



Ollscoil Chathair
Bhaile Átha Cliath
Dublin City University

**School of Computing
RESEARCH ETHICS COMMITTEE**

**APPLICATION FORM FOR ETHICAL REVIEW OF A
RESEARCH PROJECT INVOLVING HUMAN PARTICIPANTS
WHICH IS IN THE CATEGORY OF NOTIFICATION ONLY**

There are 3 generally accepted levels of ethical review for projects carried out in a University or similar setting. These are notification only, expedited and full committee.

This notification only level of review is to approve relatively low-risk research involving human participants, primarily using social science methodologies in which any personal information collected is not of a sensitive nature. The School of Computing Research Ethics Committee has been delegated responsibility by the University to approve ethics submissions from undergraduate and taught Masters projects only, which are in the category of notification only.

Examples of projects in this category include:

- Anonymous surveys in which the topic itself is not likely to elicit significant difficulties for the participants, such as: anonymous internet surveys (e.g. Survey Monkey), street questioning.
- Observation (without audio or visual recording) of public settings where privacy would not normally be expected, such as observing people on streets or at sports events.
- Research carrying no risks beyond those of everyday life (as experienced by the intended participant population), such as asking people's opinions about products or services; asking students about educational experiences; monitoring the impact of daily activities.
- Interviews with public figures, professionals or others in their professional capacity regarding their professional activities.
- Analysis of data (e.g. health records) which have had all identifying information removed by the data holder and been provided to the researcher in accordance with data protection legislation.
- Collection of biological samples which are anonymised and do not require invasive techniques (e.g. hair, nails).

If your project is using data from a public repository like Kaggle or is not generating or using any form of personal data then you do not need research ethics approval, you do not need to complete and to submit this form and your project supervisor should indicate this on the project dashboard.

If your project involves collecting or processing [personal data which is of a personal nature](#), you must first complete the DCU online Data Protection training course and review the ["Data Protection – Key Points for DCU Researchers"](#) guidance from the Data Protection Unit to assist you in meeting your legal obligations under GDPR and associated Irish law.

Once you have completed this form (if you need to) you should save it as a PDF file, not WORD, and upload it to the your project dashboard before you start gathering data. It will then be read and assessed by two members of the committee and once two members of the committee approve your submission you will be automatically notified by email and your project can start data gathering.

There are strict deadlines for submitting this form for each class group, undergraduate and taught Masters by which your submission must be made and you will be informed of these deadlines by your course board chair or project co-ordinator. If you do not submit by these deadlines then the research ethics committee is not obliged to approve your submission and when that happens and your project is assessed and graded at the end of the year, you will be awarded 0 for that component of your project.

SECTION 1 – GENERAL DETAILS**1.1 Project Title**

Demeter

1.2 Applicant Details

Name	Student or Supervisor	E-mail
Ronghui Lin	Student	ronghui.lin2@mail.dcu.ie
Kline Borromeo	Student	kline.borromeo2@mail.dcu.ie
Hyowon Lee	Supervisor	hyowon.lee@dcu.ie

Other Investigators: *Including any external to DCU*

Name	School/Unit/External Institution	E-mail

1.3 Key Project Dates

Proposed start date for data collection	Proposed end date for data collection	Proposed project completion date
01/02/2024	10/02/2024	21/05/2024

1.4 Please indicate which academic award

Undergraduate <input checked="" type="checkbox"/>	Taught Masters <input type="checkbox"/>
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1.5 Please confirm the location(s) where the research will be carried out

If research will be carried out abroad, you will need to address the ethical challenges raised by this in Section 3 of your application - consult the Conducting Research Abroad document in the Ethics Resources and Guidelines section of the [DCU Research Ethics webpage](#)).

DCU, Glasnevin Campus

1.6 Please state what additional permissions may be required to access participants.

Specify from whom the permission is required (e.g. a school Board of Management), and when their written approval will be obtained

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SECTION 2 – PROJECT DESIGN AND METHODOLOGY

Research Overview - Please respect the indicated word counts in the following sections and explain all acronyms in full text the first time they appear.

2.1 Provide a brief description of the research (max 250 words):

Please use lay language, include the scientific/theoretical background of study and a justification as to why this research project should proceed in that context

This research project, titled "Demeter," revolves around the development of an innovative mobile application designed to revolutionize individuals' interactions with food. The app aims to streamline users' culinary experiences by offering features such as personalized meal recommendations, grocery assistance, dietary restriction and allergen detection, and seasonal dish suggestions.

2.2 Please state the aims and objectives of the project (max 200 words)

We want to test the efficacy and usefulness of the app to make it suit the needs of the prospective users of the app.

2.3 Please confirm your methods of data collection:

Tick all relevant check boxes and provide details for each one, including any devices used to collect data, and whether the data will be anonymous, potentially identifiable or identifiable at point of collection

Method	Describe briefly
<input type="checkbox"/> Interviews or focus groups	
<input checked="" type="checkbox"/> Surveys/questionnaires	Surveys and questionnaires mainly in the form of debriefing and feedback after.
<input checked="" type="checkbox"/> Audio/video recordings	Audio/Video is used when subjects use the application as it has voice processing as a form of input and the use of their mobile phone camera as a form of input is also part of the application.
<input type="checkbox"/> Public observations	
<input type="checkbox"/> Persons in public office	
<input type="checkbox"/> Using existing data (incl. secondary data)	
<input type="checkbox"/> Using human derived material (biological samples)	
<input checked="" type="checkbox"/> Standard tests (educational/personality etc.)	Some aspects of the app will require users to add what food they prefer and if they have any allergies or dietary restrictions.
<input type="checkbox"/> Standard educational practices	
<input type="checkbox"/> Other (please specify)	

2.4 Please confirm who the participants on this study will be, including group size and composition:

Include associated demographic characteristics, and state how your proposed sample size was determined (e.g. power analysis)

Profile of Participants

The participants will be college students between the ages 20 to 23. These students will be from Dublin City University.

Sample Size

5

The sample size was determined this way as our supervisor indicated that 4 to 5 participants is the ideal sample size for Usability Testing.

2.5 Please outline your recruitment process, including where you are sourcing participants from and your criteria for inclusion/exclusion:

Where gatekeepers are involved, outline the procedures relating to their involvement

We will approach DCU students from 4th Year Computer Science verbally and collect their emails on a sheet.

We will then send emails sent to the 5 participants including the Participant Information Sheet (which contains information about Demeter) Informed Consent Form as well as the Questionnaire/Survey on the Demeter App.

2.6 Addressing participant vulnerability – if your participants fall into any of the following categories, please check the relevant tick box/boxes and state below what special arrangements will be made to protect them:

If your participants are not in any of these categories, tick N/A

<input checked="" type="checkbox"/> N/A
<input type="checkbox"/> Children under 18 years of age
<input type="checkbox"/> Persons in unequal relationships with the researcher (e.g. lecturer-student, therapist-client, employer-employee)
<input type="checkbox"/> People with a recognised or diagnosed intellectual, physical or mental impairment
<input type="checkbox"/> People confined to institutions (e.g. prisoners, residents in 24 hr nursing facilities)
<input type="checkbox"/> People who have undergone traumatic or adverse emotional events
<input type="checkbox"/> People with diminished cognitive ability
<input type="checkbox"/> Marginalised sections of society
<input type="checkbox"/> Other (please specify)

Special arrangements:**2.7 Involvement of children under 18 years of age – if your participants are in this category, please confirm compliance with the following:***If your participants are not in this category, tick N/A*

<input checked="" type="checkbox"/> N/A
<input type="checkbox"/> We confirm that we have read and agree to act in accordance with the DCU Child Protection policy and procedures (as per the DCU Child Protection Unit webpage)
<input type="checkbox"/> We confirm that we have put in place safeguards for the children participating in the research
<input type="checkbox"/> We confirm that we have supports in place for children who may disclose current or historical abuse (whether or not this is the focus of the research)
<input type="checkbox"/> We confirm that all requirements will be met prior to commencing the research (e.g. TUSLA Children First Training completed, Garda Vetting in place)

2.8 Please confirm how the results of the research will be disseminated:*Include a statement on whether the participants will be provided with any information as to the findings or outcomes of the project*

The findings of the project will be shared only with Kline Borromeo, Ronghui Lin and Hyowon Lee. The findings will also be provided to the examiners of the 4th Year Project on request.

SECTION 3 – ETHICAL ISSUES AND RISK MANAGEMENT

3.1 Please identify all issues including ethical issues which may arise in the course of this research. What are the potential risks to participants, and how will those risks be addressed or minimised?

Potential risks can be physical, psychological, social, legal, etc. Please include details of any additional support being provided for participants during/after the study

There will be no risks involved with the testing as all data that the participants will enter as they will be anonymous.

However, users can choose not to continue in this study at any time and they will be reminded of this throughout this investigation.

They will test the application and fill in a quick survey without stating any sensitive personal information such as names, email, phone number, etc. When entering log in details, they will be referred to as User1, User2, etc.

The testing will carry no risks beyond those of everyday life since this is a mobile application without any intensive attention or intense interactivity required.

3.2 Please identify the potential benefits (direct and/or indirect) to those participating in this research:

Potential benefits should outweigh the potential risks to participants

Users will be able to test a new app that will help them keep track of their nutrition and may result in them making healthier food choices.

If the app becomes successful, users could say that they were part of the development of Demeter.

3.3 Please describe what measures/protocols you have put in place in the event that there are any unexpected outcomes or adverse effects to participants arising from involvement in the research:

No deception or investigation of participants in illegal activities will be involved in the project.

Here are some potential risks to the participants and their corresponding measures the researchers will take if said risks arise.

- **Embarrassment:** The participant may feel embarrassed if they struggle to use the application.
Measure/Protocol:

They will be assisted if they are struggling and assured that it is due to the poor design of the application that they are facing the challenge.

- **Agitation:** the participant may become agitated if the application is difficult for them to use.

Measure/Protocol:

Participants will be observed while testing the application and the test will end immediately if they appear too agitated to avoid conflict.

3.4 Do you intend to provide payment or incentives to participants?Yes ☐No ☒

If Yes, please consult the REC Guidelines on the Use of Compensation and Incentives (in the Ethics Resources and Guidelines section of the [DCU Research Ethics webpage](#)) before providing additional details below

3.5 Does this research raise any potential risks for the researchers themselves?

Please consider the location/environment where the research is being conducted, exposure to distressing data content etc.

Yes ☐No ☒

If Yes, please describe further and explain what risk management procedures will be put in place to minimise these risks to researchers:

3.6 Does this research raise any potential conflict of interest?

Please consider any potential real or perceived conflicts of interest that might influence the integrity of the research, or give rise to bias in conducting and reporting the research, or affecting publication (consult the [DCU Conflict of Interest Policy](#) for assistance)

Yes ☐No ☒

If Yes, please identify and explain the steps being taken to address that conflict:

3.7 Please describe how the conduct of the research will be monitored:

Regular oversight by the PI is required to ensure the project conforms to the procedures set out in this application (especially where several people are involved in carrying out the research procedures)

Kline Borromeo and Ronghui Lin will report to Hyowon Lee of the testing outcomes in meetings that will take place weekly or every two weeks until the planned testing period is completed.

SECTION 4 – CONFIDENTIALITY AND DATA MANAGEMENT

4.1 Considering your previous response in section 2.3 of the form on data collection, please confirm whether you are collecting or processing personal data in this research project:

Personal data is any information about a living person, where that person is either identified, or could be identified from the data itself, or when it is combined with other data. This includes paper based, electronic and biological samples data. If your data is fully and completely anonymous, it is not personal data.

Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
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If Yes, please confirm your compliance with the following by ticking the checkboxes:

<input checked="" type="checkbox"/> We confirm that we have completed the DCU Data Protection training module on Loop.
<input checked="" type="checkbox"/> We confirm that we have read the “Data Protection – Key Points for DCU Researchers” guidance on the DCU Data Protection Unit (DPU) website and agree to protect and manage our data in accordance with same.
<input checked="" type="checkbox"/> We have assessed the degree of risk inherent in the personal data being used in the research project, and confirm that all DPU GDPR requirements have been met prior to submitting this application (e.g. completion of Data Protection questionnaire, confirmation that any survey tool being used is GDPR compliant, that required Data Processing or Sharing Agreements will be in place, etc.)

4.2 Data access – please confirm whether access to participant data is confined to the investigators named on this application:

Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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If No, please name who the other individuals are and why they need access. Any proposed transfer of data (including outside of the EU) should be detailed here.

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4.3 Data storage – please confirm compliance with the following:

<input checked="" type="checkbox"/> Data collected on mobile devices will be protected with a strong password/passphrase at a minimum, and/or encrypted if the device supports it
<input checked="" type="checkbox"/> Data will be removed from mobile devices as soon as is practicable and stored in a secured location in DCU (on server or institutional Google Drive)
<input checked="" type="checkbox"/> Paper based data will be held securely in locked cabinets in DCU, with access restricted to the named researchers
<u>Specific arrangements in relation to biological samples should be stated here:</u>
<u>Any exemptions to the above compliance statements should be justified here:</u>

4.4 Please confirm who will be responsible for the secure storage of data generated by the research:

Name the relevant DCU investigator/s

Kline Borromeo
Ronghui Lin

4.5 Please confirm how long the data will be held for:

For personal data, consult section 15: Retention of Personal Data in the [“Data Protection – Key Points for DCU Researchers”](#) guidance on the DCU Data Protection Unit (DPU) website

The data will be held until 21/05/2024, which is indicated as the proposed project completion date as indicated in section 1.3 above.

4.6 Please confirm what will happen to the data collected at the end of the study:

Please tick the relevant checkbox and complete the associated follow-up section for that category

Archived <input type="checkbox"/>	Destroyed <input checked="" type="checkbox"/>	Other <input type="checkbox"/>
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4.6.1 Archived data

Please provide the following details:

Name the DCU staff member responsible for archival and future use of data	
Confirm whether the data will be made available to other researchers, and if so, how?	
Confirm <u>how</u> the data will be prepared for archive (e.g. will datasets be anonymised)	
Confirm <u>where</u> the data will be archived and who will be allowed to access it	

4.6.2 Destroyed data

Please provide the following details – Note: for student projects, the supervisor must take responsibility for data destruction if there is no guarantee the student will have access to the data at the time of destruction

Please justify why the data will be destroyed	<i>The data will be destroyed because we do not want sensitive information about the participants to be released or potentially leaked.</i>
Name the DCU researcher responsible for destruction of data	<i>Kline Borromeo</i>
Confirm when the data will be destroyed (specify date)	<i>21st of May 2024</i>
Confirm compliance with the following destruction methods (tick relevant boxes)	<input checked="" type="checkbox"/> Electronic data will be overwritten/securely deleted <input checked="" type="checkbox"/> Paper based data will be confidentially shredded <input type="checkbox"/> Medical samples will be disposed in accordance with the relevant DCU approved SOP

4.6.2 Other - Please explain what will happen to the data if not being archived or destroyed:

SECTION 5 – PARTICIPANT INFORMATION AND INFORMED CONSENT PROCEDURES

In addition to completing this form you are required to attach, within the single PDF that you submit, a copy of (1) the Participation Information Sheet which you share with your participants and (2) a copy of the Informed Consent Form which your participants sign.

5.1 Please confirm that the following items have been addressed in your Participant Information Sheet which should be shared with all participants whether it involves online or in-person data gathering:

The items below should be used as headings in your information sheet. Note the language used under each item must reflect the participant age group and corresponding comprehension level– if your participants have different comprehension levels (e.g. both adult and child participants) then separate sheets must be prepared for each set. Templates are available via the [REC Forms - Applications, Templates and Amendments section](#) of the Research Ethics website.

Checklist – tick the relevant check box for each item	Yes	No
Introductory Statement (Researcher names and titles, school, title of the research study)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
What is this research about?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Why is this research being conducted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Why have you been invited to take part?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
What will happen if you decide to take part in this research study?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
How will your data be used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
How will your privacy be protected (including any legal limits to confidentiality)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
What are the benefits of taking part in this research study?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
What are the risks of taking part in this research study?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Can you change your mind at any stage and withdraw from this study?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
How will you find out what happens with this project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Contact details for further information	<input checked="" type="checkbox"/>	<input type="checkbox"/>

If you marked any item as No, please explain and justify why:

5.2 Informed Consent Procedures – please confirm whether written consent is to be obtained:

Please tick the relevant checkbox

Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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If Yes, describe the procedures by which written consent will be obtained. If you are involving child participants, you will also need to obtain their written assent. Templates are available via the [REC Forms - Applications, Templates and Amendments section](#) of the Research Ethics website.

User's consent will be obtained by signature of an informed consent form or electronically by the digital version of the informed consent form via google forms.

If No, describe the procedures regarding how consent/assent will be obtained:

If you are gathering data from an online process such as Google Form or SurveyMonkey then you should use a page such as the one below, to capture participants' informed consent and your data gathering should not proceed until participants have completed this form with the appropriate answers.

Participant – please complete the following (by clicking Yes/No for each question)

I have read the Plain Language Statement (or had it read to me) *

- ☒ Yes
☐ No

I understand the information provided *

- ☐ Yes
☐ No

I have had an opportunity to ask questions and discuss this study *

- ☐ Yes
☐ No

I understand the information provided in relation to data protection *

- ☐ Yes
☐ No

I have received satisfactory answers to all my questions *

- ☐ Yes
☐ No

I understand I may withdraw from the Research Study at any point *

- ☐ Yes
☐ No

I have read and understand the arrangements to be made to protect confidentiality of data, including that confidentiality of information provided is subject to legal limitations *

- ☐ Yes
☐ No

I have read and understand confirmations relating to any other relevant information as indicated in the PLS *

- ☐ Yes
☐ No

I consent to participate in this research study *

- ☐ Yes
☐ No



Section 1 of 2

Informed Consent Form



Link to Plain Language Statement:

Aim of the study:

To assist in the design of the Demeter Nutrition Mobile Application
The feedback from this study will be used to see where Demeter can improve its user interface and to test its usability.

**** Please read the Plain Language Statement before filling out this form ****

Section 1: Informed Consent Form

Section 2: User Testing Form

I have read the Plain Language Statement and/or the Participant Information Sheet (or had it read to me) *

☐ Yes

☐ No

I understand the information provided *

☐ Yes

☐ No

I understand the information provided in relation to data protection *

☐ Yes

☐ No

I have had the opportunity to ask questions and discuss the study *

☐ Yes

☐ No

I have received satisfactory answers to all of my queries *

☐ Yes

☐ No

I understand that I may withdraw from the Study at any point *

☐ Yes

☐ No

I have read and understand the arrangements to be made to protect confidentiality of data, including that confidentiality of information provided is subject to legal limitations *

☐ Yes

☐ No

I have read and understand confirmations relating to any other relevant information as indicated in the Plain Language Statement. *

☐ Yes

☐ No

I consent to participate in this research study *

☐ Yes

☐ No

Section 2 of 2

User Testing Form

Please make sure you have read the **Plain Language Statement** and filled out the **Informed Consent form** above before answering the questions below.

This survey should take no longer than 5 minutes.
Please provide your input using the questions below.
If you have any concerns, please feel free to contact the developers of Demeter below.

Kline Borromeo - kline.borromeo2@mail.dcu.ie
Ronghui Lin - ronghui.lin2@mail.dcu.ie

This survey is entirely anonymous, and its main aim is to gather information from system users to help with the design and development of the program. No private information will be gathered or saved.

How would you rate your overall experience using Demeter? *

1 2 3 4 5

Very Bad ○ ○ ○ ○ ○ Very Good

Do you think Demeter would be useful when you are getting groceries? *

☐ Yes
☐ No

How did you find the inputting of ingredients into Demeter? Was it a chore to input it in over your 2 days?

Long-answer text

How could the developers persuade you to keep inputting ingredients?

Long-answer text

Would you be happy to input more if there was more incentives?

☐ Yes
☐ No

If you answered yes to the previous question, do you have any suggestions on what would be a feasible incentive?

Short-answer text

Was the application easy to use? *

☐ Yes
☐ No

If you didn't find it easy to use, why was it hard?

Long-answer text

What did you think of the visual design of the application? *

1 2 3 4 5

Very Poor ○ ○ ○ ○ ○ Very Good

Is there anything you did not like about the design?

Long-answer text

Do you have any features that would suit this application? (Future Features/ Deployment)

Long-answer text

Do you have any other comments?

Long-answer text

SECTION 6 – SUBMISSION CHECKLIST AND RESEARCHER DECLARATION

6.1 Please confirm all required supplementary documentation to be included in this application within Section 7:

Checklist – tick the relevant check box for each item	Yes	N/A
Participant Information Sheet/s	<input checked="" type="checkbox"/>	
Informed Consent Form/s	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Informed Assent Form/s	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Recruitment Advertisement	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Questionnaire/Survey	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Interview/Focus Group Questions	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Debriefing Material	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Bibliography	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Approval from another Research Ethics Committee	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Evidence of other external approvals (e.g. Board of Management letter)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Evidence of internal approvals (e.g. BSC approval review letter)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other – provide details here:	<input type="checkbox"/>	<input checked="" type="checkbox"/>

6.2 Signed Declaration

By submitting this form, the applicant (and supervisor) agree to the following:

The information contained herein is, to the best of my knowledge and belief, accurate. I have read the University's current research ethics guidelines, and accept responsibility for the conduct of the procedures set out in the attached application in accordance with the form guidelines, the [REC guidance and resources](#), the University's [Conflict of Interest Policy](#), its [Code of Good Research Practice](#) and any other condition laid down by the Dublin City University Research Ethics Committee. I have attempted to identify all risks related to the research that may arise in conducting this research and acknowledge my obligations and the rights of the participants.

I also acknowledge my requirement to be informed as to other duties and legal obligations applying to my research, and to comply with these duties and obligations – this includes being informed about DCU Data Protection guidelines for researchers, DCU Child Protection policy and procedures (where relevant) and DCU Insurance requirements.

I and my co-investigators and/or supporting staff have the appropriate qualifications, experience and facilities to conduct the research set out in the attached application and to deal with any emergencies and contingencies related to the research that may arise. Research will not commence until required consents and approvals are in place.

Electronic Signature(s):

Supervisor: Hyowon Lee

Print Name here: HYOWON LEE

Date: _____

Student(s) signature(s): Kline Borromeo, Ronghui Lin

Print Name(s) here: KLINE BORROMEO, RONGHUI LIN

Date: ____ 16/01/2023 ____

SECTION 7 – SUPPLEMENTARY DOCUMENTATION

Please attach all required documentation as confirmed by you in the previous section. The application should then be saved as one file in PDF format before submission via the project dashboard.

DCU Research Ethics Committee Participant Information Sheet

Introductory Statement

Researchers:

Supervisor: Hyowon Lee, School of Computing
Student: Ronghui Lin, CASE4 School of Computing
Student: Kline Borromeo, CASE4 School of Computing
Title: Demeter – The Food App Fit for a God

What is this research about?

This research/project is about creating an innovative mobile application that seeks to transform how people engage with food. It will provide a comprehensive solution for managing nutrition, meal planning, grocery shopping and dietary/allergy concerns.

Why is this research being conducted?

The data collected from this research will be used to gauge how intuitive the application is as well as the user experience with the application.

This will include how the various user input options available to the user will impact the usage of the application, especially with parts that include heavy data input. We want to be able to identify how the user experience is in conjunction with our research into ways to reduce the burden of input on the user which could affect future human computer interactions with mobile applications.

Why have you been invited to take part?

You have been invited to take part in this research study in order to improve our application's usability and feature set by testing our application and its features over the course of 3 days. The participant may also be someone who:

1. Cooks on a regular basis - Ideally minimum twice a week so we can gather more information to test.
2. College Student - Initially designed with college students in mind so students can save costs associated with grocery and meals.
3. Amateur Chef - Participants which cook often and may utilise the recipe and ingredients tracker more often.

In the case of college students, your involvement or non-involvement with this research study will not affect your ongoing assessment / grades / management if you are in a dependent relationship with any of the researchers.

What will happen if you decide to take part in this research study?

The participant will have to read the Participant Information Sheet and fill out an online consent form, before engaging in our anonymous survey online.

The participants will have to install our application on their preferred mobile platform (**Android/iOS**) and utilise the application for a trial period of 3 days.

Utilising the application will include:

Completing your profile:

1. Completing user registration
2. User login
3. Adding dietary restrictions or allergies
4. Adding preferred cuisines.

Utilise features:

1. Inputting ingredients into the pantry via the various input options available via:
 - a. Barcode Scanning
 - b. Ingredient Detection via Camera
 - c. Voice Recognition

DCU Research Ethics Committee Participant Information Sheet

- d. Manual typing.
2. Using meal/recipe recommendations given
3. Using the automated ingredients tracker by accepting a meal/recipe recommendation.

Participants will also be asked to keep track of any pain points, any annoyances or areas of improvement from the experience of using the application over the course of the 3 trial days.

Participants will also have to complete a post-trial debriefing survey either electronically or in person via an informal interview if possible in order to gauge the participants' feedback on usability and any other feedback about the application that they wish to provide.

Identity of the Data Controller(s):

- Ronghui Lin (ronghui.lin2@mail.dcu.ie)
- Kline Borromeo (kline.borromeo2@mail.dcu.ie)

DCU Data Protection Officer: Mr. Martin Ward (data.protection@dcu.ie Ph.: 7005118 / 7008257) who will handle any data protection concerns arising from the research.

The reason(s) for which the data will be processed or held.

- The data will be processed and held solely to test and improve the application for the duration of this project/research.

The categories or types of personal data to be processed.

- Audio clips, Video clips and user account data such as emails used to sign up and dietary/allergy restrictions (to test detection).

The details of any third parties (i.e. data processors) with whom the data will be shared or transferred, and the reasons for sharing.

- Data will not be shared or transferred to any third parties.
- Data will not be shared or transferred to any external parties.
- The data will only be retained for the duration of this project and will subsequently be deleted after the conclusion of the project after the project demonstrations.

Please note that you have the right to lodge a complaint concerning the use of your personal data with the [Irish Data Protection Commission](#).

You also have the right to access your own personal data that is held by the researchers, please contact the researchers if you wish to be sent a copy.

"Ronghui Lin at ronghui.lin2@mail.dcu.ie" or

"Kline Borromeo at kline.borromeo2@mail.dcu.ie", or

alternatively by contacting the Data Protection Officer Mr. Martin Ward (data.protection@dcu.ie) Ph.: 7005118 / 7008257.

How will your privacy be protected?

Your data will be encrypted and stored in a database that only the researchers may access and will be deleted upon the completion of this project after demonstrations have concluded.

Please note that confidentiality of information can only be protected within the limitations of the law - i.e., it is possible for data to be subject to subpoena, freedom of information claim or mandated reporting by some professions.

More information can be obtained by clicking on the link below:

<https://www.dataprotection.ie/en/individuals/data-protection-basics/principles-data-protection>

What are the benefits of taking part in this research study?

Participants will be able to gain an insight into their purchasing habits and cooking habits.

DCU Research Ethics Committee Participant Information Sheet

They will also be able to keep track of their ingredients and recipes that are available to be used from ingredients in their pantry.

What are the risks of taking part in this study?

No deception or investigation of participants in illegal activities will be involved in this research project. The potential risks could include:

- Embarrassment - the participant may feel embarrassed if they have difficulty in using the Application, if this occurs, they will be assisted and assured that it is due to the poor design of the application.
- Agitation – participants may become agitated if the application requires a large amount of data entry depending on the method used for data entry. If this occurs participants are recommended to end the study to avoid conflict.

**** Please note, that your participation in the research project is completely voluntary and will end at any point you withdraw your consent to participate.**

Regarding personal data collected, data can be removed at any time by contacting the researcher's listed on this information sheet. **

Contact details for further information:

Ronghui Lin (ronghui.lin2@mail.dcu.ie)

Kline Borromeo (kline.borromeo2@mail.dcu.ie)

DCU Data Protection Officer:

Mr. Martin Ward (data.protection@dcu.ie Ph.: 7005118 / 7008257)

If participants have concerns about this study and wish to contact an independent person, please contact: The Secretary, Dublin City University Research Ethics Committee, c/o Research and Innovation Support, Dublin City University, Dublin 9. Tel 01-7008000, e-mail rec@dcu.ie