UFCFXK-30-3 - Digital Systems Project

Formal Project Proposal

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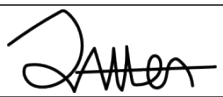
Details of Project:

Project title:	Photography Gamified Web App
Brief description of topic:	A **Progressive Web App (PWA)** or **React Native App** used to gamify photography via challenges based of photography genres, styles, locations, objects and more. Images posted for challenges **will show detailed metadata** from the image, this will include: • Camera Make/Model • Focal Length • Aperture • ISO • Shutter Speed This level of detail will be good for other photographers to learn the process behind winning shots and therefore help them develop their skills. However, due to potential privacy concerns **posting this data will be optional**. Challenges will be judged by the userbase using a rating ELO system, like what is seen on sites like reddit. There will be no hidden AI based algorithm used to show images, this is because I believe the AI approach to recommendation, although interesting, often results in poorer quality content. Putting the userbase in control gives a better sense of engagement and relevancy within the app. Users will be able to gain achievements/badges for completing challenges and other related goals. These will be able to be displayed on the user's profile.
Aims and objectives:	• To develop create an engaging and fun web app for photographers. • To display metadata such as Camera Settings to provide an educational opportunity for anyone wondering how a specific shot was taken. • To develop a functional backend API to contact the database via Python and Flask. • To develop a simple, user friendly and accessible UI. • To ensure that the UX is optimised and not painful for the user. • To have a Web and Mobile (Android, React Native does support IOS but I have no

	way to test the implementation as I do not own an apple device.) version.
Full details of initial literature sources, in correct UWE Harvard format:	• Basten, D. (2017) Gamification. *IEEE Software [online].* 34 (5), pp. 76-81. [Accessed 27 October 2021]. • Boduch, A. (2017) *React and React Native.* [Online]. Birmingham: Packt Publishing [Accessed 27 October 2021]. • Bujari, A. Ciman, M. and Gaggi, O. (2016) Using gamification to discover cultural heritage locations from geo-tagged photos. *Personal and Ubiquitous Computing volume [online].* 21, pp. 235-252. [Accessed 27 October 2021]. • Hamari, J. Koivisto, J. and Sarsa, H. (2014) Does Gamification Work? -- A Literature Review of Empirical Studies on Gamification, 2*014 47th Hawaii International Conference on System Sciences*, IEEE Computer Society, Waikoloa, HI, USA , 6-9 Jan. 2014. IEEEXplore [online]. Available from: https://ieeexplore-ieee-org.ezproxy.uwe.ac.uk/document/6758978 [Accessed 27 October 2021]. • Liestøl, G (2018) The Photo Positioning Puzzle : Creating Engaging Applications for Historical Photographs by Combining Mobile Augmented Reality and Gamification, *2018 3rd Digital Heritage International Congress (DigitalHERITAGE) held jointly with 2018 24th International Conference on Virtual Systems & Multimedia (VSMM 2018)*, Digital Heritage, San Francisco, CA, USA. IEEEXplore [online]. Available from: https://ieeexplore-ieee-org.ezproxy.uwe.ac.uk/document/8810038 [Accessed 27 October 2021] • Seaborn, B and Fels, D I. (2014) Gamification in theory and action: A survey. *International Journal of Human-Computer Studies [online].* 74, pp. 14-31. [Accessed 27 October 2021].
Signed (student):	
Signed (supervisor):	

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