School of Computer Science & Statistics Research Ethics Application

Part A

Project Title: "Developing an Educational Culinary Application - Final Year Project"

Name of Lead Researcher (student in case of project work): Conor Thorne

Name of Supervisor: <u>Inmaculada Arnedillo-Sánchez</u>

TCD E-mail: thornec@tcd.ie Contact Tel No.: +353831408964

Course Name and Code (if applicable): Integrated Computer Science TR033

Estimated start date of survey/research: March 1st I confirm that I will (where relevant):

- Familiarize myself with the Data Protection Act and the College Good Research Practice guidelines http://www.tcd.ie/info_compliance/dp/legislation.php;
- Tell participants that any recordings, e.g. audio/video/photographs, will not be identifiable unless prior written permission has been given. I will obtain permission for specific reuse (in papers, talks, etc.)
- Provide participants with an information sheet (or web-page for web-based experiments) that describes the main procedures (a copy of the information sheet must be included with this application)
- Obtain informed consent for participation (a copy of the informed consent form must be included with this application)
- Should the research be observational, ask participants for their consent to be observed
- Tell participants that their participation is voluntary
- Tell participants that they may withdraw at any time and for any reason without penalty
- Give participants the option of omitting questions they do not wish to answer if a questionnaire is used
- Tell participants that their data will be treated with full confidentiality and that, if published, it will not be identified as theirs
- On request, debrief participants at the end of their participation (i.e. give them a brief explanation of the study)
- Verify that participants are 18 years or older and competent to supply consent.
- If the study involves participants viewing video displays then I will verify that they understand that if they or anyone in their family has a history of epilepsy then the participant is proceeding at their own risk
- Declare any potential conflict of interest to participants.
- Inform participants that in the extremely unlikely event that illicit activity is reported to me during the study I will be obliged to report it to appropriate authorities.
- Act in accordance with the information provided (i.e. if I tell participants I will not do something, then I will not do it).

Signed: Conor Thorne Date: 09/02/2021

Lead Researcher/student in case of project work

Part B

Please answer the following questions.		Yes/No	
Has this research application or any application of a similar nature connected to this research project been refused ethical approval by another review committee of the College (or at the institutions of any collaborators)?			
Will your project involve photographing participants or electronic	audio or video recordings?	No	
Will your project deliberately involve misleading participants in any way?			
Does this study contain commercially sensitive material?			
Is there a risk of participants experiencing either physical or psychogive details on a separate sheet and state what you will tell them to problems (e.g. who they can contact for help).		No	
Does your study involve any of the following?	Children (under 18 years of age)	No	
	People with intellectual or communication difficulties	No	
	Patients	No	

School of Computer Science and Statistics Research Ethical Application Form

Details of the Research Project Proposal must be submitted as a separate document to include the following information:

- 1. Title of project
- 2. Purpose of project including academic rationale
- 3. Brief description of methods and measurements to be used
- 4. Participants recruitment methods, number, age, gender, exclusion/inclusion criteria, including statistical justification for numbers of participants
- 5. Debriefing arrangements
- 6. A clear concise statement of the ethical considerations raised by the project and how you intend to deal with them
- 7. Cite any relevant legislation relevant to the project with the method of compliance e.g. Data Protection Act etc.

Part C

I confirm that the materials I have submitted provided a complete and accurate account of the research I propose to conduct in this context, including my assessment of the ethical ramifications.

Signed: Conor Thorne Date: 10/02/2021

Lead Researcher/student in case of project work

There is an obligation on the lead researcher to bring to the attention of the SCSS Research Ethics Committee any issues with ethical implications not clearly covered above.

Part D If external or other TCD Ethics Committee approval has been received, please complete below.

External/TCD ethical approval has been received and no further ethical approval is required from the School's Research Ethical Committee. I have attached a copy of the external ethical approval for the School's Research Unit.

Part E

If the research is proposed by an undergraduate or postgraduate student, please have the below section completed.
I confirm, as an academic supervisor of this proposed research that the documents at hand are complete (i.e. each item on the submission checklist is accounted for) and are in a form that is suitable for review by the SCSS Research Ethics Committee
Firmanlada Arnedilla
Signed: .Inmaculada Arnedillo-Sánchez Date: 12 th February 2021

Completed application forms together with supporting documentation should be submitted electronically to the online ethics system - https://webhost.tchpc.tcd.ie/research_ethics/ When your application has been reviewed and approved by the Ethics committee, hardcopies with original signatures should be submitted to the School of Computer Science & Statistics, Room 104, Lloyd Building, Trinity College, Dublin 2.

CHECKLIST

Please ensure that you have submitted the following documents with your application:

1.	SCSS Ethical Application Form	Х
2.	Participant's Information Sheet must include the following:	Х
	a) Declarations from Part A of the application form;	
	b) Details provided to participants about how they were selected to participate;	
	c) Declaration of all conflicts of interest.	
3.	• Participant's Consent Form must include the following:	X
	a) Declarations from Part A of the application form;	
	b) Researchers contact details provided for counter-signature (your participant	
	will keep one copy of the signed consent form and return a copy to you).	
4.	• Research Project Proposal must include the following:	X
	a) You must inform the Ethics Committee who your intended participants are	
	i.e. are they your work colleagues, class mates etc.	
	b) How will you recruit the participants i.e. how do you intend asking people to	
	take part in your research? For example, will you stand on Pearse Street asking passers-by?	
	c) If your participants are under the age of 18, you must seek both parental/guardian AND child consent.	
5.	• Intended questionnaire/survey/interview protocol/screen shots/representative	Х
	materials (as appropriate)	
6.	URL to intended on-line survey (as appropriate)	

Notes on Conflict of Interest

- 1. If your intended participants are work colleagues, you must declare a potential conflict of interest: you are taking advantage of your existing relationships in order to make progress in your research. It is best to acknowledge this in your invitation to participants.
- 2. If your research is also intended to direct commercial or other exploitation, this must be declared. For example, "Please be advised that this research is being conducted by an employee of the company that supplies the product or service which form an object of study within the research."

Notes for questionnaires and interviews

- 1. If your questionnaire is **paper based**, you must have the following **opt-out** clause on the top of
 - each page of the questionnaire: "Each question is optional. Feel free to omit a response to any question; however the researcher would be grateful if all questions are responded to."
- 2. If your questionnaire is **on-line**, the first page of your questionnaire must repeat the content of the information sheet. This must be followed by the consent form. If the participant does not agree to the consent, they must automatically be exited from the questionnaire.
- 3. Each question must be **optional**.
- 4. The participant must have the option to 'not submit, exit without submitting' at the final submission point on your questionnaire.
- 5. If you have open-ended questions on your questionnaire you must warn the participant against naming **third parties**: "Please do not name third parties in any open text field of the questionnaire. Any such replies will be anonymised."
- 6. You must inform your participants regarding **illicit activity**: "In the extremely unlikely

event that illicit activity is reported I will be obliged to report it to appropriate authorities.

SCSS Research Project Proposal - Conor Thorne

<u>SECTION 1 – Project Description</u>

1. Title of study

Developing an Educational Culinary Application - Final Year Project

2. Dates and duration of study

The project submission date is the 23rd of April. Evaluation of Prototypes of the application are planned to take from the 1st March until the 14th of March

3. Purpose of the project including academic rationale.

The purpose of the project is to implement Human Factors and HCI research to produce a mobile application that provides users a method to cook at home. The project is my Final Year Project for my Computer Science Degree.

4. Describe how participants will be recruited, how many you seek to recruit (and statistical justification if relevant), the type of participants you wish to recruit, and the inclusion and exclusion criteria.

I am seeking to recruit participants over the age of 18 who are interested in cooking at home or who would like to try. The participants need not have any prior technical knowledge to use the application. Due to Covid I will not be able to monitor the evaluations in person and I will ask participants to complete the tasks over a zoom call.

5. Procedures of the study.

Participants will be asked to complete a number of simple tasks using the application prototype, while completing these tasks we encourage participants to think aloud and to describe what they are doing and why. After completion of the assigned tasks we will conduct an interview and questionnaire to evaluate participants' user experience. The questionnaires are standardized and consistent with simple questions. This pattern may occur for multiple evaluations, each time with a different/higher fidelity prototype.

6. Debriefing arrangements following the study.

Participants will be emailed the study to read.

7. Intended Questionnaire

I intend to use the standardized SUS (System Usability Scale) questionnaire (enclosed below)

	Strongly disagree				Strongly
I think that I would like to use this system frequently					
System medacing	1	2	3	4	5
I found the system unnecessarily complex					
	1	2	3	4	5
I thought the system was easy to use					
I think I would need the support of a	1	2	3	4	5
technical person to be able to use this					
system	1	2	3	4	5
I found the various functions in this					
system were well integrated	1	2	3	4	5
I thought there was too much					1
inconsistency in this system	1	2	3	4	5
I would imagine that most people would		-			1
learn to use this system very quickly					
	1	2	3	4	5
I found the system very cumbersome					
to use	1	2	3	4	5
I felt very confident using the system					T
	1	2	3	4	5
I needed to learn a lot of things before					
I could get going with this system	1	2	3	4	5

The following will also be included;

Each question is optional. Feel free to omit a response to any question; however the researcher would be grateful if all questions are responded to. If at any time you wish to withdraw from the study, please indicate this to the evaluator and the study will be cancelled and withdrawn from participation and your answers and testing will not be used or submitted.

SECTION 2 – Ethical Concerns

Describe and discuss all ethical issues relating to the study (including any relating to participant autonomy and personal data). As part of this you should:

1. Potential benefits and potential harms to participants, and how they are addressed.

There are no potential benefits or potential harms that I can identify for participants. It is a simple evaluation of the application prototype and should not result in any lasting effect on the participants.

2. Conflicts of interest and how they will be addressed.

It is unlikely that any conflicts of interests will occur. If the participant has any association with any entity which would impact the bias of their participation they are implored to withdraw themselves.

<u>SECTION 3 – CONFIDENTIALITY AND DATA PROTECTION</u>

3.1 Does this study involve collecting, using, accessing or sharing personal data¹?

Yes

If **NO**, please go to section 4.

If **YES**, please list² all categories of personal data.

Please see checklist on secure storage available here.

Type of Data	Justification: Why do you need the data?	Data Format	Technical and Organisational Controls	Identifiable coded, or anonymised
Email Address	Contact to organise interviews Contact to email finished report	Excel spreadsheet	on local machine in a folder which is encrypted	Identifiable
Consent Form	Evidence of consent from an ethical perspective	Word Doc	on local machine in a folder which is encrypted	Identifiable

Personal data is information which can identify a person. In particular: a name, address, email, telephone number, an identification number, location data, an online identifier, an IP address, a code key linking back to identifiable data etc. Please note that pseudonymised data is personal data under GDPR. Pseudonymised data means data which cannot be attributed to an individual without the use of additional information which is kept separately. (i.e. a key) . It is sometimes referred to as 'coded data'. Please note that in order to be considered personal data in our hands, Trinity must hold the key.

² If using Personal data. Records must be kept pursuant to Article 30, GDPR; https://gdpr-info.eu/art-30-gdpr/

3.2 Does the study involve collecting, using, accessing or sharing sensitive data³?

No

If **NO**, please go to question 3. 3.

If YES, please list all categories of the sensitive data collected.

Please see checklist on secure storage available here.

Type of Data	Justification: Why you need the data?	Data Format	Technical and Organisational Controls	Identifiable coded, or anonymised
EXAMPLE: Interview sheet	Method of research	Hard copy form	Stored in encrypted format on local machine which is also encrypted	Pseudonymised (code given to each individual). PI has the key

3.3 Who determines how and why the personal and/or sensitive data is used? (Data Controller⁴ or Joint Data Controllers)

Provide Details:		
Conor Thorne		

3.4 Will the personal and/or sensitive personal data be shared with any third parties⁵?

No

This list should include all Data Processing Agreements with external laboratories, Cloud-based Solutions Agreements etc., and any and Data Sharing Agreements with Collaborators.

Sensitive personal data means personal data, which poses a higher risk to the individual. It includes personal data revealing racial and ethnic origin, political opinions, religious or ideological convictions, trade union membership, criminal convictions and offences, genetic, biometric (photos, videos, audio etc.) data concerning physical or mental well-being, information relating to education, professional training employment and career history, questionnaires, Information relating to the family of the individual and the individual's lifestyle and social circumstances.

Employees and students of TCD are not data controllers. TCD is the data controller for the institution. However, if other institutes jointly decide how and why the data will be used, they should also be noted as controllers here.

⁵ Third parties could be collaborators (institutes/industry) or service providers (transcribers, cloud storage etc.)

Please contact <u>researchDPO@tcd.ie</u> if you need assistance with agreements and/or for any transfer outside EEA (including England, Wales, Scotland or Northern Ireland).

Provide Details:

3.5 How long will you retain the personal data?

Please see good <u>research practice guide</u> for guidance on retention of research data. Your school should be able to advice on best practice.

Provide Details: Until the final project has been graded, approximately no longer than September 2021

3.6 Will the personal data be fully anonymised or deleted after it is no longer necessary?

The data will be fully deleted when no longer necessary

3.7 How will you inform participants of their rights under GDPR⁶:

Before evaluation, I will email them the GDPR and a summarised version specific to them

Please note that the DPO's contact details <u>must</u> be included on any information leaflet or privacy notice if you are using personal data for your research.

Email: dataprotection@tcd.ie

Post: Data Protection Officer, Secretary's Office, Trinity College Dublin, Dublin 2, Ireland

6 Under GDPR, these include:

- right of access;
- right to rectification;
- right to erasure;
 - right to object to processing based on legitimate or public interest;
- right to data portability
- right to object to profiling or making decisions about individuals by automated means?

SCSS Research Project Proposal - Conor Thorne

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system	1	2	3	4	5
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inconsistency in this system	1	2	3	4	5
I would imagine that most people would		-			1
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Email: dataprotection@tcd.ie

Post: Data Protection Officer, Secretary's Office, Trinity College Dublin, Dublin 2, Ireland

Under GDPR, these include:

right of access;

right to rectification;

right to erasure;

right to object to processing based on legitimate or public interest;

right to data portability;

- right to object to profiling or making decisions about individuals by automated means?