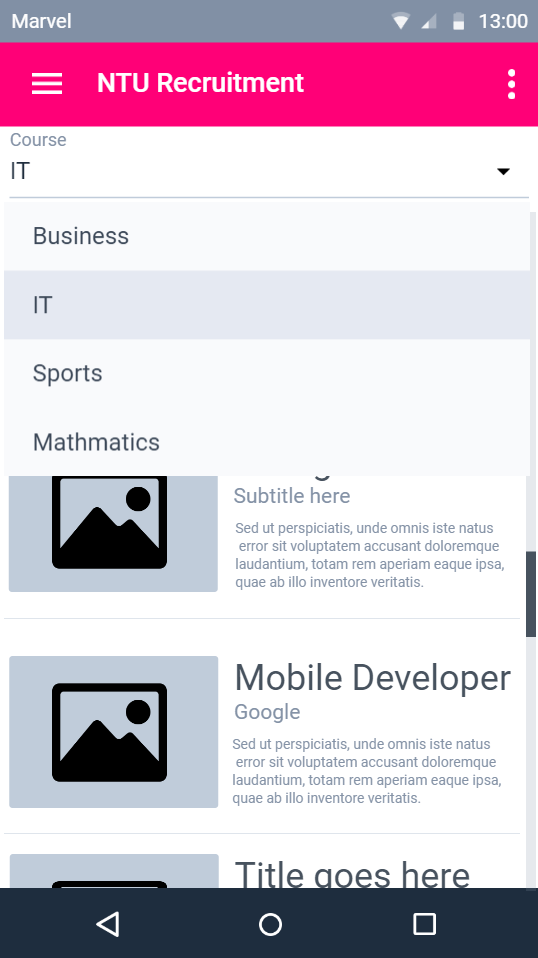
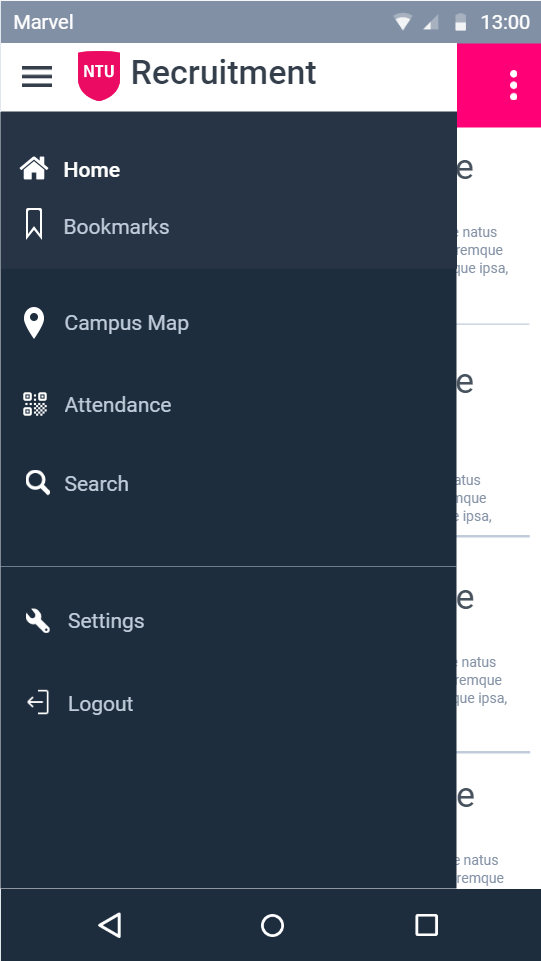
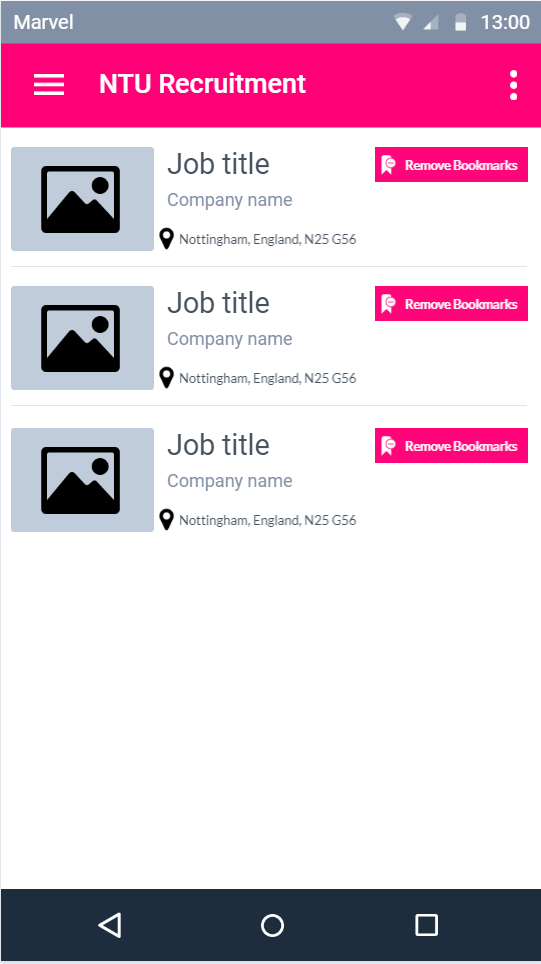
## Personas

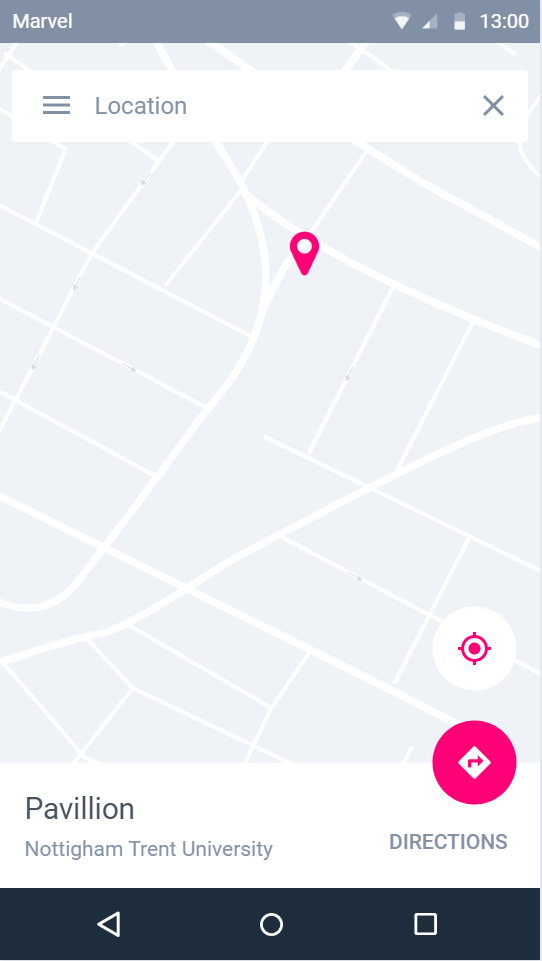
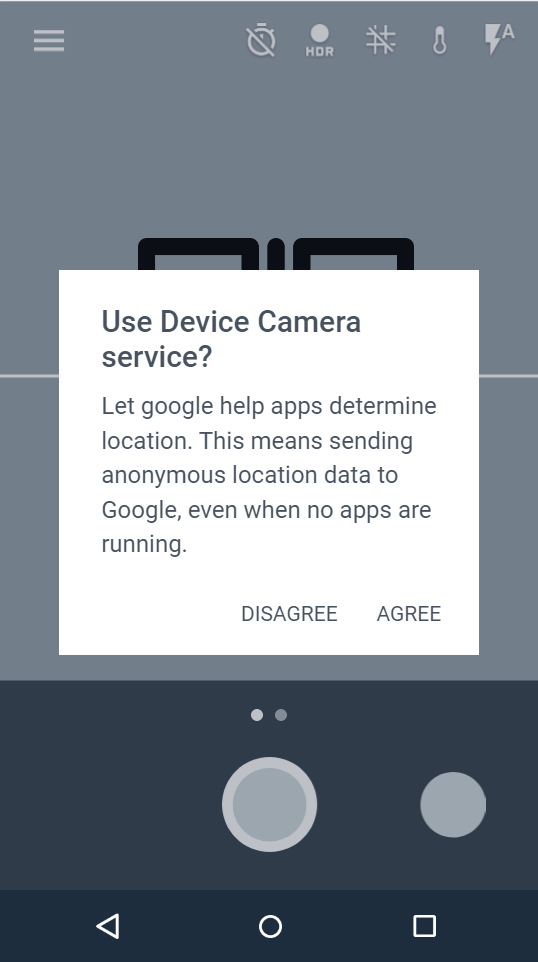
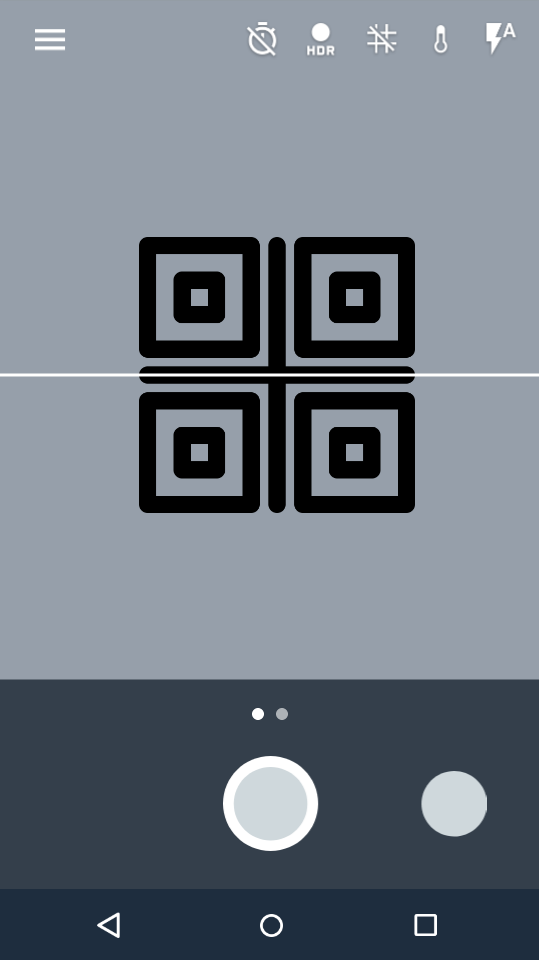
|  |  |
| --- | --- |
| Name: Holly  Age: 28 | Demographic:   * Staff in-charge of managing the event * Part of the NTU employability team * Manages placement student data |
| Issues with current process:   * Difficult to get the information out about the job opportunities before the event * Hard to direct all students to the location of certain companies/opportunism (as some can be in other buildings) * Can be too crowded at booths as students have to wait to ask simple questions as they have no prior knowledge of the company or the opportunity they provide (placement or not etc.) | Solutions:   * Provide a way to add information about the opportunity’s companies provide for the students to view beforehand * Have map features so they know the location and where they need to go * Allow students to bookmark opportunities which they are interested in and ask about it in more detail on the day of the event which will reduce the crowded booths |

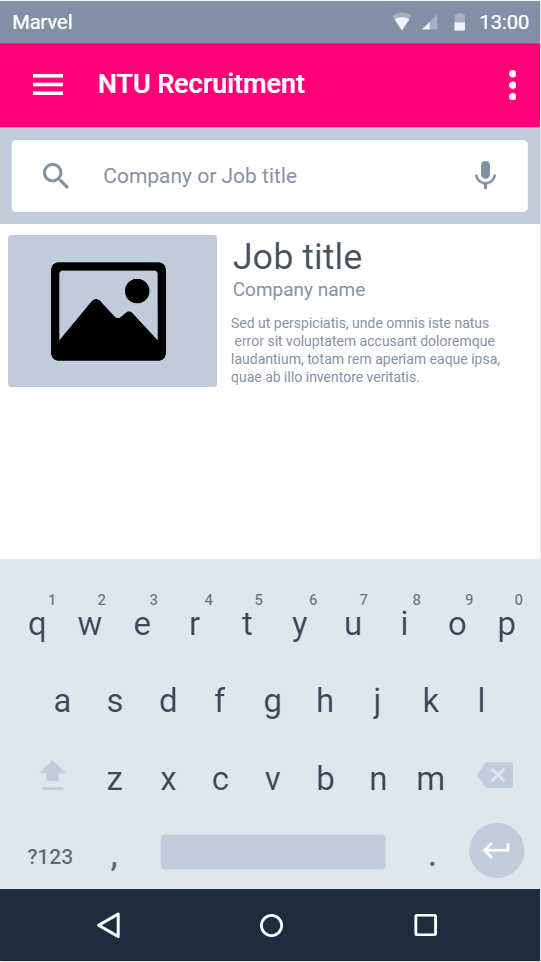
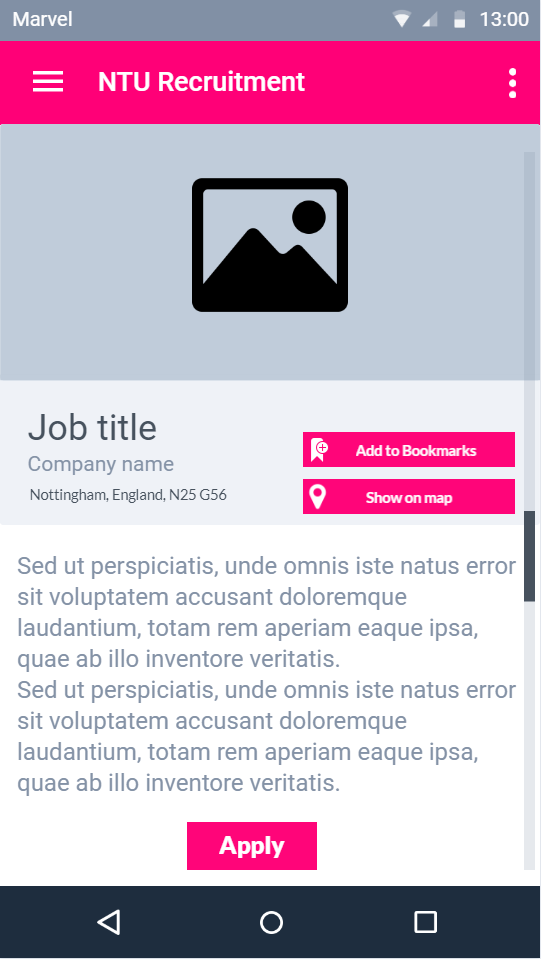
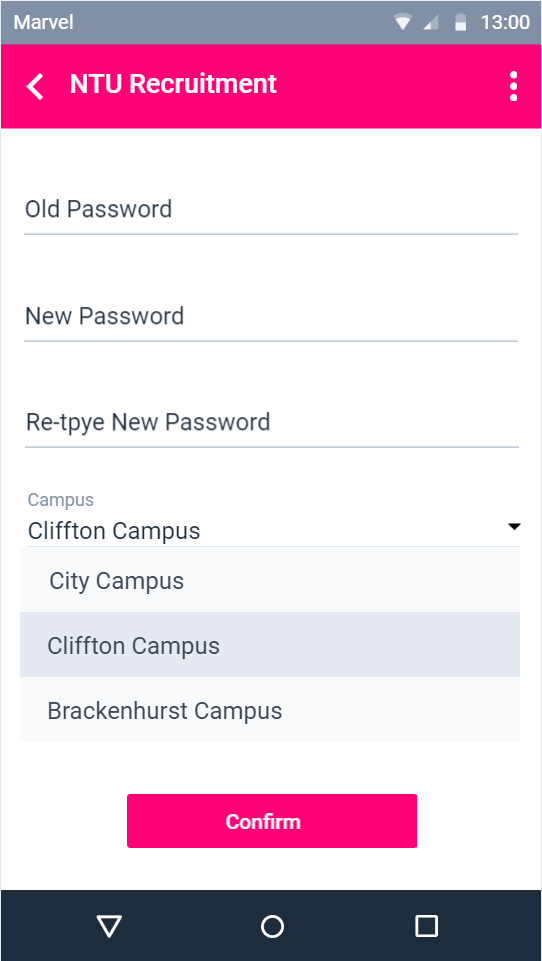
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| --- | --- |
| Name: Jake  Age: 20 | Demographic:  2nd year student   * Wants to look for placement opportunity * Studies Computer Science * Wants to be a Web developer |
| Issues with current process:   * Hard to navigate around campus as not familiar with all the buildings apart from technology ones so don’t know the location of certain companies * Don’t get to visit all the companies due it being really crowded * Hard to know which companies offer placement or not without talking to them * Not very clear if the companies provide the opportunity you want without talking to them | Solutions:   * Provide a feature which locates the location of the company on the university campus and provides directions * Have basic information about the companies and the opportunities they provide beforehand * Indicate whether they provide placement or not |

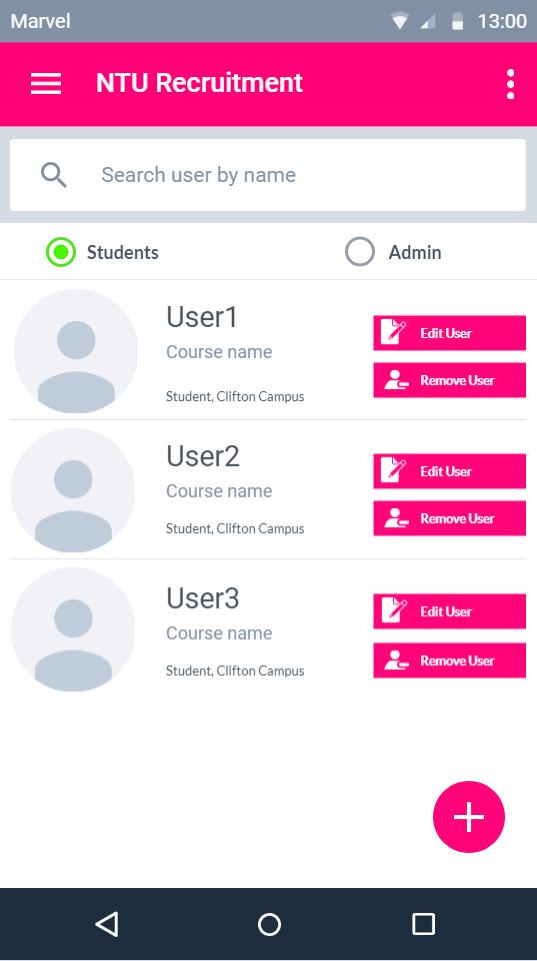
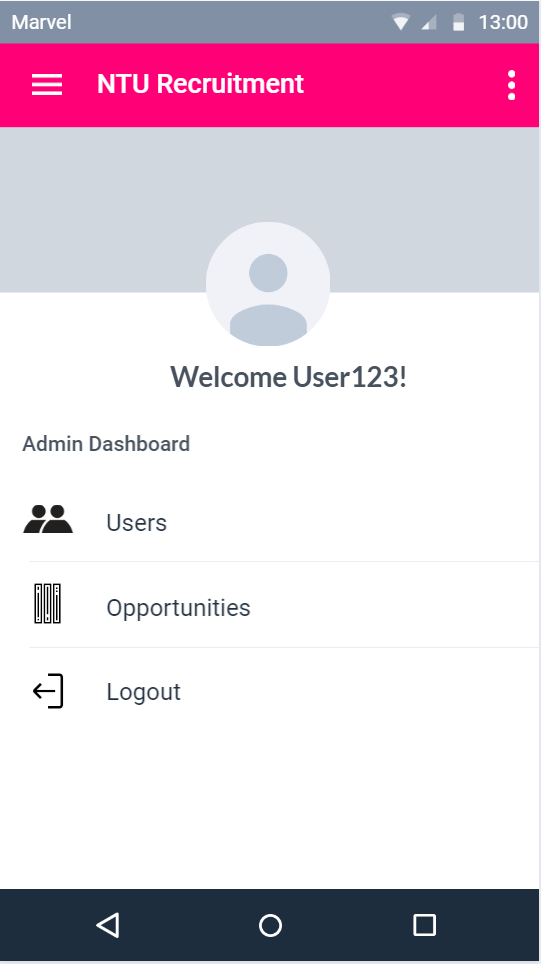
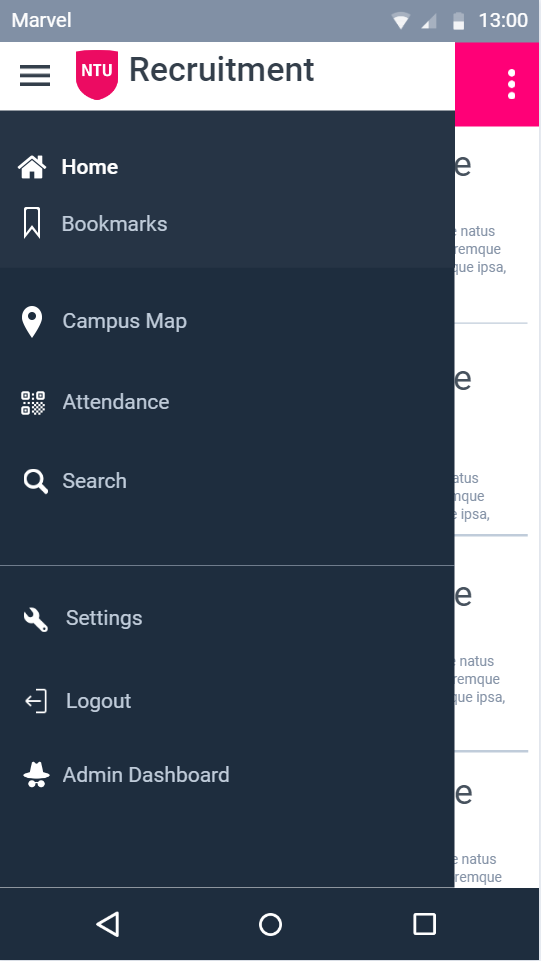
## Paper prototype

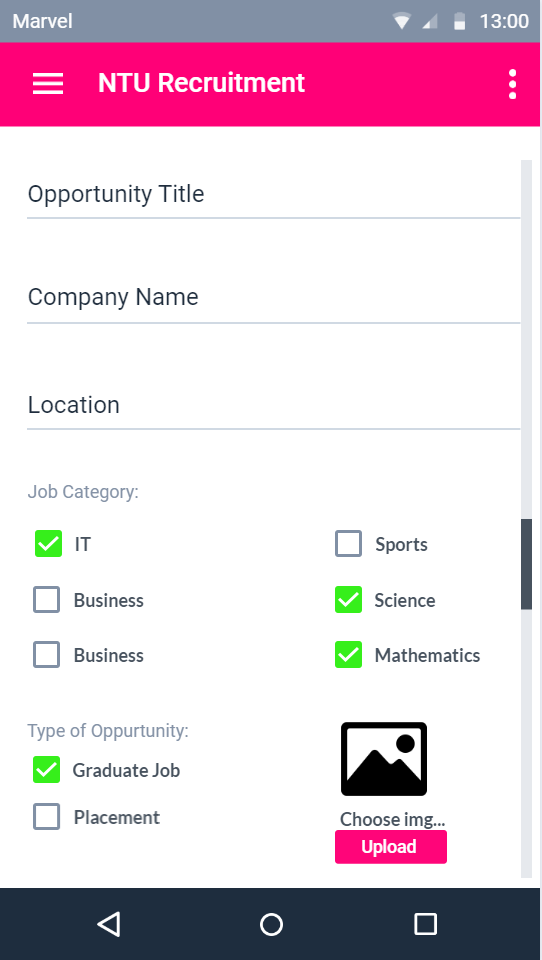
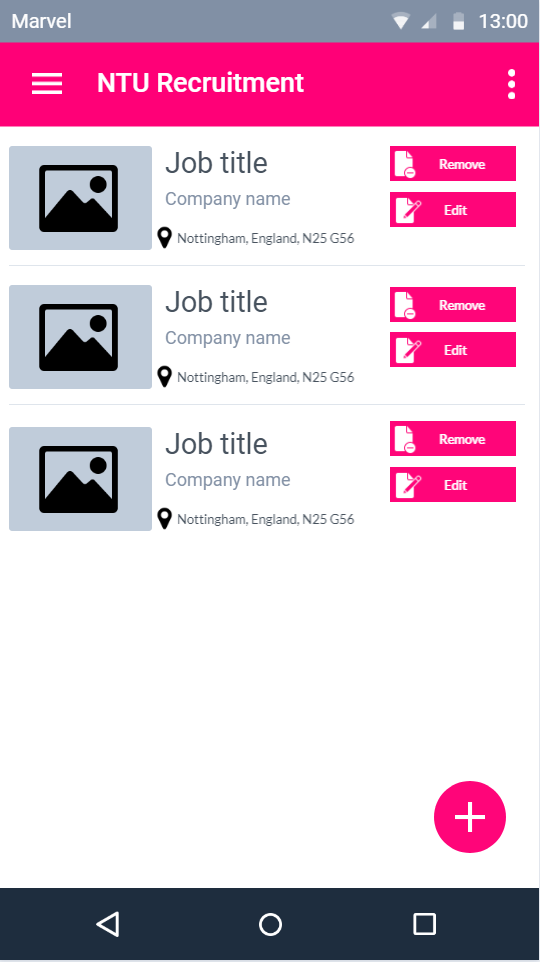
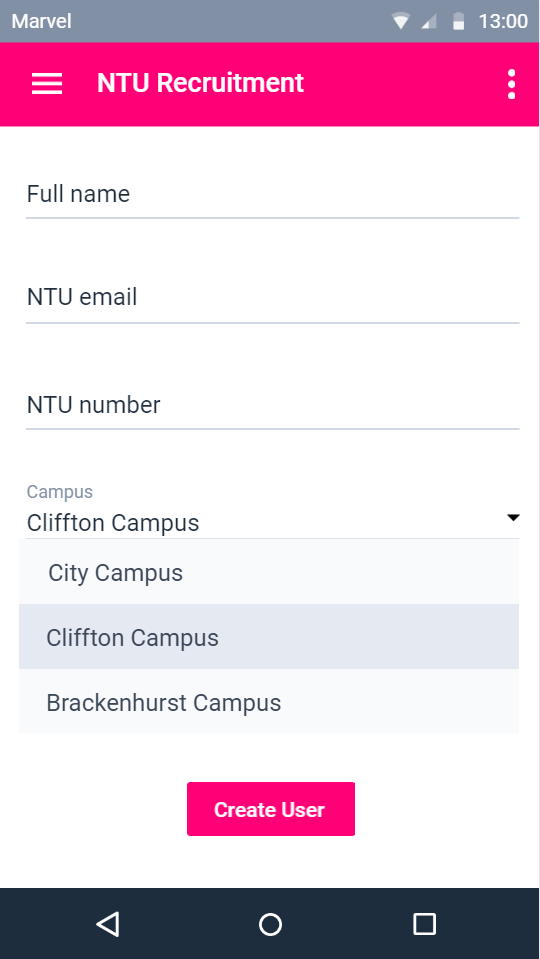
  

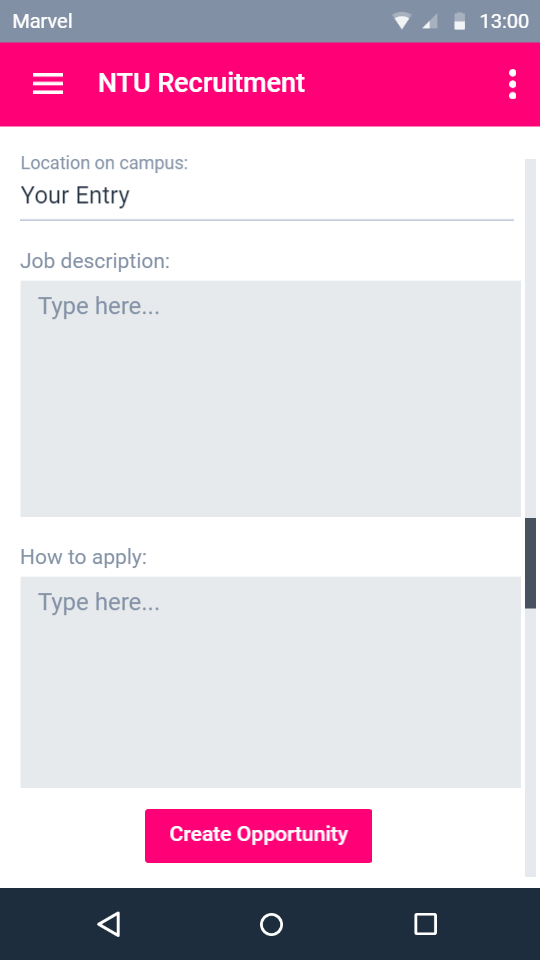
  







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