
Concept Proposal

Mobile addiction

--Group Name: Transformer--

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INTRODUCTION

Mobile devices have been widely used in recent years, and the popularity of smartphones has increased significantly. Initially, our teammates belong to the different domain, and then we voted for our project domain which is the mobile addiction since all teammates get empathy feeling about the obsessive use of mobile devices. The intent of this project is trying to evoke people's self-awareness of mobile addiction, and also the purpose of our concept is reducing youngster spending too much time on social media. Accordingly, our team plan to build a system that tracking the usage time on users' mobile devices and remind them of over addicted to the mobile.

INTRODUCING THE TEAM

 A person with short pink hair, wearing a white shirt, is sitting on the floor and looking at a small pink and blue toy structure.	<p>Shiqi Zheng 44872863</p>	<p>Master student in Interaction Design and background with landscape design.</p> <p>Strength: UX Design, UI Design, Prototyping, Project Guidance</p>
 A person with long dark hair, wearing a black and white striped Adidas jacket, is sitting and looking at the camera.	<p>Yue Feng 45128026</p>	<p>Study master of Interaction Design in UQ, background with video editing.</p> <p>Strength: UX Design, UI Design, Prototyping</p>
 A person with short dark hair and glasses, wearing a light blue shirt, is sitting at a table and looking at the camera.	<p>Siyang Hu 44165565</p>	<p>Master student in Interaction Design and background with Accounting.</p> <p>Strength: UX/UI Design, Front-End development, Node js</p>

	<p>Muhammad Afiq Ainuddin Mohd Khashim 44641171</p>	<p>Bachelor degree student majoring in Software Engineering. Keen to learn and try something new as a part of my learning process.</p> <p>Strength : Java Programming (Object - Oriented), Software Testing</p>
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DOMAIN/PROBLEM SPACE

In this section, based on research about our domain space to narrow down our scope and ensure that specific insights would be generated from below research.

Jih-Hsin, Ming-Chun, Cheng-Ying & Tsai-Yuan (2016) proposed that overuse social media has become a significant concern during the school. Mobile addiction such as Facebook addiction is defined as the most prevalent tool for communication and build the Interpersonal relationship. Trough surveying 894 college students in Taiwan, roughly 80% of students used Facebook every day, what is more students (10%) use this social media exceed 8 hours a day. Surprisingly, the results show that with nearly 20% of the college students in the research declaring the compulsive use of Facebook. Regarding the research results implied that interpersonal relationships serve as an activator on Facebook teenagers addicted to the social media. Due to the fact that, interpersonal relationship on social media is strongly integrated with their daily life, which was the most dominant reason for mobile addiction.

As the previous research mentioned before, the online interpersonal relationship found to be a critical predictor of social media cause students daily obsessive mobile devices. From another perspective, empirical evidence evaluated that the mediating role of interpersonal issues associated with mobile phone addiction and the negative emotion such as anxiety, loneliness towards adolescents (Li Chen et al., 2016). In order to ascertain the hypothesis of the positive relation, the study conducted a total of 1124 survey towards young adults to acquire the data of mobile phone addiction levels, mobile phone use, negative emotions and interpersonal problems and analysis. Over the data analysed that social media addiction offers a mediating correlation between interpersonal relationship and negative emotion. For instance, the youngster who has introverted personality is afraid of communicating with people in real lives; they are more likely to be active and interactive online in the virtual world. Thus they would spend abnormal time on mobile via social media to alleviate their negative sides of lives.

In order to enable our teammates to focus on a specific space, the research mainly concentrates on the association between social media addiction and interpersonal relationships. Accordingly,

we comprehend the affiliation between social media addiction and relational relationship from positive and negative perspectives. Teenagers tend to build, maintain their online relationship and share their inside feelings routinely in social media application such as Facebook, Instagram and other apps instead of experiencing reality lives. The characteristic of citizens should be a priority consideration of our domain. As the above research mentioned that introverted personality might result in their mobile and social media addiction, our concept also would pay attention to this viewpoint.

Design Opportunity / Concept

Insight and Opportunities

Regarding the research that we did, there are three insights that we generated from the study.

The first is personality, people who are shy or introverted not willing to communicate with other in real life, they prefer to chat with people online and to share their feelings with those who are strangers. Thus, the social media is a reliable tool for them to communicate with people. The second one is maintaining the relationship with others. Due to the developing of the technologies is fast, people can keep in touch with friends, family and colleagues in social media nowadays. It is a trending that people get to know each other's life on social media, people "like" and comment below their friends' post to maintain their friendship. The last one is that people fond of focusing on the trending of the world. Most social media have a trending page which contains the popular things that people pay attention to, it is easy for people to get information about these things through social media, and they can chat with people they know and do not know about their point of view about those popular things.

Opportunities

According to the research and the insights that we got, there are two opportunities that we came up.

The first is to build an application which can track the time that user spends on social media on the mobile phone, and give the user the analysis report of their daily, weekly and monthly usage of social media. Meanwhile, once the user spends an hour on social media, the application will send a notification to the user to remind them that they spend too much time on social media. Moreover, the user can choose to lock their social media applications if they want.

The second is to create a watch that the user can wear and connect it to the mobile phone, the watch can track the time that user spends on social media applications that downloaded in the mobile phone, once user spends too much time on those applications, the watch will vibrate to remind the user to quit those applications and focus on their works.

Existing solutions

1. SPACE.

SPACE is an application that can help the user to break phone addiction by tracking your time of using your mobile phone. After answering several questions about the user's phone habits, the system will define the type of user according to the answers. In light of the type, the system will offer the user a recommended goal of their daily time that they plan to spend on the mobile phone, comparing the goal and the real usage, the user can realise how much time they waste on the phone and may change their behaviour. The concept is great, and the application is easy to use, the only drawback that we noticed is that the application does not have a real way to reduce the time that people waste on the phone.

2. BreakFree

This interesting point of this application is that it will give you an addiction score according to the user's daily usage of the phone, and if user tap on that score, they can see the usage statistics of their phone, for example, user can see the time that they spend on Facebook, Instagram and realise they may spend too much time on the social media. Also, we noticed that this application could help parents to monitor their child's time spent on the phone, which is an efficient way to help youngster use their time wisely.

3. Flipd

Flipd is an application helps people save their time to focus on their work. Different from the SPACE and BreakFree, this application can lock the phone if users want. Furthermore, Flipd offers a platform where the user can challenge their friends or colleagues about their time saved, and users can see the ranking, which can encourage them to save more time and reduce their time on mobile phone.

Target Audience

The target audience of our system is the youngster, since the youngsters are the big markets of the social media and the young people lack self-control, they may need a device like our system to help them reduce the time that they spend on the social media applications and focus on the tasks and works in real life. Moreover, based on the research mentioned above, young people are fond of using social media applications to communicate and keep in touch with others, hot

news that real-time update in social media attracts young people's attention as well. The lock application function of our system can help those young people who distracted by the social media applications to concentrate on their works or assignments in real life.

Concept Description

According to the research that we did and comparing the benefits and drawbacks of the existing solutions, our initial concept is to build a system to save user's time to spend on their real life but not social media on mobile phone.

The system is aiming to reduce the time that people used in social media by tracking the time that they spend on social media. All the social media that people download to their mobile phone will be classified to the "social media" group, and once the user of the system opens one of the social media, the system will begin to track the time user spends on this social media. The overall time that user spends on the social media and the whole time user opens the social media will display on the system, the daily, weekly and monthly statistics could be found by the user either. Besides, the statistic that user could see is specific, the time user spends on each social media can indicate the social media user most commonly used and help the user to reflect on whether they spend too much time on this social media or not. Meanwhile, the system offers the user to see the period that pays on the social media, for example, the user finds that spend too much time on social media in the evening, they may be aware of that this affect their sleep quality at night and they need to change this behaviour. Finally, the system has a lock function, and user can use the lock function to lock the social media they want to lock during the time they need to focus on other things. After they complete the work, they could unlock the social media to have relaxation. The user can select the social media they want to lock or lock all the social media directly, and it depends on the user's need.

Different from the existing solutions, our system has a reminder function, a notification will display to remind the user the time once they spend on social media accumulate to an hour. This function can warn the user to notice that they spend too much time on social media, they should better to focus on the work or tasks they need to do.

Scenario of use

Due to our target audience focus on teenagers, we create a sample scenario based on our initial concept which enables our idea more clearly and simply to display. Clare is a university student and addicted to the smartphone in her daily lives. Normally, she obsessed in the social media such as Facebook and Instagram to follow the newest trend of today and friend's moments in the mobile devices. Even though sometimes her friends accompany her, she still prefers to keep in contact with online friends and instant information via mobile phone. One day she had brunch with her friends, as usual, taking photos for food and take countless selfie regardless of the feeling of friends. Finally, her friends cannot stand that anymore and decide to express her emotions for a long period. At that moment, Clare realised that she was over-addicted to the social media and want to change in the future. Her friend recommends the system could track her time usage in mobile devices during a day. She starts to use the system to track her time usage and continuously remind herself. Gradually, Clare changes her habits that obsessed with social media and are more likely to enjoy the interpersonal relationships in real life.

PLAN OF WORK

In order to create milestone for teammates clearly understand our each phase of prototype and a clear division of labor. Therefore, we distribute tasks into different parts for teammates to comprehend each one's goals. Finally, we will try the best to achieve our project for each step.

Week	Week starting Monday	Deliverable (Task)	Members Involved	Notes
6	27 August	Problem Domain idea finalizing	All team members involved	1.Create a team; 2.Share our different idea and choose a problem domain to solve.
7	3 Sep	Idea Presentation (during workshop session)	All team members involved	1.Distribute different task for concept proposal; 2.Prepare presentation and gain abundant feedback during workshop session.
8	10 Sep	Initial Project Requirement and Design started	Designer and Developer	1.Ensure our initial concept for prototype; 2.Prototype requirement analysis.
9	17 Sep	Project Development started	All team members	Project start to develop based on requirement analysis
Mid-Semester Break (25 Sep – 1 Oct)				

10	1 Oct	Prototyping and Evaluation	Software Tester	Intended users are invited for testing purposes
11	8 Oct	Project Iteration and Evaluation	Software Tester	Bug fixing
12	15 Oct	Project Enhancement and Prototyping	All team members	Final testing phase before prototype release
13	22 Oct	Final Prototyping	All team members	Final prototype ready for demonstration

Table 1: Plan of Work Breakout throughout Semester

The initial project idea and analysis should be started at Week 6 in the workshop session. In this phase, the team required to start writing the proposal for the proposed idea and the team contract. The team need to submit proposal and the team contract in the GitHub repository as the beginning of the project.

In week 7, the team shall present the idea during the workshop session for about 5 minutes with a maximum of 5 slides as the presentation aid. Any idea improvement and critics will be recorded to enhance the idea of the project.

In week 8, the team shall start to initiate project requirement and project design. In this phase, the team shall discuss the important requirements (software and hardware) and any technical items required to develop the project. After the project has been design, the project shall have started to develop during week 9.

After the mid-semester break commences, as the final stage of the project shall have implemented into device for testing into the device. For this phase, the team will make improvements for fixing bugs and functionalities improvements. This phase will be iterated until the final prototype is released.

METHODS/ APPROACHES

Literature Research

We are going to start with literature research, and in this process, we will talk about space in depth based on the domain determination direction. Through the collection and comparison of different types and research focus of the literature, the original stage of the academic investigation. We hope this way to understand the current social phenomenon of mobile phone addiction to research, and combined with time-consuming social media direction to do in-depth research. At the same time, this is the most effective way for us to get an in-depth understanding of a field study in the shortest period.

Existing System Research

At this stage, we will collect and compare the different existing procedures. These programs will have a very high degree of relevance to our Domain, or a solution or method that has been proposed. We will experience these programs in practice by downloading or manipulating them and documenting each person's feelings and feedback. We want to be inspired by this comparative approach and experience to solve problems or to iterate and improve from existing research.

Design Survey

We will complete the design survey in this step based on the previous experience and inspiration. In this process, we will use different investigative methods to design the variables and methods of investigation according to the characteristics of the target user group. In the plan, we will conduct design surveys in the form of questionnaires, direct observations and face-to-head interviews to collect enough research samples and data primarily. Besides, we will analyse and discuss the actual data and feedback collected, and conduct quantitative and qualitative analysis to find insightful design direction by analysing the results. It is also an essential way for us to explore the

viability of our solutions by exploring the real response of users to the big social media that is addicted to mobile phones.

Design Prototype

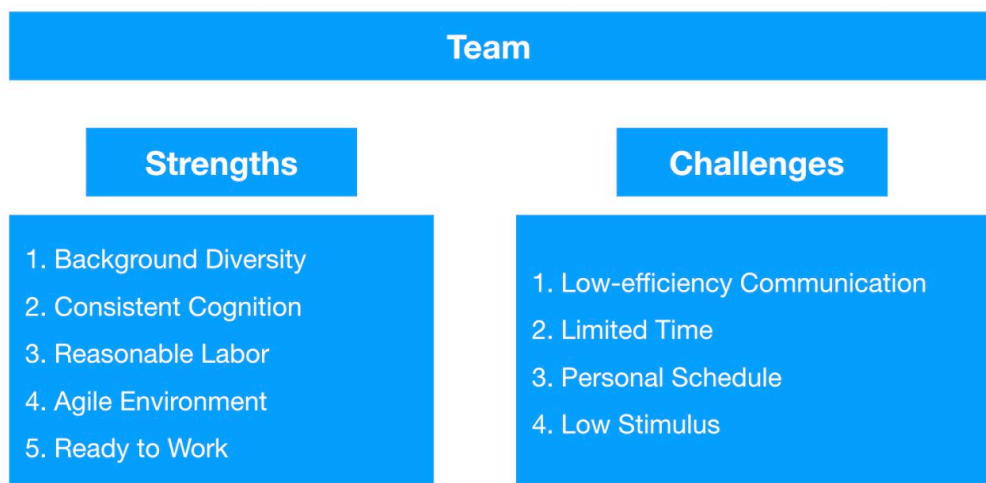
During the prototyping phase, we will design prototypes based on pre-all survey features and use the interface. At this stage, the project will perform three iterations of the cycle. We start with the design of a low-fidelity prototype, such as a paper prototype. This is a low-cost, convenient and fast way to test. The test method will combine the questionnaire with the direct observation method and set up a test plan for the characteristics of the low fidelity model. We will iterate and update the prototypes on this basis and design the intermediate fidelity prototypes. Based on the intermediate fidelity prototypes, we need to identify the main functional originals and refine the design again. Also based on the test plan to obtain adequate feedback and data, the interface and function of the group design, the final production of the high-fidelity prototype.

Evaluation plan

In the plan for this project, the assessment plan includes setting assessment criteria, setting assessment methodologies, and setting up assessment plans and procedures. We will evaluate standard settings based on human-computer interaction and design principles, such as usability, sustainability. Based on the characteristics of the prototype and user experience feedback, select the appropriate evaluation method, such as heuristic Evaluation model and SUS questionnaire. Set assessment objectives and assessment steps based on the assessment method taken. Based on this, the prototype is adequately evaluated and iteratively updated to make it more effective in solving the problem of mobile addiction and social media addiction.

SCORE ANALYSIS

Within the Team



strengths

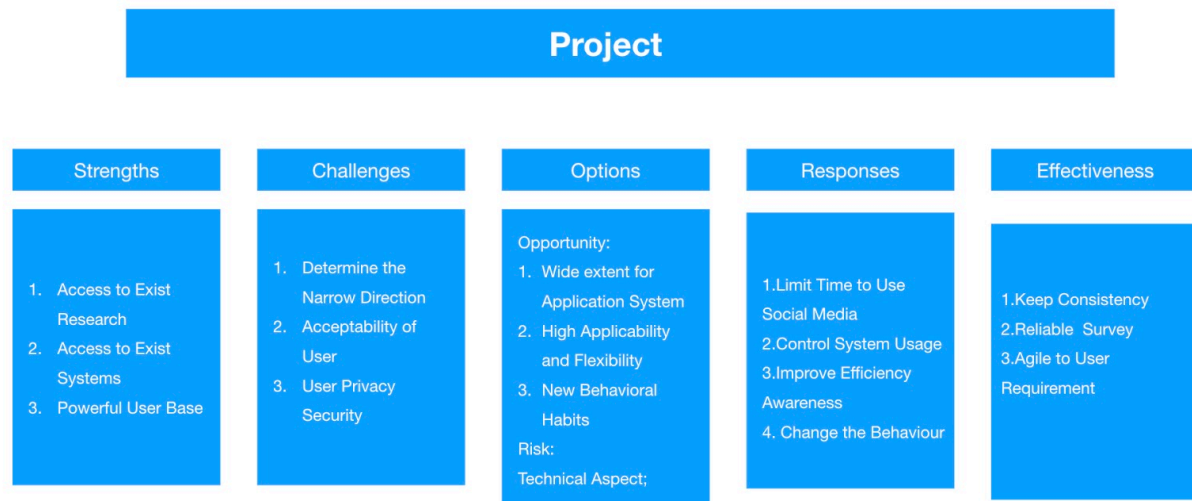
Our project team from different academic backgrounds and in the Domain research phase of the study direction and content are not the same, and such a team building is more conducive to the different members of the divergent thinking to solve problems. Because each person in-depth research field is different, simultaneously has the different background knowledge. When we choose to delve into the domain that is addicted to mobile phones, we can quickly brainstorm the form of brainstorming and propose different solutions and evaluation methods. Our project team from different academic backgrounds and in the Domain research phase of the study direction and content are not the same, and such a team building is more conducive to the different members of the divergent thinking to solve problems. Because each person in-depth research field is different, simultaneously has the different background knowledge. When we choose to delve into the domain that is addicted to mobile phones, we can quickly brainstorm the form of brainstorming and propose different solutions and evaluation methods. Besides, our group has

fully explored the concept of the project, and the direction of exploration, the preparation of the project is more sufficient to avoid the occurrence of information asymmetry between the group members. So each team member can maintain a consistent understanding of the content of the project. We also have a reasonable division of labour based on the strengths of our team members and use Instant Messaging tools to create an agile working environment that allows us to communicate at all times.

Challenges

Also because of the different backgrounds and the native language used, the team may have difficulties during the initial communication process, such as spending much time on inefficient communication. The other is the time control of the project, and the main is the time is limited, we need to complete a lot of research work in a limited time. Therefore, due to excessive workload, the risk of the team members may be difficult to achieve within the specified time of the target work. Besides, each person's schedule is different, find the same free time is more difficult, so we developed the project at the end of the first three days to complete the work, and to adequately communicate the content. Our team is looking forward to the early completion of the project within the pre-scheduled time.

Within the Team



Strengths

This project is mainly related to the problem of mobile addiction and social media addiction, so the advantage lies in the applicability and flexibility of the project, and is a common phenomenon in modern society. The social phenomenon of digital production addiction has already occurred and lasted for a long time, so there are a lot of completed research results and data analysis available for us to access and reference. Moreover, based on this, we can put forward more effective solutions or improve the existing solutions to make these solutions more adaptable to people's new usage habits. Besides, our target group is the youngster, this part of the target user base is large, and the user groups are widely distributed, and they are the primary source of social phenomena. A powerful user base can help us conduct a field survey of the project, and the results of the survey data analysis (such as quantitative quantification) are more accurate.

Challenges

The Domain we selected is the mobile addiction, but this topic and research direction are too broad. Therefore, the biggest challenge for this project is to select a narrow research direction in

a given field. Based on the analysis of the causes and processes of mobile addiction, we identify social media as a single object of study, as this is the most significant incentive for modern young people to indulge in mobile phones. For new products and new user experience, it may take a long time for audiences to recognise and accept changes in their usage habits. Similarly, we need to apply system applications to different system platforms, which need to be adapted to more devices to be used more broadly by audiences. Because there are more homogenisation products, its quality is not top-notch. At the same time, there may be a slow response in the face of the user's requirements. Besides, because the features of the project require full control over the operation of the system, the process will involve the user's privacy and information security issues. Because we also need to consider how to protect the user's digital information protection.

Options

In order to solve the problem of mobile addiction, which caused by excessive use of social media, there are more extend systems available for us to choose from and be used to solve real problems. Therefore, the project also has a high degree of applicability and flexibility, we have the opportunity to choose and try to use different systems to achieve our goals, and effectively control the situation of social media addiction. There are a large number of digital system users, and users of such design product acceptance are high. On the contrary, mobile-addicted to life habits have existed for a long time, it is difficult to imagine the time to form a new habit of using mobile phones.

On the contrary, because of the high acceptance of the mobile phone, the user for a long time, so people addicted to mobile and social media habits have existed for a long time, it is difficult to imagine the time to form a new habit of using mobile phones. Moreover, users in the process of changing the use of habits more easily due to the emergence of disgust and interrupted. Most of these opportunities and risks, we will choose to design for more application system, and encourage more user groups to increase their patience to voluntarily spend a certain amount of time to change their mobile usage habits.

Responses

The program is expected to be built for this purpose and will be consciously controlled by those who indulge their time in the mobile phone, and these users can use this program to limit their use of social media time. At the same time, we also expect users to effectively control their use of mobile phone time, the formation of new usage habits and improve user awareness of efficiency. We expect users to realise through this project that mobile phones as an advanced technology product can improve their quality of life and work efficiency, but also addicted to mobile phones at the same time do not neglect in real life.

Effectiveness

In order for the project to have a better effect in practice, we can collect more reliable sample data survey, take a variety of analysis methods and ways to find out the central contradiction to solve the pain point. Moreover, learn from the existing anti-addiction system to design and improve the project. Maintain a consistent understanding of the user's needs as the project progresses, and the team members fully understand the concept of the project and the symmetrical integrity of the information. Besides, we should be able to respond to user requirement and change the adjustment quickly.

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