DC1 Task B Submission Template

Task B:

Your Full Name: Ryan Indrananda

Your Student Number: 10852565

Your tutor name (the name of the tutor responsible for your group): Daniel Hewson

Name of your app: Yield

(Please note that you need to choose a name for your app, for example "ParkingAssist" if your app is about assisting people for finding parking spaces)

Design Log: <insert design activities with clearly marked out weeks below>

WEEK 2

Possible app ideas:

1. Parking Lot app
    a. Problem space: users find it hard to look for parking spaces in their place of work.
    b. Sometimes, when they arrive to work, their usual space is taken and they must look for another space, which will take time.
    c. A mobile app that will guide them to open parking spaces may help solve this issue.
    d. They will be able to reserve spaces before arriving, thus saving time.
2. Scan and purchase app
    a. Problem space: purchasing products in a market may take some time, especially during crowded hours and days.
    b. Having an app that can instantly scan and purchase products will save a lot of time.
3. Productivity app
    a. Problem space: many users especially in this day and age struggle with productivity due to many unproductive apps, such as games and social media apps, rising in the market.
    b. An app that can temporarily blacklist these apps while providing other useful features, such as calendar, to-do list, etc. will be very useful.
    c. Keeps their motivation and productivity in check.
4. Music cataloguer
    a. Problem space: many music listeners want reports on their listening habits for fun.

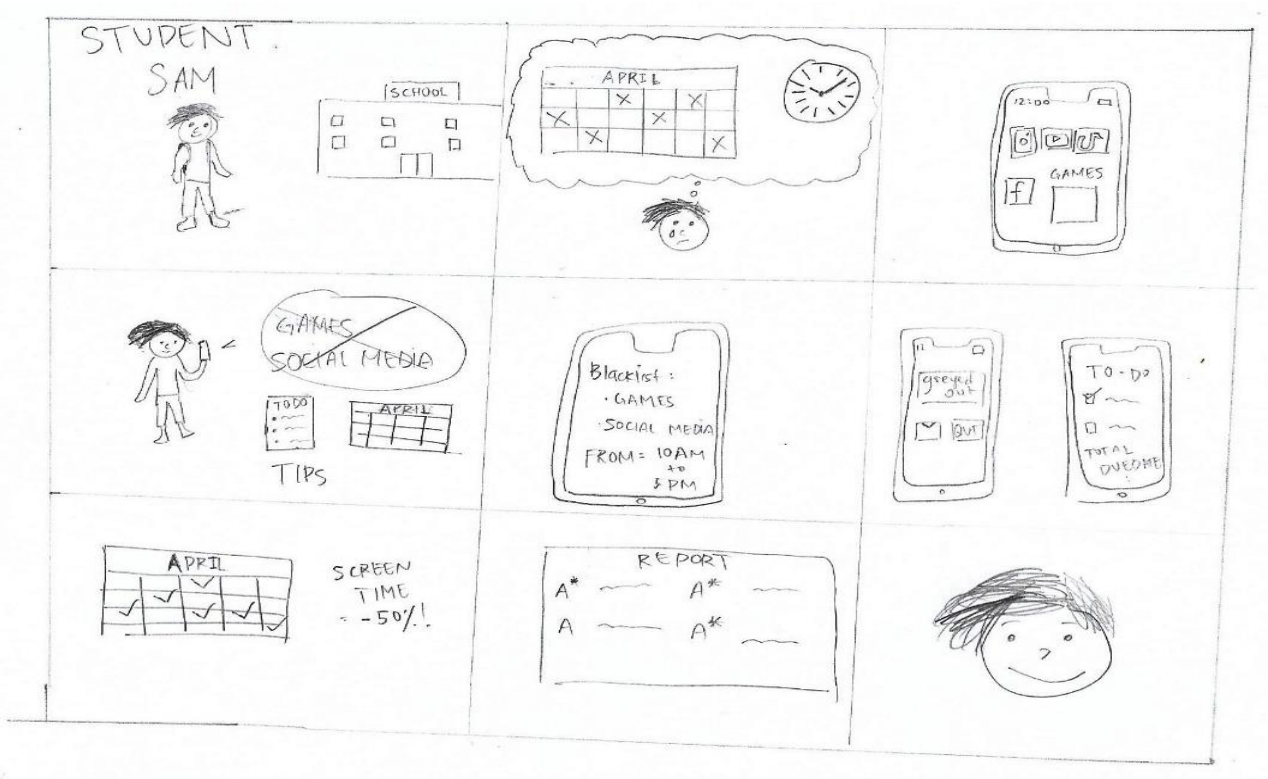
b. An app that can catalogue what they listen to and produce monthly reports of artists listened to, songs, genres, etc.
c. App can then recommend users of similar artists based on their listening habits.

5. Notification organizer
    a. Problem space: media share app notifications pile up easily on a day-to-day basis and there is no measure to organize them.
    b. e.g., YouTube's subscriptions notifications only appear once every 7am per day and doesn't give a detailed explanation of what videos from which content creator have been uploaded until it is clicked and takes you to the YouTube app itself.
    c. continuously updates users of these things organized either in a physical app (e.g., once a video is uploaded)

Fatal 5:

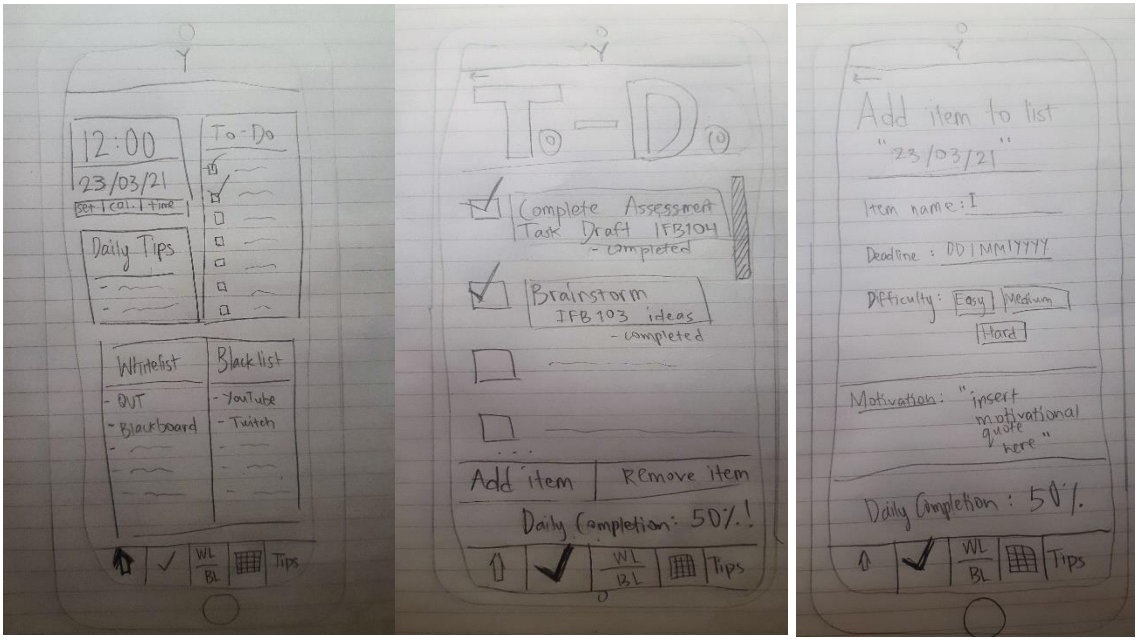
One common cause of fatal vehicle accidents in Australia is fatigue. In creating a mobile app to solve this issue, one feature I may implement is a reaction time test, whereby users react to a button changing colours for example. Another feature is logic puzzles, where users can test to ensure their cognitive ability is not impaired in the current moment through various visual puzzles. Lastly, I would implement a map feature that locates and directs users to the closest store or café so they may purchase refreshments. Word count: **88**.

WEEK 3



To explain the above storyboard, Student Sam is a high school student who struggles with productivity and time management. He stresses at the thought of his deadlines and the prospect of not being able to manage his time and work enough to allocate enough or equal time to all his projects and assessments such that he may be able to get desirable marks on all of them. He attributes this to the fact that his mobile devices are filled to the brim with unproductive applications, such as games and social media. Most of his screen time throughout the day is consumed by these applications, and he has trouble staying focused without occasionally checking these applications every few minutes. He wants to somehow be able to prevent this habit from occurring, while staying on top of his academic and mental health. Thus, a productivity app that may be able to solve this problem may be able to blacklist and whitelist certain apps, give a concrete minimalist scheduler feature, a simple to-do list, as well as offer wellbeing tips for the health of the consumer. After using such an app,

Sam is able to stay on top of his deadlines all the while reducing his total daily screen time. His academic reports reflect this change, and he is able to get straight-A's! He is grateful for this change and will continue to use such an app.



This is a simple low-fidelity prototype of an app that may help Sam with his productivity issue. The first image is the home screen of the app. It organizes all the features neatly in one space, with the goal of a neat interface to keep the application trivial and easy to use for an already stressed user. The feature I will explain is the simple to-do list. This feature will list down items that users can individually define, as well as giving them the ability to set a deadline and difficulty, with the difficulty aiding the sorting of items from most difficult to least difficult to ensure users are constantly reminded of their priorities. Checkmark buttons are used instead of radio buttons to reflect the completion of the items. A bar is dedicated to give users a daily motivational quote to keep their motivation at a good level to continuously do their work. On the lower part of the screen, a daily completion percentage is shown to reflect on the overall completion of the items on their daily to-do list schedule. The add item screen is also shown. It is a fairly trivial screen as well designed to be quite self-explanatory,

and this is where users can define item names for the list as well as their difficulty and deadlines. Throughout the day, preferably about every 2 hours, users will receive notifications to remind them of their work. Users can also reflect on previous days and their completion rates, and monthly reports may be generated.

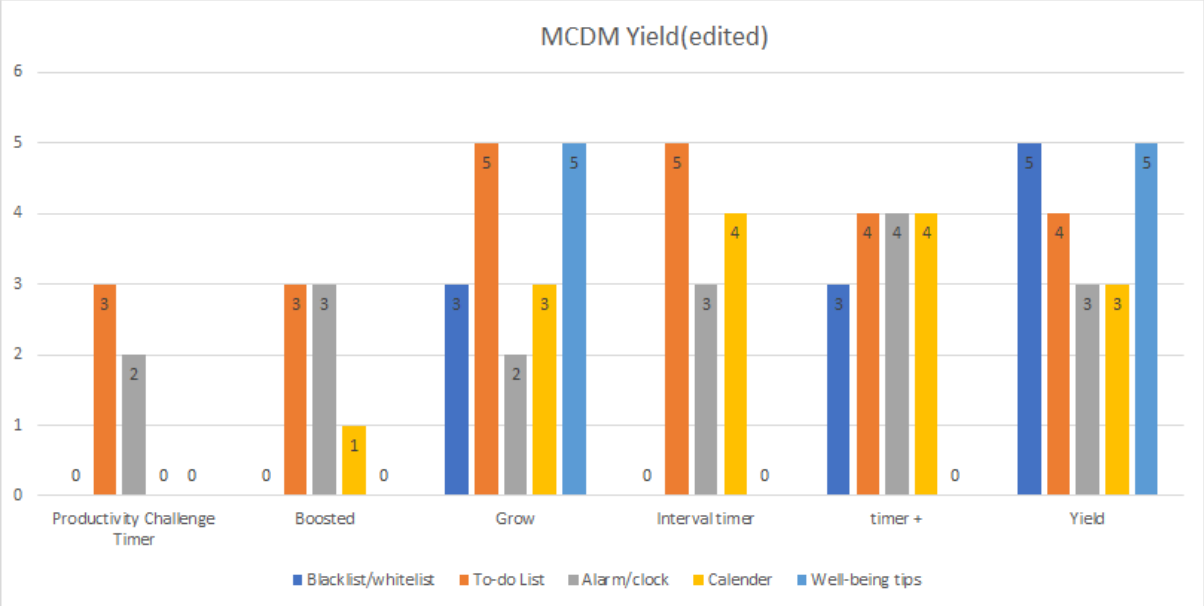
To test the low-fidelity prototype, I sought out two users and displayed the current state of the prototype. I gathered their feedback on a notebook, with the most important notes reflected in the following list:

- Add more visual images, rely less on text, e.g., icons
- UI is currently a bit too cluttered
- Features are quite clear
- Start thinking about colour theory and how it reflects the function of the app
- The flow of the feature is linear and clear, feels natural.

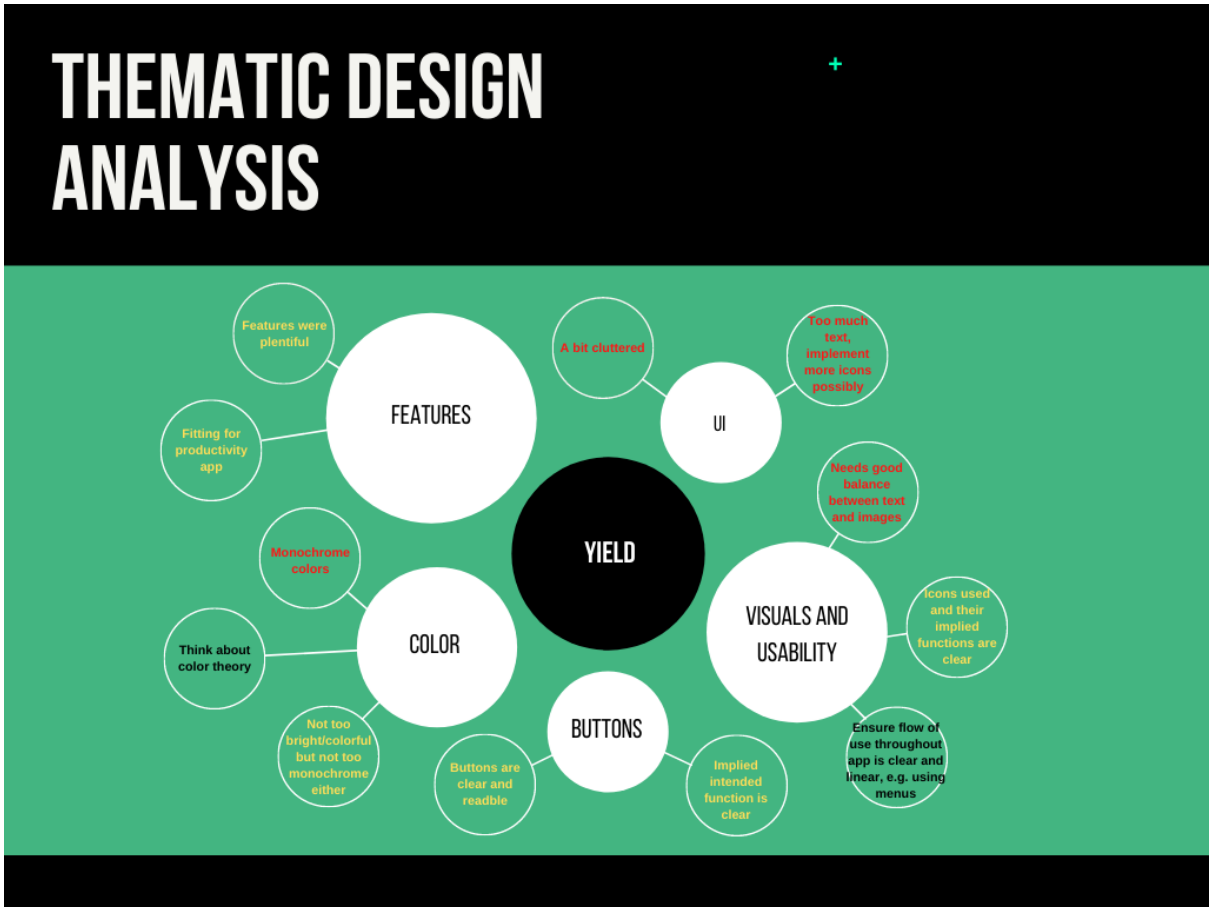
WEEK 4

Productivity app	Blacklist/whitelist	To-do List	Alarm/clock	Calendar	Well-being tips	Total	Weighted total
Productivity Challenge Timer	0	3	2	0	0	5	20
Boosted	0	3	3	1	0	7	26
Grow	3	5	2	3	5	18	64
Interval timer	0	5	3	4	0	12	40
timer +	3	4	4	4	0	15	55
Yield	5	4	3	3	5	20	74
weighting	5	4	4	2	3		

Above is a Multi-Criteria Decision-Making (MCDM) table. This table provides a direct comparison between our app Yield (noted in blue) and other competitor productivity apps, specifically between our selected features, being a blacklist/whitelist feature, a to-do list, an alarm/clock reminder feature, a calendar, and well-being tips. As can be seen, some of our competitors do not have all these features on their apps, instead focusing on one or two features, mainly the to-do list and alarm and calendar features. In designing our app Yield, we have accounted the weighting of how important individual features are, and that is reflected on the bottom of the table denoted with a purple background. Using this weighting, and applying it to the total score of the apps we have rated alongside Yield, it can be seen that our weighted total score denotes that our app is stronger than our competitors' from a feature perspective.



To give a more visual illustration, here is a bar chart denoting a feature-to-feature comparison for our app versus our competitors' apps. As mentioned before, some competitors lack certain features we have planned for Yield, and overall, our app is very balanced in features and it's rating.



To accumulate all our user feedbacks throughout the previous weeks based on our low-fidelity prototypes. We have categorized these feedbacks into five main categories, which are features, the user interface, colour, buttons, and visuals and usability. From these categories, feedback denoted in gold are positive feedback, in red are negative feedback, and black are neutral feedback. From this feedback, we are able to improve upon our current medium fidelity prototype.

WEEK 5

Student Sam

"I am struggling to focus on my studying task because of my smartphone. I want to be free from it !!!!!"

High school student Sam is trying to focus on studying in order to get good grades on the exam, but he keeps wasting time on his smartphone. It is difficult to control himself. Furthermore, he wants to manage his health as well to be much healthier student by exercising and eat wellbeing food. However, he does not have any idea for wellbeing tips.

Name Sam
Workload High school student
Age Range 13 - 18

Motivations

- Want to focus more on study
- Manage time for study and work
- Get well-being tips to study well

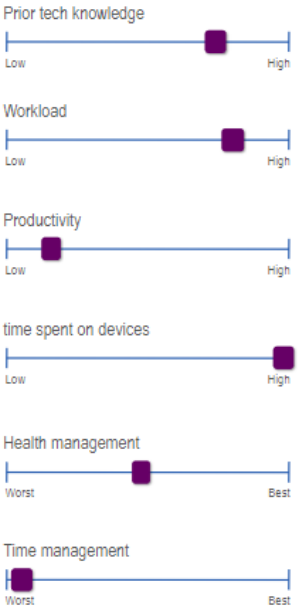
Goals

- Achieve the great grades
- Spend more time on study more than on SNS or games.
- Be healthier by exercising and eating good diet

Pain points

- No application to reduce time to use smartphone apps
- Keep eyes on the smartphone while studying for the exam
- Hard to get information about health with better diet method

Behaviours



ThoughtWorks

Our first persona is Student Sam, a student with an age range of 13-18. He struggles with focus on his tasks because of his smartphone and wants to reduce his screen time. He wants better time management for study and work and wants to maintain his mental health by continuously receiving well-being tips to study and maintain his health. Due to his struggle, his grades and reports have come back negative and he hopes our app will help him achieve better. He wants to also allocate his time to his academic life and be healthier both physically and mentally. At the current moment, there are no applications that exists that fulfil all his goals, and his motivation is at an all-time low. His behaviours reflect that of a typical high-school student, with good tech knowledge, high workload, low productivity, high screen time, and so on and so forth.

Employee Emily

"Useless apps are hogging up my work hours! Productivity at an all-time low! HELP!"

Full-time worker Emily is struggling to reduce time to use smartphone apps since she thinks that she wastes her time a lot. She also wants to manage her schedule as well. She wants to leave memo who she will meet and what to do and so on. Furthermore, to be productive to achieve her goal, she wants to get some help from other people who have similar goal to hers.

Name Emily
Workload Full-time worker / employee
Age Range 25-35

Motivations

- Want to be productive by lessening screen time on useless apps
- Keep in touch with daily meetings (who, what, when, where)
- Want to get idea to achieve goal

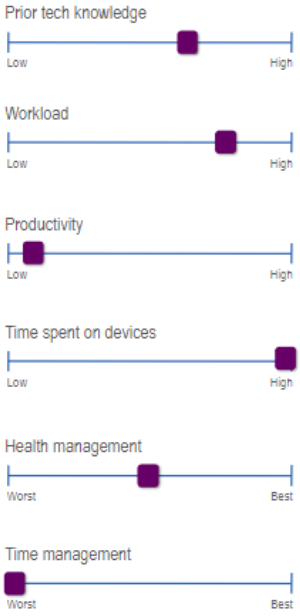
Goals

- Reduce screen time by 50% during working hours.
- Long term: promotion
- Achieve several goals she set

Pain points

- No existing apps enforces lesser screen time
- Hard to keep up with existing physical schedulers, want a simple digital alternative
- Hard to meet other people face-to-face to get some tips for her goal because of lack of time. There is no service to encourage share idea for similar goal

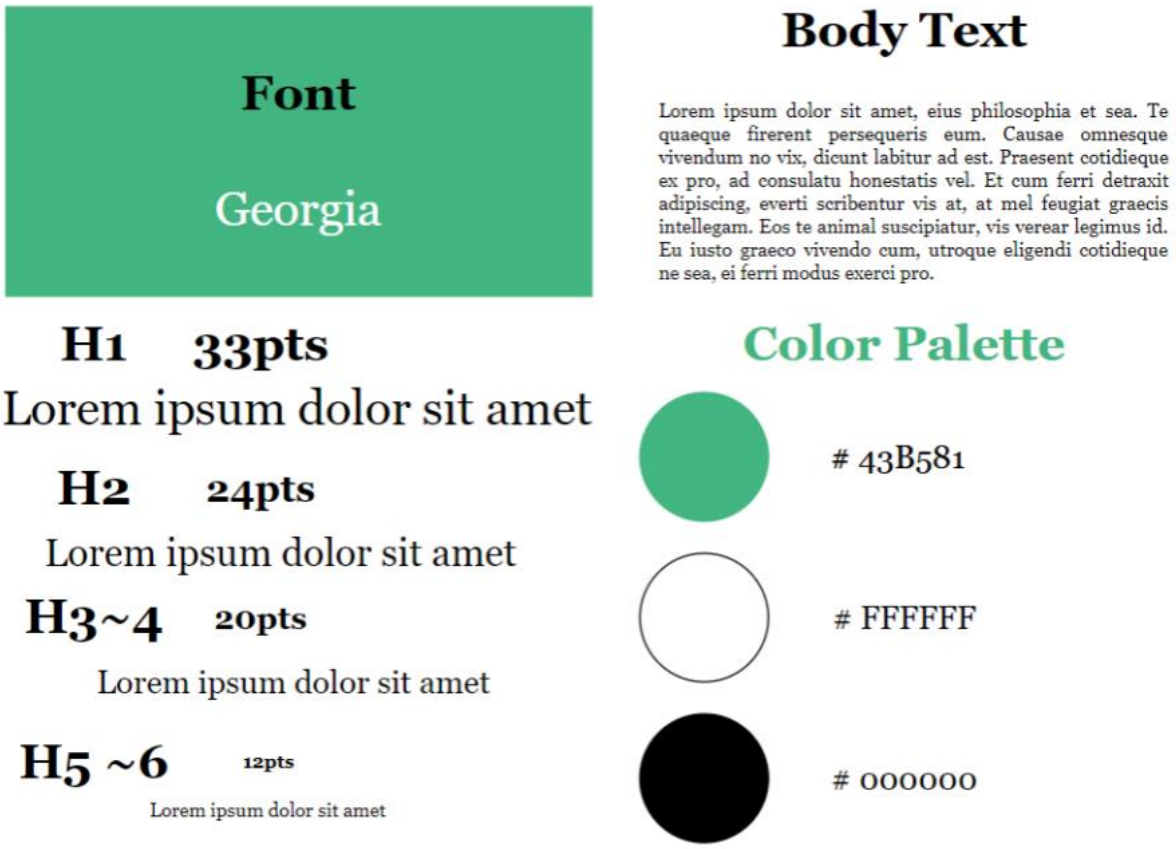
Behaviours



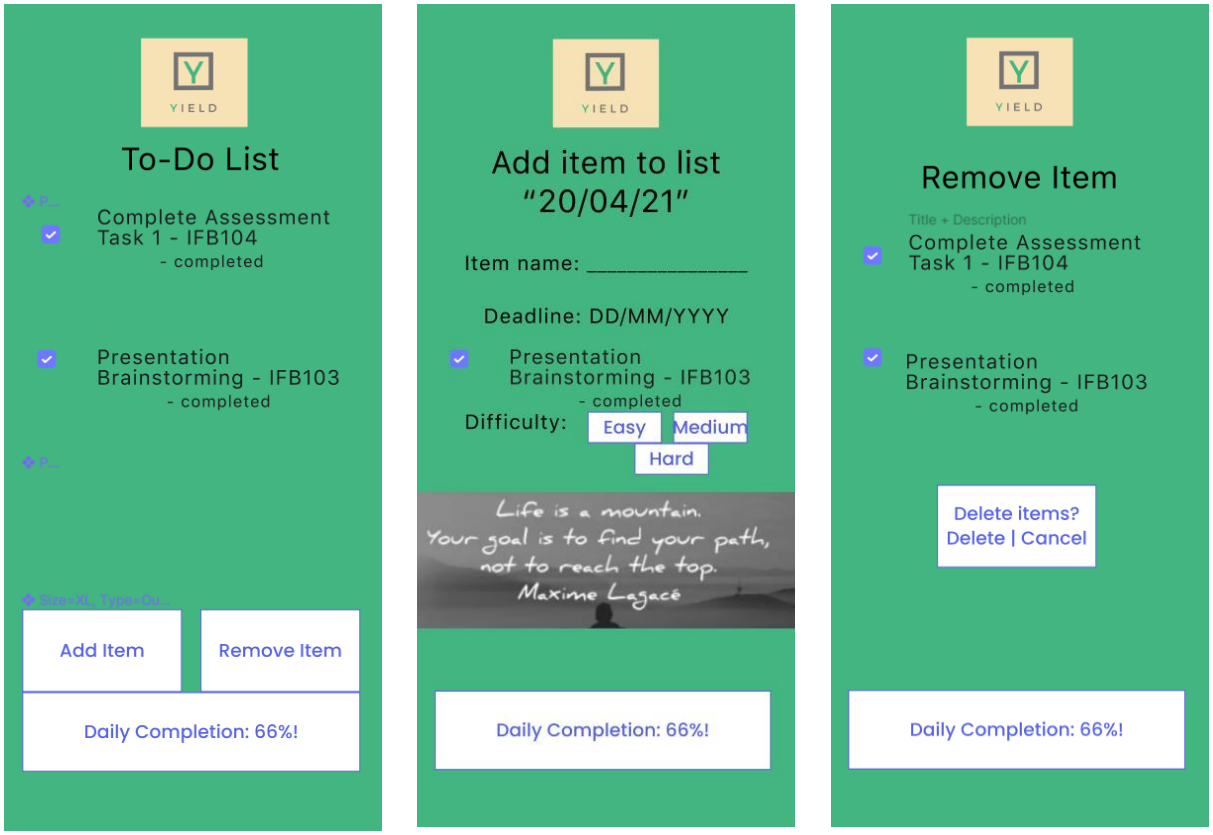
ThoughtWorks

Our second persona is Employee Emily, a full-time worker with age range 25-35. Similar to Sam, Emily's work hours are being taken up by useless apps that do not aid her productivity. Her motivations are similar to Sam but are more catered towards work life, with things such as keeping in touch with daily meetings. Her goals are more clear-cut. She wants to reduce screen time by at least 50%, at least during her work hours, and her long-term goal is for promotion. As with Sam, no existing apps currently exists to cater her issues. Physical scheduling is time-consuming and wasteful and she is leaning for a more digital alternative.

WEEK 6



The stylesheet above is an illustration of the design of our high-fidelity prototype. The colour we have chosen is a minimalist green that is soft on the eyes and non-straining, which reflects the users' want to stay motivated and productive. A serif font (Georgia) is used as it pops out and is relatively more readable than a sans serif font. Heading font sizes are also defined such that text within the application is readable for users. We generally wanted to keep the app simple in terms of colours to focus more on the features and workability, thus with a main colour of minimalist green, we stuck to keeping most of the app, specifically buttons and text, as monochromatic black and white.



Above is a working medium-fidelity prototype for the aforementioned to-do list feature. It is a trivial representation of the evolution from a low-fidelity prototype, adding colour, functionality, and visuals, and reducing the amount of on-screen text and uncluttering the user interface. Buttons are now incorporated for some text, such as the difficulty feature in the item definition in screen 2. Checkmark buttons are available to denote the completion of an item, which directly correlates to the daily completion header at the bottom of every screen. A motivation image is shown in the add item screen to not only motivate the user before committing to an assignment but to also add visuals and keep the app visually interesting and appealing. A prompt has now been added to screen 3 when removing an item to ensure of the flow of use for the feature and overall app, all to account for feedback given reflected in the thematic data analysis.

Same with low-fidelity prototype, I gathered data from two users by displaying them the current prototype and gathering their main feedback:

- Maybe add more interactive buttons to further lessen text and add more appealing visuals.
    - E.g., for deadline, use a scroll button for users to determine time and day, etc.
- Prompt for remove item screen seems a bit too simplistic
- Overall, buttons and functions are clear
- Fonts could use work, make use of bold and italics for readability
- Good flow for app
- Good use of colours

In combination with the thematic data analysis, we can thus make use of this to finalize a high-fidelity prototype.

WEEK 7

Positive reflection:

1. Was able to work well with new people.
2. Good brainstorming and problem-solving work from everyone.
3. Everybody's input was well thought of, which contributed to the end product of the app.

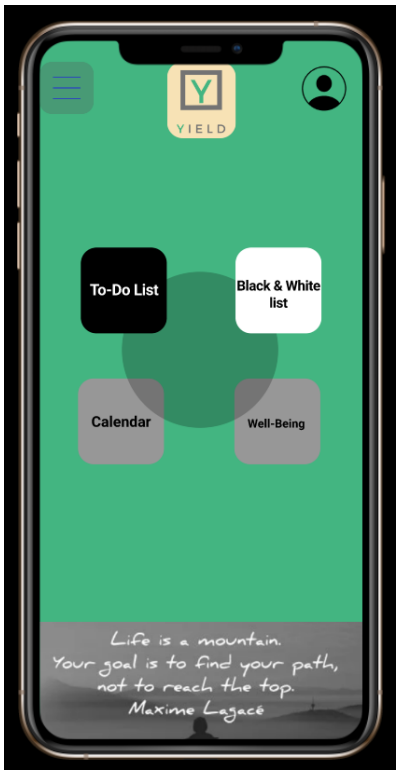
Negative reflection:

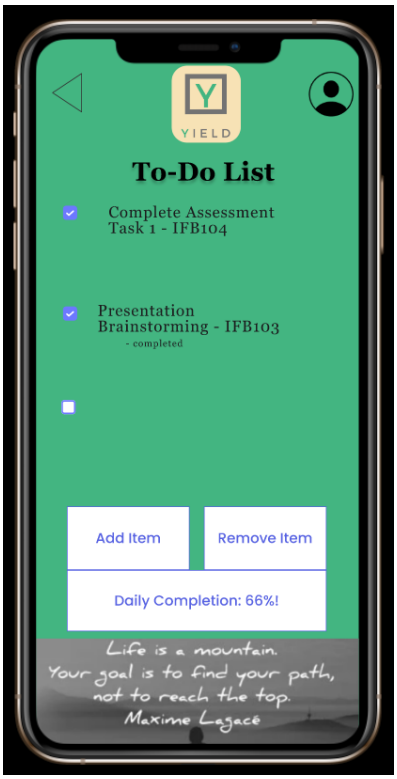
1. Fell behind at times with keeping up with the work.
2. High fidelity prototype could have looked and functioned better.
3. Balance between work responsibilities could have been better.

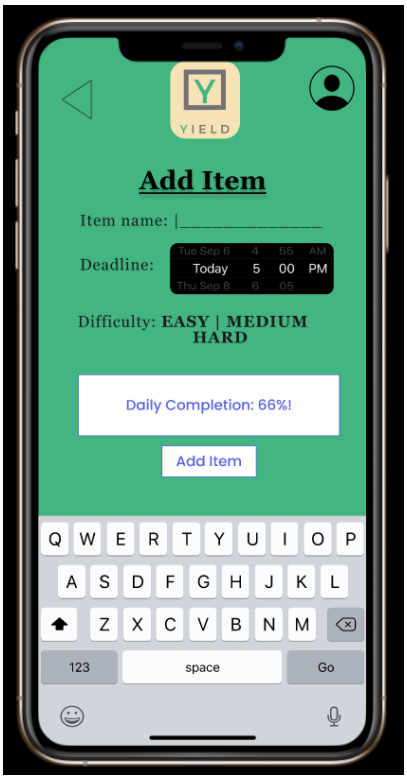
Per member review:

- Chanwoo Kim – very responsible and was a very good leader in moderating that the work was not only done but done well.
- Lee Donghoon – very good inputs with prototypes and edited the final presentation video which was very well put together.
- Farbod Jafari – great inputs with ideas and prototypes. His section in the presentation was quite well done.
- Eric Chen – great inputs with ideas and prototypes. Good introduction in the presentation.

High-fidelity prototype:







Above is the high-fidelity prototype, which expands upon the previous iteration of the medium-fidelity prototype. As per the feedback, some more interactive buttons are added, namely the back button on the top left for linear flow use of the app, the

user button on the top right, the deadline feature is now a scrollable selection button, and the home screen is much more simplistic than ideated in the low-fidelity prototype, which reduces the amount of text versus visuals and unclutters the user interface. The prompt for deletion for removing items is now also more visually appealing. Motivational quote images now also exist in all screens which adds to the visual appeal and balances text and images. Some fonts are altered slightly such that the overall visual of the application feels more natural and professional.