



Faculty of Science
Department of Computing and Networking
Open-Book and Remote Assessment Cover Page

Student Name: Dion Buckley

Student Number: C00220868

Lecturer Name: Philip Bourke

Module: Project II (Games)

Stage/Year: Final

Date: 02-05-2020

Declaration

This examination/assessment will be submitted using GitHub/Google Drive/Youtube as the online submission tool. By submitting my examination/assessment to GitHub/Google Drive/Youtube, I am declaring that this examination/assessment is my own work. I understand that I may be required to orally defend any of my answers, to the lecturer, at a given time after the examination/assessment has been completed, as outlined in the student regulations.

Computer Games Development CW208

Project Proposal Year IV

Student Name:	Dion Buckley	Student Number:	C00220868
Working Title:	Analysis into use of Gamification techniques to affect Engagement of Coeliac patients with Knowledge portion of Coeliac Health App.		
Description:h	<p>This research is part of a two year Erasmus+ project which aims to deliver a health application for Coeliac patients to better understand and manage their condition. Currently the only true way of managing this condition is to comply with the strict Coeliac Diet and this is known to be extremely difficult to maintain.</p> <p>I am hoping that with the research I do here I can come closer to both proving the effectiveness of gamification on engagement while in the meantime build such an engaging component that the final larger health app will be sure to increase diet compliance and therefore quality of life for these patients.</p> <p>The knowledge component here exists as previously mentioned inside a larger health app and as of earlier this year this component consisted of two parts; Quiz and Information.</p> <p>This year however I plan to expand the scope of the Knowledge Project to incorporate even more learning and encouraged behaviour change techniques, namely through addition of Gamification, which itself is a broad area, so I will narrow that down even further to gamified elements such as badges, streaks, experience / levels and possibly even leaderboards (although I could see this last one having a negative effect on those with lower self esteem).</p> <p>We can see clearly from certain apps in a similar space; Headspace which works to help the user build up habitual mindful / meditative practices. Or Fortify (with a feature similar to the Symptom Tracker aspect of this overall Erasmus+ project) which encourages daily activity to form long term thought and behavioral change. Both of the above mentioned apps incorporate visually appealing videos which are short and to the point, while still explaining high level ideas in an easy to understand manner, meanwhile helping to work on the subconscious mind.</p> <p>If we can find the resources this year to build out a few of these types of videos to a standard which could actually hold the attention of these patients I am certain we would see a huge increase in the success on the Quiz portion of the app.</p> <p>Along with the potential to incorporate videos I believe deep analysis into as much of the related literature as possible along with my skill set I aim to reorganize the Quiz and Information sections to optimize learning and time spent on app.</p>		
Reasons for selecting project:	Fascination with human behaviour change techniques for positive benefit.		
Proposed research content:	Gamification; Well-being; Engagement; Electronic mental health; Coeliac diet compliance.		

Computer Games Development CW208 Project Proposal Year IV

External links (if applicable):	<ul style="list-style-type: none"> • Erasmus+ • React • Gamified elements • Switch video
Hardware requirements:	<ul style="list-style-type: none"> • Android device to test the apps • Functional development machine(s) <ul style="list-style-type: none"> ○ Standard keyboard & mouse / trackpad ○ Some display
Software requirements:	<ul style="list-style-type: none"> • Windows environment at work and home is fine here • Node.js (namely for npm) • React • Visual Code is an acceptable editor • Git (with Bash for unix cmd) • Shared backend technology (done in Python, Flask etc)
Other requirements:	Finally hone in on just one related published work.

Signed:

Don Buckley

Date: 02-05-2020 (*Digitally Signed Version)

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Approved/Not Approved:		
Reasons for not approving project:		
Conditions attached to approving project:		
Approved/Not Approved:		
Name of Supervisor:		
Signed: _____	Date: _____	