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Module: COMM3780 Mobile Media

Assessment Two – Option B (Research & Design)

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This assignment consists of the following materials:

1. Research Report – this document
2. Specification Report – submitted to the X-Drive
3. Video prototype available either:
On Marvel: <https://marvelapp.com/5bf3di3>
On YouTube: <https://youtu.be/Tkx19-ayOfg>



Research Report

According to research conducted by universities and academics alike, students in higher education today are feeling more under pressure than ever, perceiving academic life as stressful and demanding (Hammer et al, 1998; Kausar, 2010). Due to this, and coupled with the fact that “adolescents are particularly vulnerable to stress” (Zarei et al, 2016, p. 1057) more than ever students are struggling to cope effectively with workloads. This research report centres on the issues surrounding student stress and how the uses of mobile applications can best alleviate and support student pressures. The report analyses secondary research in depth within the areas of student stress due to growing workloads, the benefits of collaborative working on stress levels and how the utilisation of social networking in non-traditional ways can facilitate group study. In response to this research, a new iOS mobile application, *Study*, has been designed in order to meet requirements identified through the secondary research. Through detailed design decisions and implementation plans showcased in the specification report, *Study* has been designed to offer students an alternative to independent study and aims to help increase collaborative and social working, all the while decreasing stress and isolation to improve grades and the overall quality of student life.

Fuelled by the added pressure of the current economic environment from the rise in tuition fees leading to the inevitability of student debt (BBC, 2015), The Guardian reports from its annual Student Experience survey that 6 in 10 students report the stress of studying makes coping difficult, with 44% feeling isolated and 37% finding it hard to balance studying (The Guardian, 2017a). The introduction of an app

designed to both reduce isolation and increase organisation may help students to better control their levels of stress when tackling large workloads.

Stress is defined as a “complex phenomenon” (Collins et al, 2010, p. 964) involving the process of the interaction between an individual and their environment (Cox et al., 2000). It can also be defined as the “response to an inappropriate level of pressure” (Arroba and James, 1987, p. 21), and results in increased levels of disruptive psychological symptoms and increased anxiety (Cox et al., 2000). In response to heightened continuous stress levels, coping strategies are often adopted by the stressed individual, which can sometimes be productive (such as exercise and relaxation) but can also result in substance abuse and withdrawal from social situations. According to Bean and Hammer’s (2006) study into the examination of stress levels in relation to academic workload in The University of Washington, they revealed 42.5% of students reported high levels of stress, with 27% claiming their stress levels were beyond a manageable limit. As students have become more stressed, the probability of turning to non-productive and damaging methods of managing stress are increasing, generating a greater need for support methods.

While stress management has mainly focused on the assistance of university support systems, due to increase in demand, these services are suffering under the pressure. The Guardian (2017b) reports universities are cutting back on councillors despite the growing demand and where those are not cutting back, wait times are increasing and the quality of help suffering. Due to this, Hammer et al (1998) and Kausar (2010) suggest that there is an ever-growing need to support students in balancing the increasing demands and pressures of work by providing new outlets to help them deal more effectively than traditional methods. *Study* will aim to meet this need and bridge

this gap between stress and time management by providing a new outlet utilising mobile technology to encourage the collaboration with others.

Students who engage more in collaborative study are found to be “more caring, supportive and committed in relationships” with peers, enjoying “greater psychological health, social competence”, a much higher self-esteem and most importantly, less stress (Marjan et al, 2012, p. 489). While studying independently has traditionally been seen to be the most ‘effective’ means of studying, collaboration has also become ubiquitous in modern society; with such advantages as: improved decision making, ability to share best practices and increased innovation (Patel et al, 2012, p. 1), as well as encouraging higher achievement, greater productivity, and allowing students to feel less ostracised. According to Klob (2015), learning becomes more effective when students are given the opportunity to learn via their own experiences and participation within an experimental framework, and not just working independently. Oganisjana (2015) corroborates this, claiming that students “should be provided with the opportunity to collaborate and to learn by collaborating” (Oganisjana, 2015, p. 5) and that the effectiveness of group learning may be felt more widely across universities if multi-channel collaboration becomes a “habitual feature and culture of the university study process” (Oganisjana, 2015, p. 15).

By understanding the benefits of collaborative learning in students, further research has shown student dependence on mobile phones to facilitate this group study.

According to Ahonen (2010) the mobile phone gets 15 times more attention from individuals than any other technology or media (Ahonen, 2010, p.25). Consequently, the mobile phone has become an integral part of everyday lives, facilitating “the mundane aspects of our lives” (Ling, 2012, p.2), and now representing ‘the everyday’

for the modernised and western world (Martin, 2016, p. 331) and evidencing the “need for social proximity and contact in daily life” (Bull, 2005, p. 343). There is no escaping the fact that nearly every student in the western world has a mobile phone and while the mobile has been criticised for leading to stress in students or causing them to be distracted, there is a wide variety of studies that undeniably present a space for mobile phones to be used in the positive movement towards collaborative learning. Within a survey conducted by Patel et al (2013), it was revealed approximately 163 participants out of 226 were using social networking on their mobiles for learning purposes. Stokic et al’s (2013) study confirmed this further, evidencing students felt more motivated to learn, had more of a willingness to share and felt an increase in knowledge building when engaging with their friends in group settings on social media. As the most preferred method for student communication, *Study* capitalises on young millennial use of mobile phones to provide a service that allows their mobile to become the hub of their productive, yet not isolated, student life.

In order to succeed at creating a social space for students to study using their phone, *Study* will be a social networking platform, utilising all the features typical of Social Networking Sites (SNS) such as profile creation, ability to add friends and share/chat with others. As a by-product of Web 2.0 developments, SNS have grown to be a global phenomenon and some of the most utilised apps. These SNS provide the opportunity to form virtual communities, ultimately changing “how we communicate, share information, and participate with one another” (Zingale, 2013, p. 296). The uses of SNS are becoming increasingly popular with young people, and even more so with students (Chu and Meulemans, 2008), for, nowadays, many students use SNS to

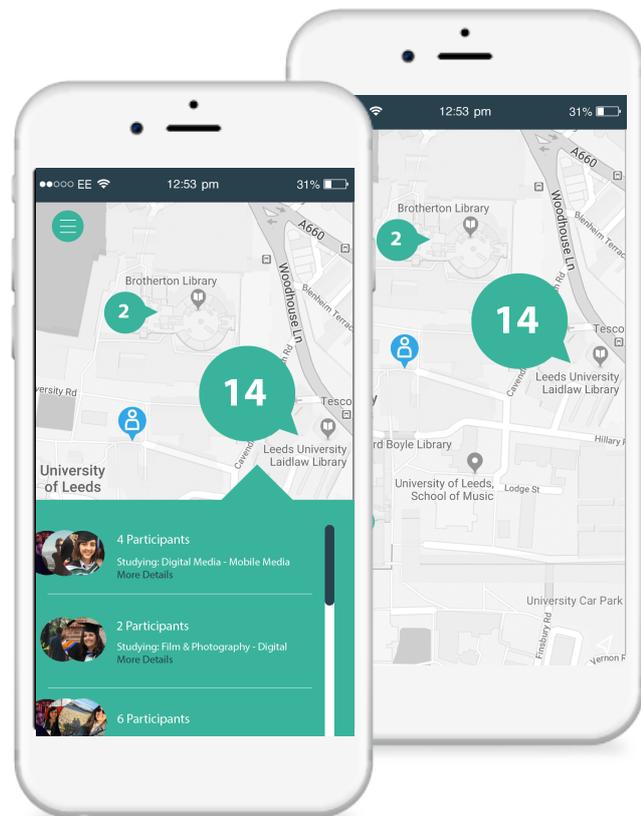
“share information and knowledge, collaborate to complete homework assignments and discuss concepts and ideas” (Mustafa and Ibrahim, 2016, p. 15). Chu and Meulemans (2008) found 90% of their participatory students used Facebook to communicate with others about school or courses, providing an efficient peer-to-peer exchange. And for these reasons, according to Yu et al’s (2010), learners who engage more in social networking ultimately were found to perform better overall academically than those who did not.

By researching into how student stress can be managed by the positive effects of collaborative studying and the deep reliance university students have for SNS, there is an unexplored gap in the application market for a social networking app that provides students with a means of dealing with workloads while combining a social aspect.

The new *Study* app aims to do just that. It will unite the best aspects of the social networking culture (such as GPS and chats) with student productivity (calendars and self-tracking services) to create a student-focused app that is unique to the application market.

Study’s main function will work by using GPS (Global Positioning System) location services, popular on today’s mobiles as they allow us to avoid “walking blind”, seemingly disconnected from information on “where and when you are in the social networks of time and space” (Elliott And Urry, 2010, p.61). The map is a critical aspect of the application. *Study* allows users to see their peer’s locations on the map, and places the users’ precise location on the map once they ‘check-in’. This ‘check-in’ feature works in similar ways to Facebook’s (2017), but takes it further to include details of study topics to encourage students working on similar topics to work

together. This form of SNS GPS and ‘checking-in’ to locations promotes self-surveillance in an empowering setting, and therefore cannot adequately be described “within the framework of hierarchical, top-down, understandings of surveillance” (Whitson, 2013, p. 171) which are so often the criticism of GPS locations within apps. By allowing the user to view their friends’ locations on the map, and the location of nearby current study groups with subjects, it encourages students to more actively engage in study groups themselves, joining nearby peers and encouraging a social aspect to studying – which in turn aims to make the student feel more in control of their workload and less isolated, reducing stress.



Due to the empowerment rooted in the users’ choice to share, when and how they share, and by utilising the user’s ability to ‘check-in’ to these locations, it creates a sense of gamification (Whitson, 2013) that is solely under the control of the user. By ‘gamifying’ studying, it allows the transformation of the tedious and mundane aspects of studying into an enjoyable and fulfilling ‘game’, where students plan meetings with others, join groups and track their study progress. This allows for “playful frames to non-play spaces” (Whitson, 2013, p. 164), and enables the users to feel they are

making progress with their workload, self-surveying their achievements to reduce anxiety and stress over deadlines. This is supported by the ‘calendar’ feature, allowing a user to track how long they have spent studying, self-quantifying the data generated by actions, encouraging tracking and completing of these tasks. This allows students to track what subjects they’re working on in order to effectively manage their

time, view if they are over working themselves and feel accomplished.

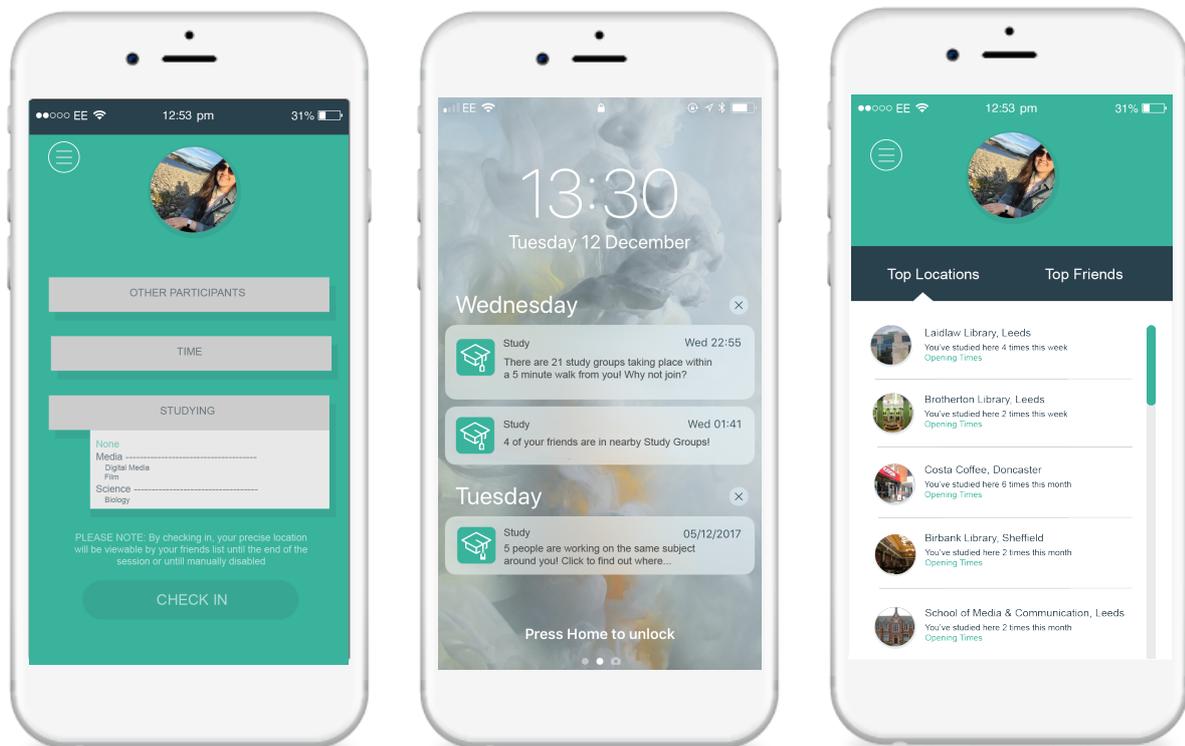


There are many apps on the market that are utilising GPS location and ‘check-ins’ in similar ways. Most popular among young people is Snapchat’s (Snap Inc., 2017a) new Snap Maps feature, which has been described by Snap Inc as “the next big way of meeting up with and engaging with friends nearby” (Snap Inc., 2017b). While Snapchat encourages the social meeting of friends, it does not provide students with the ability to post work-based updates. It also doesn’t allow users to create reoccurrences,

or send push notifications when walking past friends. This is what makes *Study* different. The app allows students to check-in their location, create a reoccurrence of that study group to encourage regular meetings and sends push notifications to let users know when they are near peers studying subjects of interest.

By encouraging students to meet with peers nearby, *Study* tackles the ‘connected but alone’ issues raised by Sherry Turkle (2012), who argues that within today’s society, people are excessively absorbed in the virtual world presented by their phones that

they forget the real world exists, avoiding human face-to-face interaction to rely on instant messaging methods. *Study* encourages students to meet up face-to-face via the use of 'favourite' locations and study buddies. Push notifications will be sent to the student when they are nearby other study groups, in order to encourage students to work together. By understanding from the secondary research that collaborative group studying can positively affect student morale, *Study* promotes the face-to-face meeting of peers, addressing the 'connected but alone' (Turkle, 2012) issues raised in mobile media.



While the app aims to reduce stress and advance productivity, careful design decisions have been implemented to avoid the opposite occurring. *Study* has taken into great consideration how to position its push notifications and other services to

avoid making students feel they're being unproductive - for, "conceptualising somebody as unproductive is not only an analytical term, but it is also a slur and quite emotive" (Fuchs, 2015, p. 64). Push notifications have the ability to be turned off, and are not worded as demands to make students feel like they *need* to be working. Instead, they are positioned as opportunities, and ordered in such a way to avoid inflicting added stress or anxiety. In order to manage work/social life balances correctly the maximum study group time will be 5 hours. After that, all participants will receive a notification urging them to take a break. The app will also not send push notifications if the user has already logged a study group into the app that day, taking into consideration that if a user has already joined a study group that day then they should participate in relaxation time. Also, a user's location is only shared with friends once the user has 'checked-in' to this location, protecting their location at any other time, thus allowing students to feel like they do not always have to be working to avoid causing further stress, and to protect the user if they choose not to share their location in that instance. Once location is shared, the user also always has the ability to turn this off.

This is not the first app created to help students manage workloads, but what makes *Study* different, is that it combines the best aspects of what other apps have attempted to do, adds location services and real-time updates to create a fully functioning social network for students. Apps such as 'My Study Life' (2017) and 'Focus Keeper' (2017), allow students to use planners and set timers for studying, but they do not allow for the encouragement of collaborative studying or use location to enable students to meet. *Study* combines the best aspects of SNS's such as chats and friends

lists, with the encouragement of meeting up with friends, all the while helping to plan time effectively and complete deadlines.

With the ubiquitous nature of the mobile phone in student's lives, this app will fit seamlessly into student culture. Overall, the revolutionary new *Study* app will seek to fill the previously unfilled gap of combining student social lives with their workloads, fusing the two in a positive and productive fashion, allowing students to work collaboratively to reduce workload stress while maintaining friendships and a healthy, more organised, less stressful student life.

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Appendix A

Declaration of non-original sources used within the project:

1. Used on the 'Top Locations' page of the app within the specification document

Geograph. 2015. *Laidlaw Undergraduate Library*. [Online]. [Accessed: 28/12/17]. Available from: <http://www.geograph.org.uk/photo/4599484>.

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2. Used on the 'Top Locations' page of the app within the specification document

Wikipedia. 2014. *Brotherton Library Reading Room*. [Online]. [28/12/17]. Available from: https://en.wikipedia.org/wiki/Brotherton_Library#/media/File:Brotherton_Library_reading_room,_University_of_Leeds,_27th_June_2014.jpg.

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3. Used on the 'Top Locations' page of the app within the specification document

Wikimedia Commons. 2013. *Costa Coffee Bar*. [Online]. [28/12/17]. Available from: https://commons.wikimedia.org/wiki/File:Cheam_London_Borough_of_Sutton_-_Costa_Coffee_bar.JPG

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4. Photo used on the 'Top Locations' page of the app within the specification document

Wikimedia Commons. 2008. *London Victoria and Albert Museum Library*. [Online]. [Accessed: 28/12/17]. Available from: [https://commons.wikimedia.org/wiki/File: London-Victoria_and_Albert_Museum-Library-01.jpg](https://commons.wikimedia.org/wiki/File:London-Victoria_and_Albert_Museum-Library-01.jpg).



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5. Used on the 'Top Locations' page of the app within the specification document

Wikimedia Commons. 2013. *Clothworkers Building, University of Leeds*. [Online]. [28/12/17]. Available from: [https://commons.wikimedia.org/wiki/File:Clothworkers%27_Building,_University_of_Leeds_\(Taken_by_Flickr_user_8th_February_2013\).jpg](https://commons.wikimedia.org/wiki/File:Clothworkers%27_Building,_University_of_Leeds_(Taken_by_Flickr_user_8th_February_2013).jpg).



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