FALMOUTH UNIVERSITY

APPLICATION FOR RESEARCH ETHICS APPROVAL

Version 4 - FINAL – 27/01/15

All researchers should be familiar with the University's Research Ethics Policy and associated procedures, available here. No element of a research project which falls under the scope of the Policy should begin before written approval has been given.

All research projects are subject to ethics approval. This form enables researchers to either:

1) declare a project out of scope. The form incorporates a short cut for this.

2) provide more detail on ethical considerations. Research ethics approval is required for research projects that:

- directly involve people in research activities, through their physical participation, eg. interviews, questionnaires, surveys, observational research, requiring the active or passive involvement of a person;
- indirectly involve people in the research activities, through their provision of or access to personal data and/or tissue
- involves people on behalf of others (eg. legal guardians of children and the psychologically or physically impaired and supervisors of people under controlled environments (eg. prisoners, school pupils).

There are special arrangements for research in the health and when it involves animals, and guidance should be sought direct from the Committee in these cases.

Convening an event, such as a conference or workshop, only requires research ethics approval where research takes place, eg. leading to an identifiable research output, and only that specific part of the event where the research is taking place.

Please note that all events (seminars, conference, workshops, etc) should be discussed with your Director of Department taking into consideration any professional ethics or reputational concerns.

IF YOU ARE UNSURE, YOU SHOULD ASSUME RESEARCH ETHICS APPLIES. IN THIS CASE SEEK GUIDANCE FROM THE COMMITTEE BEFORE CONTINUING.

Part A – Overview of the project		
1	Title of the project	Can Mixed Reality Be Used To Enhance The Learning Experience Of Escape Rooms
2	Briefly summarise the project's aims, objectives and methodology	This project aims to investigate the use of mixed reality to enhance the learning experience in an escape room puzzle. This will provide further evidence that the use of augmented reality and escape rooms can enhance learning in various ways.
3	Start and end dates	
4	Principal Investigator	Title: Mr Name: Jonathan Marx Department: BSc Computing for Games

5	Other key investigators	Title	Name	Post	Role in project	Organisation	Department
		Dr	AlcwynParker	Researcher and Lecturer	Supervisor	Falmouth University	Games Academy

Part B – Does the project require research ethics approval?		
6a	Does any part of the project constitute research, ie. a process of investigation leading to new insights, effectively shared (eg. identifiable research output)? If you answer No to this question please provide a rationale here (max 100 words)	**Yes** If Yes or don't know, continue to 6b. If No, the project is out of scope. Go direct to 18a.
6b	Does your research involve participants of any type, ie. humans or animals, directly or indirectly? Review the questions in Part C as a guide	**Yes** If Yes or don't know, continue to Part C. If No, the project is out of scope. Go to direct to 18a.

Part C – Details of the research		
7	Give a brief reflection/overview of the ethics issues in this project.	For this research participants will play a short escape room puzzle with, or without, a HoloLens. No personal information will be asked for.
8	Who will the participants be? Identify	All the participants will be students from The Games Academy at Falmouth University. No vulnerable groups will be targeted.

	specifically any vulnerable groups or individuals and address any special measures you intend to take to accommodate them	
9	How will participants be recruited and how many will be involved?	An a-priori power analysis was performed using G*Power. A large effect size of 0.8 and a power of 0.8 was chosen as it decreased the sample size to a more manageable size given the time frame for this research. The result from the power analysis gave a sample size of 21 for each group, meaning a total of 42 participants.
10	What will participants be asked to do?	Participants will be asked to play the escape room that I have designed. Then they will complete a questionnaire and a short interview.
11	What potential risks to the interests of participants do you foresee and what steps will you take to minimise those risks? A participant's interests include their physical and psychological well-being, their commercial interests; and their rights of privacy and reputation	*Possible risks include:* *Confidentiality and data protection: I will ensure all data is collected, stored and handled anonymously.* *Health and Safety: I will make sure the equipment being used is checked before each use. I will use the attached HoloLens risk assessment to ensure all health and safety measures are addressed to provide minimal risk for participants.* *Eye strain or headaches: I will make sure the headset is put on correctly to minimise chance of this.*
12	Will you be obtaining personal information from any of the participants? E.g. name, personal opinions, address, recorded images or audio, date of birth, notes and observations.	The participants will complete a questionnaire which will require them to rate their experiences of multiple scales relating to learning. Time to complete the puzzle will also be recorded. All information will be stored securely using Google Sheets and Google Forms. They both use industry standard security and abide all data protection laws. All information will be anonymous and confidential with no identifying factors. None of the data will be publicized and will be destroyed upon completely of the paper as required by Data Protection Law. **If you answer 'Yes', please give details. In your response, please consider:** How will you store and use this information during the course of your research? What parts of this information will need to be confidential and how? Will you exhibit or publish the information? Will you retain information after the research is concluded? If information is to be destroyed, explain why this is appropriate.
13	What potential risks to yourself or other members of the research team do you foresee and what steps will you take to minimise those risks? Eg. does your research raise	*Potential risks include:* *Eye strain or headache due to using the Hololens equipment* repeatedly for testing. I will reduce this by emulating the experience on a PC and only testing on the Hololens when necessary. See HoloLens Risk Assessment attatched.

	issues of personal safety for you or others involved in the project, especially if taking place outside working hours or off University premises	
14	What potential risks to the environment do you foresee and what steps will you take to minimise those risks, eg. does your research involve plants or soil	*None.*
15	Will payments or in-kind contributions be made to participants?	**No** *If YES, please state amount and whether payment is for out-of-pocket expenses, or a fee*
16	If the project is to receive financial support (real or in-kind) from outside the University, please give details, including any restrictions that have been imposed upon the conduct of the research. Please discuss this with RIO. Financial propriety, protection of commercial rights and reputation are important for you, the University and other third parties (eg. sponsors, participants etc.)	*NA*
17	Will any restrictions be placed on the publication of results?	**No** *If YES, please state the nature of the restrictions, (eg. details of any confidentiality agreement)*
18a	Declaration of Principal Investigator if activity is out of scope	I confirm that the form is accurate and complete to the best of my knowledge and belief and it does not fall under the scope of the Research Ethics Policy. Signature: Date: 27/11/2018
18b	Declaration of Principal	I confirm my responsibility to deliver the project in accordance with the

	Investigator if activity is in scope	University's Research Ethics Policy and Guidelines on Good Research Practice and, where externally funded, with the terms and conditions of the research funder. In signing this form I am also confirming that: a) The form is accurate and complete to the best of my knowledge and belief. b) There is no potential material interest that may, or may appear to, impair the independence and objectivity of researchers conducting this project. c) I undertake to conduct the project as set out in the application unless deviation is agreed by the University and to comply with any conditions. d) I agree to keep all ethics issues in the project under review and to re-submit a new application for ethics approval should any new issue arise or significant change occurs. e) I understand and accept that the ethical propriety of this project may be monitored by the University. f) I have included the following documents: ❑ An information sheet (compulsory) ❑ A consent form (compulsory) ❑ Copy of the full proposal/application (compulsory) ❑ Other relevant information Signature: Date: 27/11/2018
19	Support from Director of Department	I have reviewed the project with the applicant and confirm it either does not fall under the scope of the Research Ethics Policy or I support it. Full Name: Signature: Date:
20	REC use only	