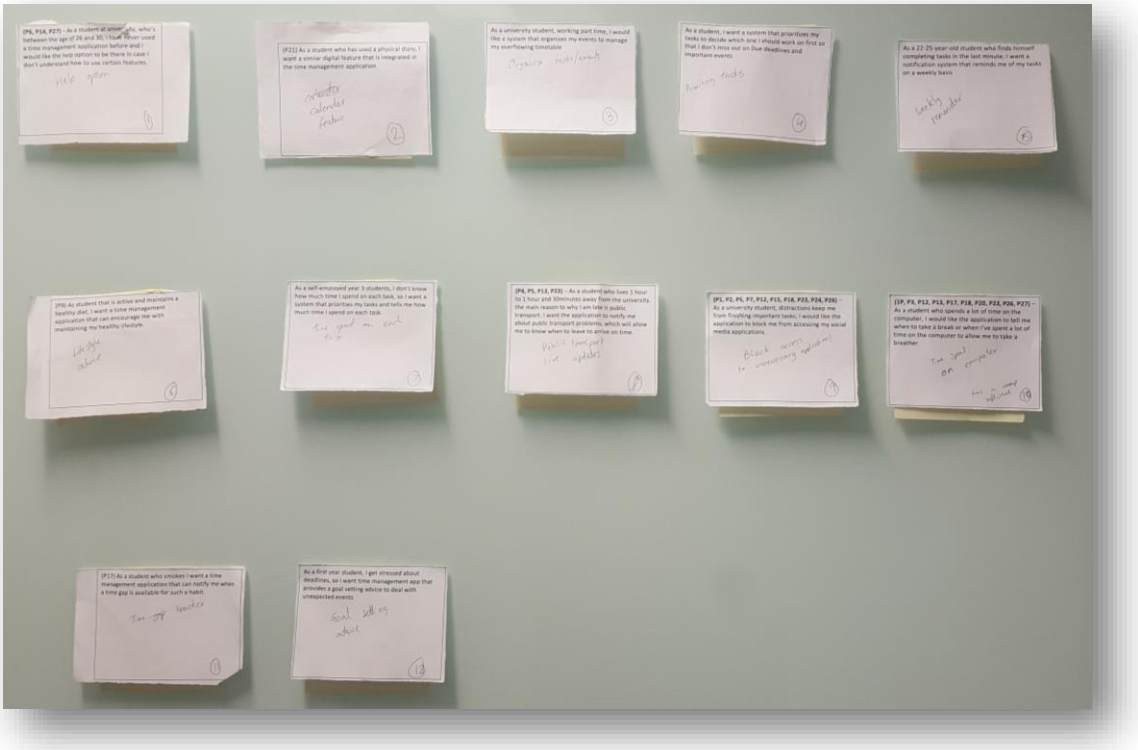
Problem definition

Our system is called “WorkIt!”. As explained in previous work, students find it hard to manage their time. This statement is based on data gathered from students via research (questionnaires and interviews). WorkIt is a phone application which is intended to help students manage their time better to make them more productive in their day to day activities.

This phase of our project is intended to set the layout of the software, how it will look and what it will do. However, the outcome of this phase of the project will not be the final product. This is because we are only creating a prototype of what we think the program should look like and do depending on the data gathered from research. For the final product to be final the prototype will have to go through multiple testing to ensure that the software is what the user needs, and to ensure that the software will be able to provide what it is being asked to provide, to help students manage their time better.



We used the user stories which we gathered from the research phase of the project and refined them to get a set of functions which the participants said they would like the application to have. These formed a prioritised list of functions the application must have to satisfy the user’s needs, however, not a final list as the user doesn’t always know what they want.

The objective of this phase of the project was to start designing the software. As mentioned above this is just the start as the prototype has to go through actual programming and testing, however, without this phase of the project, we wouldn’t have a prototype. This phase is very important because now that we have a prototype it gives us space to work on it to provide a final product. The phase allows us to test the prototype to see what was done well and what changes could be made to make it work even better, ensuring the final outcome will be to an acceptable standard.

Methods

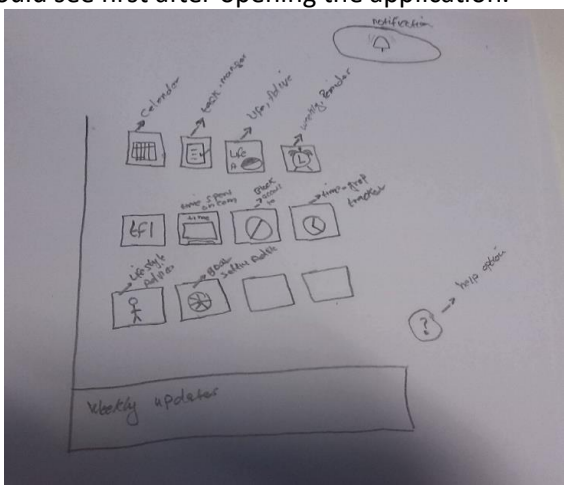
We had multiple group meetings where we worked on the design of the application. We approached the design phase by first looking at the user stories we gathered from the research phase, refining and prioritising them. Once we had a clear image of what the user wanted the application to do, we then added a few of our own features which we thought would be appropriate to add, appropriate in such way that they would help the user. These features include transport information and social media blocker. We worked together to take all these decisions and not one decision was taken by one group member without the approval of the rest.

Once we had all the features which the application would require to have we started drawing the screens on paper. We approached this through iterative drawing, as in we started off with a simple drawing of the layout/house style of the application and worked ourselves towards a prototype design.

The output of our work is a design of what the application should look like, how the features are laid out, and what it should do. This then helped us to create the application prototype which would then be used to analyse the effectiveness of our research and design. As good research and design means that the prototype wouldn't require too many modifications to finalize the application.

Conceptual design

As mentioned above we started off by looking at the user stories, then refined those in such way to get a list of features which the users would expect the application to have and then we added some of our own features. We then started drawing the main screen of the application. The screen which the user would see first after opening the application.



Navigation buttons

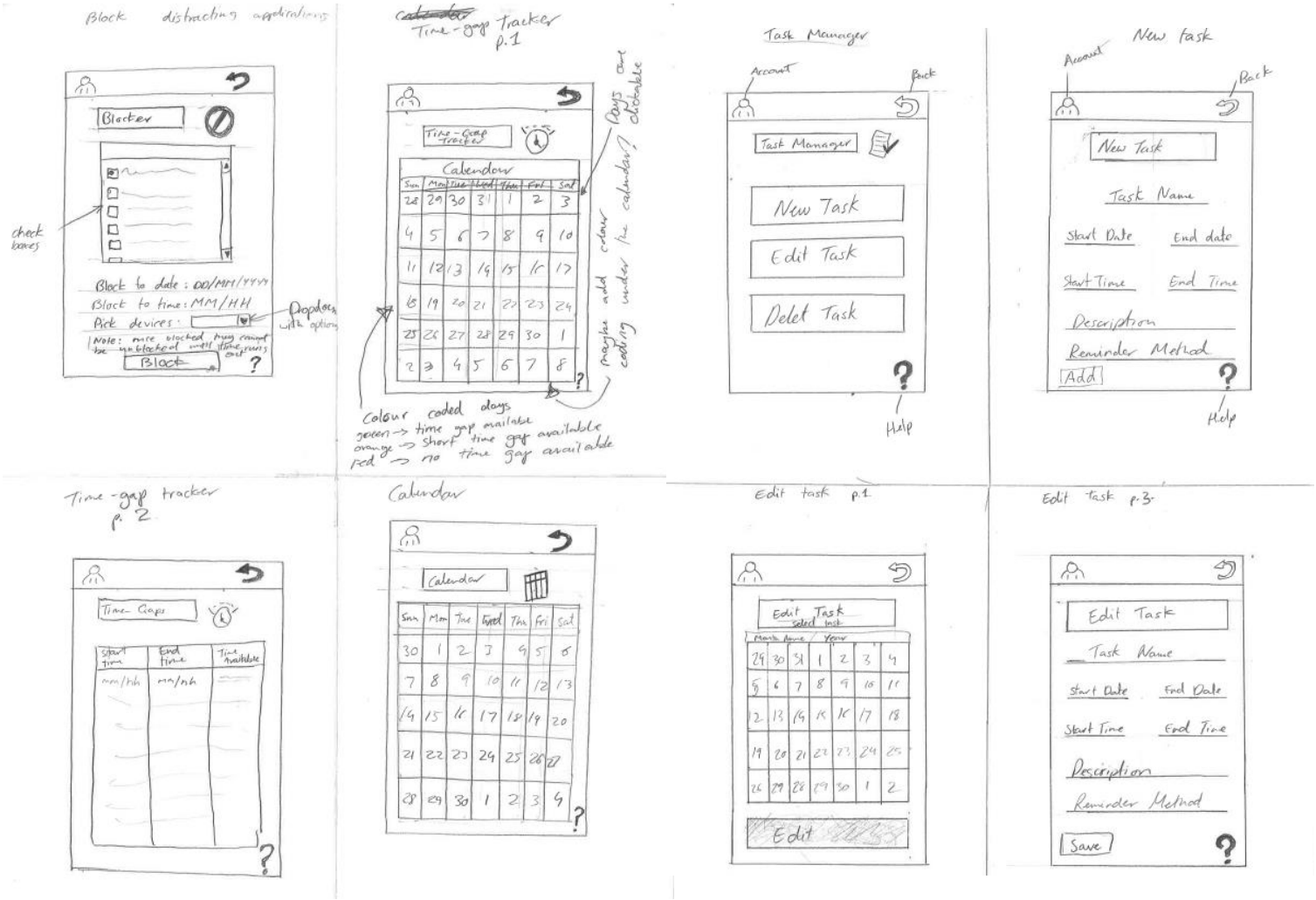
The image to the left is the first drawing we made. This was a simple drawing which we simply just threw all the features on the screen to get an idea of what needed to be there. This allowed us to visualize the area we have available to play with and design in such way where there was no major white space, where we could place everything without leaving blank space and without overcrowding the screen.

We then looked at what we had and redrew it to use that empty space that we had but also to give the application a house style, a layout which all the other screens would use. This layout is, the header at the top which includes the account button and the help button, and the rest underneath the header.

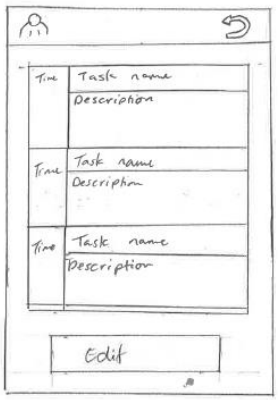
We based the conceptual design on the principle that there shouldn't be too much empty space, however, at the same time the screen shouldn't be overcrowded. We also made the layout simple to use by making the navigation buttons relatively big and giving them clear symbols of what they represent (as clear as possible).

The actual prototype has minor differences from the conceptual design. As the conceptual design is just the starting point, the foundation. While creating the prototype, we realised that some features or placements of objects on the screen were best left out. The help button on every screen in the initial drawings was taken out as it was too repetitive and we decided it would be best if the user had only two help buttons. One help button when they are logged out, which informs the user about the application and some other basic information, and the help button when they are logged in which informs the user about everything there is to know for them to understand the application.

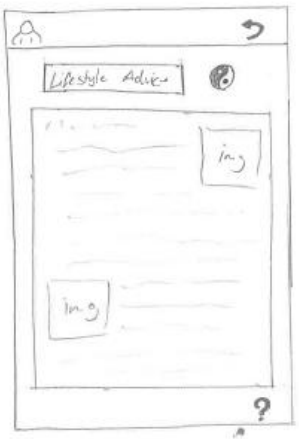
We chose to place the icon for the feature on the feature screen, next to the title of the page to subconciously familiarize the user with the icon. As in time, from seeing the screen title with the icon, the user will be able to recognize the icon on the main screen and what it means without having to look it up. We also chose to have a similar layout for all the feature screens, which wiill make the application easier to use, as the user will be familiarized with the layout, just the functions will be different on each screen.



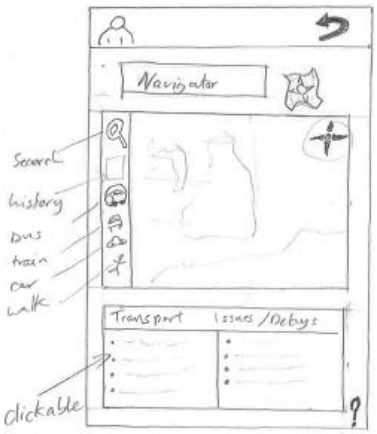
Edit Task Pt. 2.



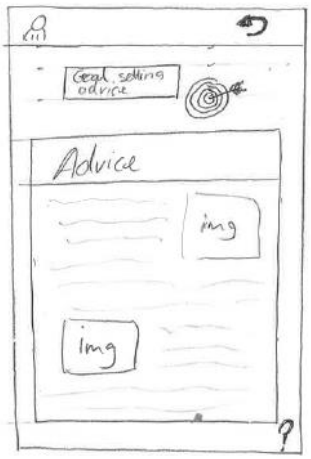
Lifestyle Advice



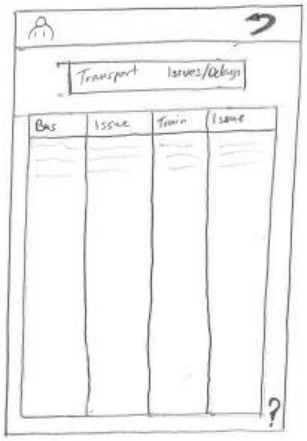
Transport information



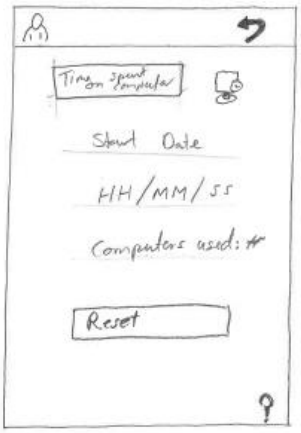
Goal setting advice



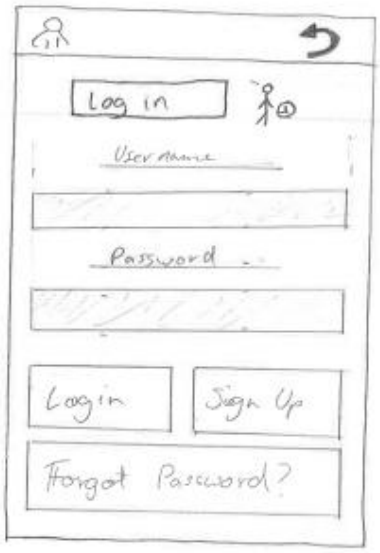
Transport information
Transport issues



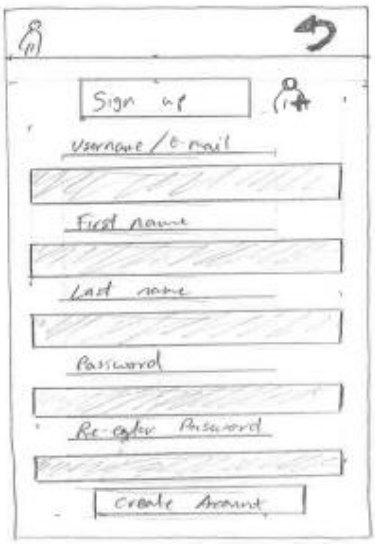
Time spent on the computer



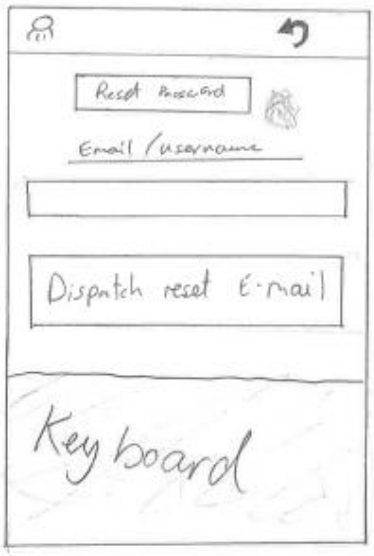
Login



Sign Up



Reset password



Reset Password Confirmation

Detailed mock-ups

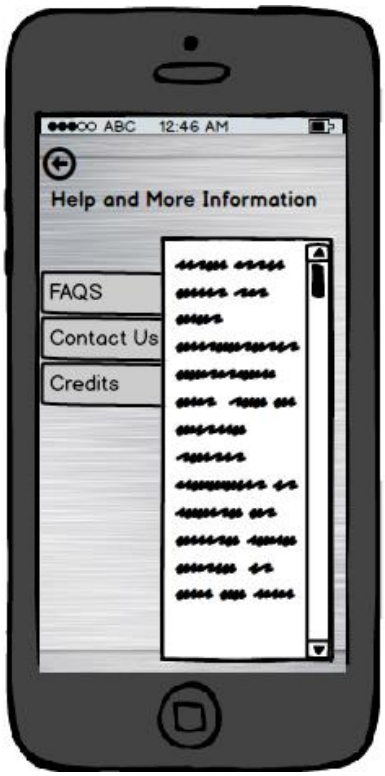
This screen allows the user to input their username and password, if they have one, and log in. If they are not registered they can press on the sign-up button which will take them to a registration page where they can register an account. If they've forgotten their password, they can press on the forgot password button which will take them to a screen where they can recover their password.

This screen allows the user to register an account by inputting their chosen username, first name, last name and password, and they are asked to retype their chosen password to confirm that they haven't made any errors while typing it. The user would then press the create button account which would create their password if all the validation rules for the input fields have been met.

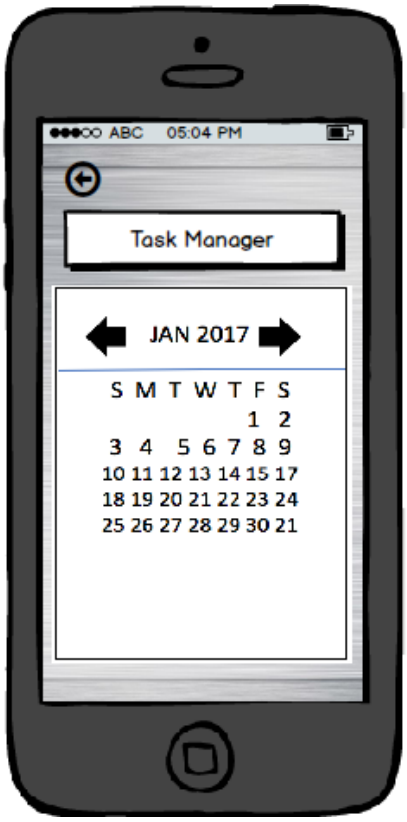
This screen allows the user to recover their password if they have chosen to do so. The user would be required to enter the email address which they have used to register their account in the first place where the reset password link would be sent to.

This screen is the follow up screen from the reset password screen. This screen appears after the user presses the dispatch reset e-mail button from the previous screen. The user can then press the login button which will take them back to the login screen where they can reattempt to login after they have reset their password.

Once the user logs in this is the main screen of the application, the centre hub. From here can navigate to the rest of the application, to the other screens. The screens mentioned are, calendar, task manager, lifestyle advice, transport information, time spent on computer, blocker, time-gap tracker and target setting advice. The user can also see notifications at the top of the screen. The user also has the option at the top of the screen to see their account information or log out of the application.



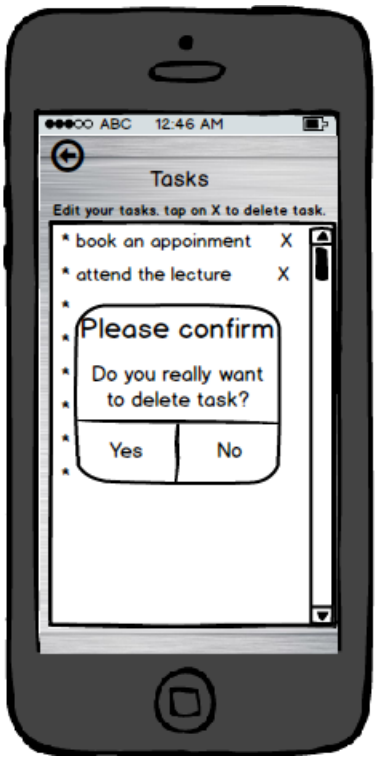
This is the help screen where the user can see useful information, such as frequently asked questions, contact us and credits. This screen allows the user to document themselves on the application if they do not understand something.



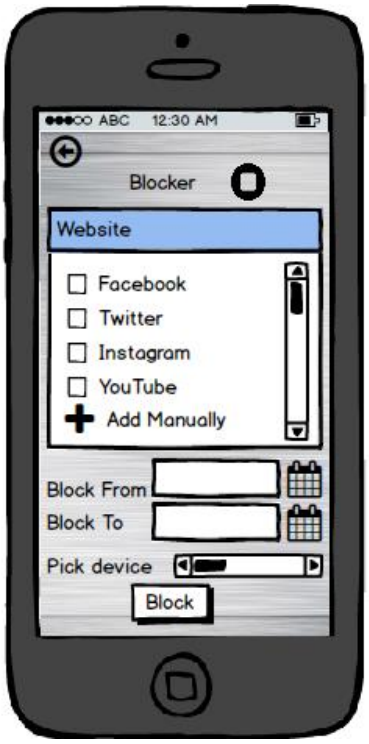
This screen is the task manager screen which allows the user to pick a date which would then redirect them to the next screen.

This screen is accessed from the previous screen. On this screen the user, after picking a date on the task manager screen, can then either add a new task to that date or view, edit or delete a task/s from that date.

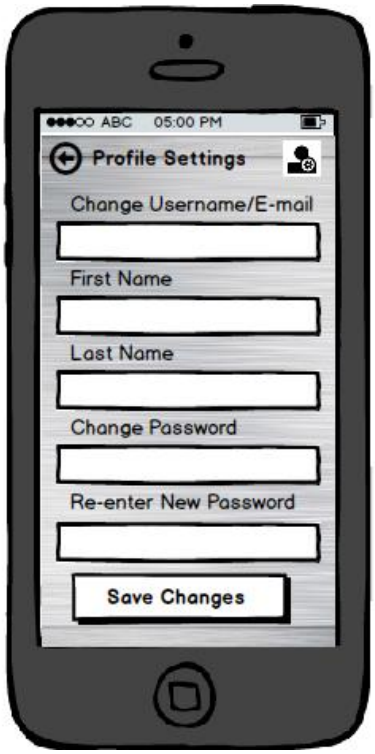
This screen allows the user to add a new task. This screen is accessed from the previous screen. It allows the user to give the task a name, which would allow them to easily recognise what the task is. It also allows the user to set a starting date and a finish date for the tasks which will allow the application to keep track of time and inform the user. Once the name and dates have been set the user then presses the save changes button which would then apply the task to the chosen date.



This screen allows the user to delete a task. After the user picks a date in the task manager screen and then choses to delete a task, the user is prompted with a confirmation window which once they press yes, if they are decided to delete that task, the application will then delete the task.



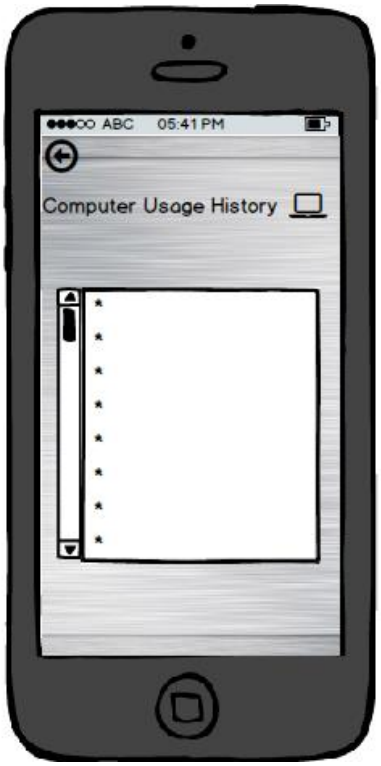
This is the blocker screen. This screen allows the user to pick websites which they wish to block themselves from using. After they pick the websites they then pick a starting and ending date for the block and they pick the device/s on which they want to block themselves from accessing the websites from. Once all of that has been specified the user pressed the block button and they are blocked from using those websites for the specified time period. This is useful because they can block themselves out from distractions while having to face with an important task at hand.



This screen allows the user to change their username/email address, first name, last name and password. Once they have chosen what they want to change and have input the new data, they then press on save changes and the application applies the new data.

This is the time-gap screen. This screen allows the user to see when they have time-gaps between tasks. This feature is important because it allows the user to see when they could add a new task or when they could simply take a break from all their hard work.

This screen is the time spent on computer screen. This screen is useful because it allows the user to see how much time they have spent on their computer as time flies by relatively fast when you are busy. It is important to keep track of activities and how much time you spend on them, especially if these are carried out on a device, as excessive computer usage can harm your health.

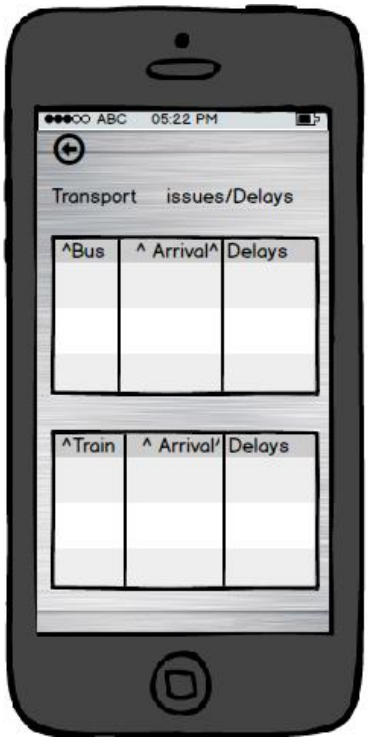


This screen following the previous screen allows the user to see their history of computer usage.

This is the lifestyle advice screen. This screen gives lifestyle advice to the user. This is important because it could help the user realise something they don't already know. It could help the user realise that they have been possibly doing something wrong in their life which could be the cause to why they might not be feeling positively (if that is the case).

This is the goal setting advice screen. This screen gives the user useful information about how they should set their goals in the most effective way. This screen is important because as the other information giving screens above, it allows the user to realise something they might not already know and it helps them improve on their current techniques.

This is the transport information screen. The user would input a starting location and a to location, they would then select their transport method (bus, train, car, walk) and the application would tell them how long it will take them to get to where they want to from where they are. They can also press on transport/delays which will take them to another screen.



This screen is the transport issues/delays screen which informs the user of any transport delays/issues which are currently at the time of when the user is using the application. This is important because it informs the user if there are any issues so that they can re-plan their route.

Discussion on what went well and how you would improve the method

Overall the initial design for the application is simple and easy to use, however further testing with participants needs to be carried out to ensure that the software is useable, not just by us but by actual users too. This is because we are computer science students who automatically know how to use software better than the average person, thus requiring further testing with users who don't know much about computers. This is because if someone who has never used such an application before or has limited knowledge can use it easily, anyone else can.

The next logical step would be to create a functioning software based prototype (a beta application) and get people to use the application and give us feedback which would then be used to alter the prototype and repeat the process until we would have a final product.

Good teamwork has been demonstrated in this phase of the project as we all came together to design the application and create the prototype. Whereas, if we were to do this on our own we would've came up with less, as in a team we got to compare ideas and designs and pick what we all agreed on would be good for the user.

Looking at the prototype and considering that this is the first prototype, a lot of changes could be made to make the application even better. One example of this is on the lifestyle advice screen. At the moment, the user can only see a list of lifestyle advice. For future improvements on that screen we could also allow the user to mark some advice as already seen or already know, delete some, maybe add their own? This is just improvements for one screen. A lot of work can be done on the prototype before considering a final product. This might sound like the prototype was designed badly but that isn't the case. This is because it allows us, as a team, to make alterations to add improvements until the prototype is no longer a prototype and it can actually start helping students.

Overall this was a learning curb for me, and it helped me realise the importance of designing and prototyping an application before actually releasing it. It helped me realise how easily mistakes can be made and how useful it is to look over work constantly to ensure perfection.