

ITX3999 Project Proposal

Andreas Pavlou

November 1, 2017

1 Introduction

Safety online has never been more important; from ever-emerging and ever-evolving threats, such as the sophisticated ransomware attacks on the NHS in May 2017, to cyberbullying which one in three teenagers have experienced [Guardian, 2014], it is imperative that online safety is taught to ordinary people who may not be particularly well-versed in the best safety practices. Individuals between the ages of 18 to 29 make up 83% of social media users and 43% of this age bracket believe that their personal data is less safe than compared with five years ago, a study [Duggan, 2012] has shown.

2 Project Idea

This project proposes that an iOS app with a target audience of 18-29 year olds is created, featuring information relating to how one can safely use services such as social media, email and instant messengers. The focus will be made on social media, as the aforementioned demographic is by far, the largest consumer. The app will also feature advice on how to deal with cyberbullying/harassment as 41% of adults have experienced some form of harassment online [Duggan, 2017]. The app will also feature a quiz, wherein users can partake in simple multiple-choice questions to help with their learning. Relevant charities that deal with online safety will also be contacted in an attempt to learn if they believe such an app would be of benefit, what requirements they would expect such an app to address, and to gain their general thoughts on the project.

3 Existing Products

Utilising the iOS store, conducting searches using terms such as 'security education' yields apps that are similar in nature, such as 'CompTIA Security + Exam Prep 2017 Edition', though this particular app is fundamentally different from the proposed app as it offers only exam help for a specific qualification. Another app is 'Learn IT & Cyber Security Free', this app however seems to go somewhat in-depth and could possibly be too difficult for an individual who does not know anything beyond basic computing. 'DigitalCitizen' is a similar app available on iOS though its target market appears to be primary to secondary age school children and it appears to be more suited for a US audience. Typing 'Teach privacy' into the app store search yields 'TechSafe — Privacy' which is a similar app, but again it seems to have a target demographic of children from primary school to secondary school age. The difference between these and the proposed app is that the proposed app will have a target audience of 18-29 in mind wherein it can offer relevant learning materials suited to such a demographic, with an emphasis on the information being helpful to a person who may not be completely computer literate, or who may not know much about computing in general.

According to [Street, 2017], 91% of 18-34 year olds own a smartphone, therefore this project proposes that an app is built, instead of a standard webpage. Whilst one may only be a Google search away from finding information, an app however can offer convenience, ease-of-use and portability which a website cannot, especially if one has limited access to the internet. An app will also allow for a more streamlined navigation of relevant information and learning resources, as opposed to an entire website where it could be off-putting if it is too difficult to find what one may be looking for. [Logan, 2017] makes the argument that *'Young people are searching for the 'App' ... that tells them just how to accomplish what they want to accomplish as quickly and efficiently as possible. If one app does not work, they look for another'*. Therefore, it is favourable that an app is pursued as opposed to any other medium in order to effectively target the young person demographic.

4 Plan

The project requires that 3 iterations are completed consisting of 4 key elements, which are requirements, design, implementation and evaluation. The project will commence with a paper prototype, where the app will effectively be storyboarded, detailing every page and what subsequent pages they link to and any other relevant features. The second stage will require that a working prototype with minimal functions is produced. This will showcase the core functionality of the app and will be able to give a clear indication on what works with the app, and what requires improvement. The third and final stage will culminate in a fully working prototype; this will be the final product for this project and will showcase all the skills learnt. Below is a table displaying the milestones and deliverables.

Deadline	Milestones	Deliverables
Week 6	Submit project proposal	Project Proposal
Week 8	Finish literature review	Literature review
Week 11	Complete first iteration	Paper prototype
Week 12	Submit interim report	Interim report
Week 16	Complete second iteration	Working prototype (minimal function)
Week 20	Complete third iteration	Final prototype
Week 24	Submit artefact on CD	Artefact
Week 24	Submit final report	Final report
TBA	Viva Voce	Viva Voce

Table 1: Milestones and Deliverables

5 Relevant Materials

There are a number of materials I will be utilising throughout the course of my project, in order to learn the necessary knowledge to create the app, as well as enhance and improve the artefact, they are as follows:

- Programming the Mobile Web [Firtman, 2013]
- Mobile HTML5 [Weyl, 2014]
- Learning iPhone programming [Allan, 2010]
- iPhone 3D Programming [Rideout, 2010]
- Head First iPhone and iPad Development [Pilone et al., 2014]
- Building iPhone apps with HTML, CSS, and JavaScript [Stark, 2010]

References

- [Allan, 2010] Allan, A. (2010). *Learning iphone programming*. O'Reilly, Sebastopol, CA. OCLC: 608305607.
- [Duggan, 2012] Duggan, M. (2012). The demographics of social media users - 2012. http://www.nwnjsbdc.com/upload/PIP_SocialMediaUsers%20Demographics%202012.pdf.
- [Duggan, 2017] Duggan, M. (2017). Online Harassment 2017. <http://www.pewinternet.org/2017/07/11/online-harassment-2017/>.
- [Firtman, 2013] Firtman, M. R. (2013). *Programming the mobile web*. O'Reilly, Beijing; Sebastopol, CA. OCLC: 828929333.
- [Guardian, 2014] Guardian (2014). Number of children who are victims of cyberbullying doubles in a year. <https://www.theguardian.com/society/2014/nov/14/35pc-children-teenagers-victims-cyberbullying-fears-grooming-tinder-snapchat>.
- [Logan, 2017] Logan (2017). Talking about "The App Generation" | Amplify. <https://www.amplify.com/viewpoints/howard-gardner-talks-about-the-app-generation>.
- [Pilone et al., 2014] Pilone, T., Pilone, D., Pilone, P., and McLaughlin, B. (2014). *Head first iPhone and iPad development*. OCLC: 868925289.
- [Rideout, 2010] Rideout, P. (2010). *iPhone 3D programming: developing graphical applications with OpenGL ES*. O'Reilly, Beijing ; Sebastopol, CA, 1st ed edition. OCLC: ocn503640640.

- [Stark, 2010] Stark, J. (2010). *Building iphone apps with html, css, and javascript: Making App Store Apps Without Objective-C or Cocoa*. OCLC: 856415900.
- [Street, 2017] Street (2017). Mobile Fact Sheet. <http://www.pewinternet.org/fact-sheet/mobile/>.
- [Weyl, 2014] Weyl, E. (2014). *Mobile Html5*. OCLC: 929738574.