DCU
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, expediated 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

START Web Application

1.2 Applicant Details

Name	Student or Supervisor	E-mail
Adam Gray	Student	adam.gray27@mail.dcu.ie
Niall Kelly	Student	niall.kelly88@mail.dcu.ie
Dr David Sinclair	Supervisor	david.sinclair@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
01/04/14	07/04/24	21/04/24

1.4 Please indicate which academic award

Undergraduate ☒	Taught Masters ☐

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).

At our own homes as well as on site at the DCU 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

N/A

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

The reason for the research to be undertaken is so after our initial implementation phase of the project we can get feedback from our target users on which features they would like to be improved or changed, allowing us to do so before the project deadline.

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

The project is a web application that will enable users to learn our own programming language, START, as well as write and execute code all from the web. It will also contain a debugger to help them learn how to fix issues they come across while programming. The application will also contain resources such as videos and educational document about the language including concepts and tutorials.

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 <u>at point of collection</u>

Method	Describe briefly
☐ Interviews or focus groups	
☒ Surveys/questionnaires	Google Forms will be used to collect data from the users who answer our survey. This will be anonymous and no user will be able to be identified.
☐ Audio/video recordings	
☐ Public observations	
☐ Persons in public office	
☐ Using existing data (incl. secondary data)	
☐ Using human derived material (biological samples)	
☐ Standard tests (educational/personality etc.)	
☐ Standard educational practices	
☐ 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)

We have 2 main groups of participants in mind: - Group 1 consists of students from a non computer science discipline - Group 2 consists of non students with no prior experience with programming Our sample size was open to any participant who met 2 criteria:

- 1) The participant did not partake in our testing last year - 2) The participant had no prior experience with programming

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

An email would be sent to possible participants we know meet our criteria, asking them if they wish to participate in the study.

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

☒ N/A
☐ Children under 18 years of age
☐ Persons in unequal relationships with the researcher *(e.g. lecturer-student, therapist-client, employer-employee)*
☐ People with a recognised or diagnosed intellectual, physical or mental impairment
☐ People confined to institutions *(e.g. prisoners, residents in 24 hr nursing facilities)*
☐ People who have undergone traumatic or adverse emotional events
☐ People with diminished cognitive ability
☐ Marginalised sections of society
☐ Other (please specify)
Special arrangements: ***No protection is required, participants data will be anonymous and will be destroyed after the survey is completed.***

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

☒ N/A
☐ 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*)
☐ We confirm that we have put in place safeguards for the children participating in the research
☐ 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)
☐ 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 results of the study will not be made public to any participant or anyone outside of the study. The project supervisor and examiners will be informed of the results where relevant and the overall results will be present in the documentation of the final project.

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

The level of risk for participants of the study is low.

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

The is no direct benefit to the participants of this study. They will be helping us to develop and improve our system.

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:

In the extremely unlikely event of any adverse side effect on any participant of the study, all research and data collection will be stopped and all previously gathered data will be destroyed.

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)

Regular meetings and contact with the supervisor of the project will ensure that the study is being carried out as specified in this application.

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 ☐	No ☒

If Yes, please confirm your compliance with the following by ticking the checkboxes:

☐ We confirm that we have completed the DCU Data Protection training module on Loop.
☐ 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.
☐ 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 ☒	No ☐

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.

4.3 Data storage – please confirm compliance with the following:

☒ Data collected on mobile devices will be protected with a strong password/passphrase at a minimum, and/or encrypted if the device supports it
☒ 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)
☒ Paper based data will be held securely in locked cabinets in DCU, with access restricted to the named researchers
Specific arrangements in relation to biological samples should be stated here:
Any exemptions to the above compliance statements should be justified here:

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

Name the relevant DCU investigator/s

Niall Kelly Adam Gray

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 help no longer than 7 days after the final project examination in May 2024.

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 ☐	Destroyed ☒	Other ☐

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 how the data will be prepared for archive (e.g. will datasets be anonymised)	
Confirm where 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	*It will no longer be needed for any purpose in the project.*
Name the DCU researcher responsible for destruction of data	*Adam Gray, Niall Kelly*
Confirm when the data will be destroyed (specify date)	*17/05/2024*
Confirm compliance with the following destruction methods (tick relevant boxes)	☒ Electronic data will be overwritten/securely deleted ☐ Paper based data will be confidentially shredded ☐ 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 yourinformation 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)	☒	☐
What is this research about?	☒	☐
Why is this research being conducted?	☒	☐
Why have you been invited to take part?	☒	☐
What will happen if you decide to take part in this research study?	☒	☐
How will your data be used?	☒	☐
How will your privacy be protected (including any legal limits to confidentiality)?	☒	☐
What are the benefits of taking part in this research study?	☒	☐
What are the risks of taking part in this research study?	☒	☐
Can you change your mind at any stage and withdraw from this study?	☒	☐
How will you find out what happens with this project?	☒	☐
Contact details for further information	☒	☐

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 ☒	No ☐

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.

The participant will click a box before completing the survey which confirms they agree to participate in the study. This will be a written agreement to complete the survey and will allow them to continue.

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 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	☒	
Informed Consent Form/s	☒	☐
Informed Assent Form/s	☐	☒
Recruitment Advertisement	☐	☒
Questionnaire/Survey	☐	☒
Interview/Focus Group Questions	☐	☒
Debriefing Material	☐	☒
Bibliography	☐	☒
Approval from another Research Ethics Committee	☐	☒
Evidence of other external approvals (e.g. Board of Management letter)	☐	☒
Evidence of internal approvals (e.g. BSC approval review letter)	☐	☒
Other – provide details here:	☐	☒

6.2 Signed Declaration

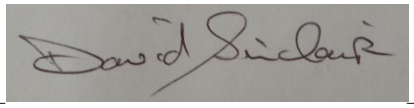
By submitting this form, the applicant (and supervisor) agree to the following:

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: 

*Print Name here:*_____*Dr. David Sinclair*_____

Date: __*19/02/2024*___

Student(s) signature(s): Niall Kelly & Adam Gray

Print Name(s) here: Niall Kelly & Adam Gray

Date: 16/02/2024

SECTION 7 – SUPPLEMENTARY DOCUMENTATION

Informed Consent Form

Research Study Title
Evaluating the START Web Application with user-based testing.
Investigators: Adam Gray, Niall Kelly
School: DCU School of Computing

The research's purpose is to allow user feedback to be implemented into the final system ensuring it is catering to the original target users. No personal data is being collected in this study.

You must first use the system for about 20-30 minutes and after answering a short anonymous survey.

Participant – please complete the following (Circle Yes or 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 have received satisfactory answers to all my questions *Yes/No*
I am aware that my interview will be audiotaped *Yes/No*

I understand I may withdraw from the study at any time or wish to not partake at all Yes/No

I understand the arrangements in place to protect my data and am aware that these arrangements are subject to legal limitations Yes/No

I understand arrangements are in in place to dispose of my data once the study period has been completed Yes/No

Signature:

I have read and understood the information in this form. My questions and concerns have been answered by the researchers, and I have a copy of this consent form. Therefore, I consent to take part in this research project

Participants Signature:

Name in Block Capitals:

Witness:

Date:

Participant Information Sheet

Introductory Statement
Evaluating the START Web Application with user-based testing.
Investigators: Adam Gray, Niall Kelly
School: DCU School of Computing

This project aims to develop an application to allow beginner programmers to be able to learn about, write and run code for our own programming language START. As such we will need to get real beginner feedback on the design of the application.

Why is this research being conducted?
The research's purpose is to allow user feedback to be implemented into the final system ensuring it is catering to the original target users. No personal data is being collected in this study.

Why have you been invited to take part?
You have been invited to participate in the study as you have been identified as a target users for our system, meaning you are from a non computer science background and have no prior experience with programming.

What will happen if you decide to take part in this research study?
Should you wish to partake in this study, you will be given an opportunity to use our new application early and give feedback on how you feel about the features of the application by completing a short questionnaire after the testing period.

How will your data be used?
Your data will be collected anonymously via Google Forms and used in conjunction with other user's data to allow the data controllers to assess the failures in the initial implementation of our application.
At the end of the study period, May 17 2024, your digital data will be destroyed by the data controller's.
The data controller's in the study are:
Niall Kelly (niall.kelly88@mail.dcu.ie)
Adam Gray (adam.gray27@mail.dcu.ie)

How will your privacy be protected (including any legal limits to confidentiality)?
Your data will be completely anonymous in this study and there will be no way to attribute your collected data to you. This will be ensured through the use of an anonymous survey as well as only the data controllers having access to the final data. *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.*

What are the benefits of taking part in this research study?
There are no direct benefits to partaking in this study, however an indirect benefit is that you may improve your programming ability.

What are the risks of taking part in this study?
It is not expected that there will be any risk to the participants arising from the involvement in this study.

Can you change your mind at any stage and withdraw from this study?
At any time you may withdraw from the study and your data will be destroyed immediately in accordance with laws associated with GDPR.

Contact details for further information:
In addition to providing the relevant researcher contact details, please include the following statement: "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