Dublin City University
RESEARCH ETHICS COMMITTEE

APPLICATION FOR APPROVAL OF A PROJECT
INVOLVING **HUMAN PARTICIPANTS**

Application No. *(office use only)*   DCUREC/2023/____

Applications must be submitted via the Research Ethics Application Portal here – no hardcopy required. All queries relating to submission should be e-mailed to the DCU Research Ethics Committee (REC) at rec@dcu.ie

Section 4 of this form addresses the possible data protection issues of the proposed research and it must be completed prior to making a formal REC application.

Student applicants must include their supervisor as an investigator on the Research Ethics Application Portal – this applies to all masters by research and PhD students. The form should be checked, approved and signed by the supervisor in advance of submission to REC. *NB – Taught Masters and Undergraduate students apply for ethical review via their local ethics review panel, not via REC.*

The application should consist of one electronic file only, with an electronic signature from the PI (and supervisor if applicable). The completed application must incorporate all supplementary documentation, especially those being given to the proposed participants. The application will go through an initial triage process and will be returned to the applicant(s) if the form is incomplete or documentation is missing. If extensive changes are required, it will be reviewed at the next REC committee meeting. The application must be proofread and spellchecked before submission to the REC.

All sections of the application form must be answered as instructed and within the word limits given.

Applications which do not adhere to all of these requirements will not be accepted for review and will be returned directly to the applicant.

Applications must be completed on the form; answers in the form of attachments will not be accepted, except where indicated. No hardcopy applications will be accepted. **Research must not commence until written approval has been received from the Research Ethics Committee.**

Note: If your research requires approval from the Biological Safety Committee (BSC) this must be in place prior to REC submission. Contact bio.safety@dcu.ie. Please attach the responses from these committees to this submission as directed below.

PROJECT TITLE	Natural Language Programming Language
PRINCIPAL INVESTIGATOR(S) *The named Principal Investigator is the person with primary responsibility for the research project. In the case of PhD/D.Ed./MSc Research projects the supervisor **must** be listed as Principal Investigator, in addition to the student.*	Dr David Sinclair Jack Farrell Conall Kavanagh
START AND END DATE	16/01/23 — 24/02/23
LEVEL OF RISK *Please indicate whether this project requires (a) notification (b) expedited **or** (c) full committee review. Justification for your choice is required under section 3.1*	Notification

1. ADMINISTRATIVE DETAILS

PROJECT TYPE: (mark Y to as many as apply)	Research Project	Y	Funded Consultancy	…
			Clinical Trial	…
	Student Research Project (please indicate level below, e.g. PhD/D.Ed./MSc Research)	Y	Other - Please Describe:	…
	PhD / Other Doctorate	Y		
	D.Ed.			
	MSc Research	…		

1.1 INVESTIGATOR CONTACT DETAILS

PRINCIPAL INVESTIGATOR(S): In the case of PhD/D.Ed./MSc Research projects the supervisor must be listed as Principal Investigator. *Doctoral researchers and Research Masters may be listed as Principal Investigators, depending on the conventions of the discipline and on the individual case. It should be made clear, in subsequent sections of this application, who is carrying out the research procedures.*

NAME	SCHOOL/UNIT	EMAIL
Dr David Sinclair	School of Computing	david.sinclair@dcu.ie

OTHER INVESTIGATORS:

NAME	SCHOOL/UNIT	EMAIL
Jack Farrell	School of Computing	jack.farrell82@mail.dcu.ie
Conall Kavanagh	School of Computing	conall.kavanagh76@mail.dcu.ie

1.2 WILL THE RESEARCH BE UNDERTAKEN ON-SITE AT DUBLIN CITY UNIVERSITY?

YES or NO
NO

If NO, state details of the off-campus location – provide details of the approval to gain access to that location in section **2.11**.

The survey will be given to participants online via a link

1.3 WILL THIS RESEARCH INVOLVE ANIMALS?

YES or NO
NO

If YES, please provide details on the outcome from BRAG and attach copies of approval(s) received etc.

1.4 HAS THIS RESEARCH PROPOSAL BEEN SUBMITTED TO ANOTHER ETHICS COMMITTEE?

YES or NO
NO

If YES, please provide details on the outcome and attach copies of approval(s) received etc.

1.4.1   HAS THIS RESEARCH PROPOSAL BEEN REFUSED ETHICAL APPROVAL FROM THIS OR ANOTHER RESEARCH ETHICS COMMITTEE PREVIOUSLY?

<mark>If YES, please provide details.</mark>

Rejected on 03/02/2023 due to incomplete sections

DECLARATION BY PRINCIPAL INVESTIGATOR(S)

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 guidelines, *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.*

If there exists any affiliation or financial interest for researcher(s) in this research or its outcomes or any other circumstances which might represent a perceived, potential or actual conflict of interest this should be declared in accordance with the University's Conflict of Interest Policy.
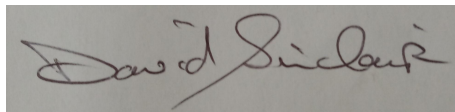
I and my co-investigators and/or supporting staff have the appropriate qualifications, experience and facilities to conduct the research set out in the attached application and to deal with any emergencies and contingencies related to the research that may arise. Supervisor(s) signature(s) is / are required as evidence that they have read and approve this submission.

Please note:

1. *Any amendments to the original approved proposal must receive prior REC approval.*

2. *As a condition of approval investigators are required to document and report immediately to the Secretary of the Research Ethics Committee any adverse events, any issues which might negatively impact on the conduct of the research and/or any complaint from a participant relating to their participation in the study.*

Electronic Signature(s):

Principal investigator(s): _____Jack Farrell_____Conall Kavanagh_____

Print Name(s) here:_____Jack Farrell_____Conall Kavanagh_____
Date: _____06/02/2023_____

I, the main supervisor of this research proposal, have read and approve this submission.

Supervisor(s) signature (where relevant):_____   _____

Print Name(s) here:_____David Sinclair_____

Date: __7/2/2023_____

2. PROJECT OUTLINE

2.1 LAY DESCRIPTION, AIMS & JUSTIFICATION, METHODOLOGY *(Approx.900 words)*

Our project aims to create a programming language that is easy for users to learn and understand.

Currently, if people want to learn how to code they have to start with python or java which have a lot of jargon and unnatural language that they have to learn alongside the problem-solving aspects of learning to code. our aim is to have a language that reads similarly to a natural language so users can understand the code by simply reading it.

In order to create this language we need to understand what it is our target demographic views as "natural language". would they prefer to use arithmetic symbols or write it out similar to a sentence, this survey that we made is what we will use in order to figure out how we should make our language so it appeals to our target audience.

2.2 **INVESTIGATORS' QUALIFICATIONS, EXPERIENCE AND SKILLS (Approx. 200 words)**

Both Jack and Conall will carry out the research by asking individuals to participate in the survey. since the survey's use is to gather information on our target demographics' opinions no special skills or qualifications are needed.

2.3 PARTICIPANT PROFILE

Participants will vary in age from 18 to 60. the main thing they will have in common is that our participants will have very little to no programming experience. Participants will consist of family and friends of the investigators.

2.4 PARTICIPANT RECRUITMENT

Participants will be approached, either in person or via an online message and asked if they would like to participate in the survey. If so a link to the plain language statement will be sent and once it has been confirmed that they have read the PLS then the link to the survey will be sent.

2.5   IS IT LIKELY THAT ANY PARTICIPANTS COULD BE CONSIDERED POTENTIALLY VULNERABLE?
Are some or all participants vulnerable in any way? (e.g. by virtue of the group they belong to, people who have undergone traumatic or adverse emotional events, people with diminished cognitive ability, power relations between researchers and participants etc.)?

YES or NO
NO

If Yes, please state and describe what this vulnerability (or vulnerabilities) is and justify why this research is being done with such participants

2.6   WILL THE IDENTITY OF THE PARTICIPANTS BE PROTECTED?

YES or NO
YES

If NO, please explain why

IF YOU ANSWERED YES TO 2.6, PLEASE ANSWER THE FOLLOWING QUESTION:

2.7   HOW WILL THE ANONYMITY OF THE PARTICIPANTS BE RESPECTED?
Please bear in mind that where the sample size is very small, it may be impossible to guarantee anonymity/confidentiality of participant identity. Participants involved in such projects need to be advised of this limitation in the Plain Language Statement/Information Sheet. If you intend to fully anonymize the data, please provide details.

The survey will be carried out via a google form where the setting to collect email addresses will be disabled. this survey does not require the participant to attach or give any information that could be used to identify themselves. all we are looking for is how many people prefer one option over another.

2.8   LEGAL LIMITATIONS TO DATA CONFIDENTIALITY
Participants need to be made aware that confidentiality of information provided cannot always be guaranteed by researchers and 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. This information should be included in your Plain Language Statement and Informed Consent Form. Depending on the research proposal and academic discipline, you may need to state additional specific limitations.

State how and where participants will be informed of these limitations.

additional limitations will be listed in the plain language statement

2.9   CHILD PARTICIPANTS (anyone under 18 years old)
*If your participants include children, you **must** confirm that you are in compliance with the research specific guidelines as detailed on the DCU Child Protection Unit website.*

Please indicate your compliance with the following guidelines:	Mark here
We confirm that we have read and agree to act in accordance with the DCU Child Protection policy and procedures	
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)	

2.10   PLEASE EXPLAIN WHEN, HOW, WHERE, AND TO WHOM RESULTS WILL BE DISSEMINATED, INCLUDING WHETHER PARTICIPANTS WILL BE PROVIDED WITH ANY INFORMATION AS TO THE FINDINGS OR OUTCOMES OF THE PROJECT*?*

> **For this survey participants will not be provided with the findings as the same participants will be used when testing the language where the changes are implemented.**

2.11   ARE OTHER APPROVALS REQUIRED TO GAIN ACCESS TO ANOTHER LOCATION, ORGANISATION, SCHOOL ETC.?

YES or NO
NO

If YES, please specify from whom and attach a copy of the approval documentation. If this is not yet available, please explain when this will be obtained.

3.   RISK AND RISK MANAGEMENT

3.1   EXPLAIN AND JUSTIFY THE STATED LEVEL OF RISK TO PARTICIPANTS

You must provide a justification for the stated level of risk and its corresponding level of review (Full Committee, Expedited, Notification), as indicated on the cover page of your application. Note that the level of risk may be influenced by the vulnerability of the research group, the methods employed and the nature of the research itself. For further information on risk levels, please refer to the Levels of Review information on the Research Support Services website.

> It is an anonymous survey

3.2   POTENTIAL RISKS TO PARTICIPANTS AND RISK MANAGEMENT PROCEDURES

Identify, as far as possible, all potential risks to participants (physical, psychological, social, legal, economic, etc.), associated with the proposed research. Will your research involve deception, investigation of participants involved in illegal activities, performance of any acts which might diminish the self-esteem of participants or cause them to experience embarrassment, regret or depression, administration of any substance or agent, collection of body tissues or fluid samples, use of non-treatment of placebo control conditions, collection and/or testing of DNA samples, administration of ionising radiation? Please explain what risk management procedures will be put in place to minimise these risks.

> there is no risk in participating in this survey

3.3   ARE THERE LIKELY TO BE ANY BENEFITS (DIRECT OR INDIRECT) TO PARTICIPANTS FROM THIS RESEARCH?

YES or NO
NO

If YES, provide details

3.4   ARE THERE ANY SPECIFIC RISKS TO RESEARCHERS?

Examples include use of dangerous materials, asking certain types of questions, research being undertaken in certain locations, researchers working alone in isolated areas, etc.

YES or NO
NO

If YES, please describe and explain what risk management procedures will be put in place to minimise these risks

3.5 DEALING WITH ADVERSE / UNEXPECTED OUTCOMES
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 project.

The survey is to gather information, if the information received is not what we initially thought and planned for we can easily make those changes to suit the newfound information

3.6 SUPPORT FOR PARTICIPANTS
Depending on risks to participants you may need to consider having additional support for participants during/after the study. Consider whether your project would require additional support, e.g., external counselling available to participants. Please advise what support will be available.

No additional support will be needed

3.7 HOW WILL THE CONDUCT OF THE PROJECT BE MONITORED?
Please explain how the principal investigator will monitor the conduct of the project (especially where several people are involved in recruiting or interviewing, administering procedures, etc.) to ensure that it conforms to the procedures set out in this application. In the case of student projects please give details of how the supervisor(s) will monitor the conduct of the project.

we meet with our supervisor every week to give updates on the current state of the project and any questions that we have, are asked.

3.8 DO YOU PROPOSE TO OFFER PAYMENTS OR INCENTIVES TO PARTICIPANTS?

YES or NO
NO

If YES, please provide further details

3.9 DO ANY OF THE RESEARCHERS ON THIS PROJECT HAVE A PERSONAL, PHILOSOPHICAL, FINANCIAL, POLITICAL, IDEOLOGICAL, OR COMMERCIAL INTEREST IN ITS OUTCOME THAT MIGHT INFLUENCE THE INTEGRITY OF THE RESEARCH, OR BIAS THE CONDUCT OR REPORTING OF THE RESEARCH, OR UNDULY DELAY OR OTHERWISE AFFECT THEIR PUBLICATION?

YES or NO
NO

If YES, please specify how this conflict of interest will be addressed

4. PERSONAL DATA

Definition of Personal Data

Personal data is any information about a living person, where that person is either identified or could be identified, from the data or when it is combined with other data. Typical examples of personal data in a research context are:

a) paper-based records e.g., consent forms, research participant files, patient records, interview notes etc.

b) electronic records e.g., database of participant details, online survey returns, photos, audio & visual recordings, interview recordings, IP addresses, diagnostic / clinical imaging etc.

c) other e.g., genetic data, biometric data, clinical or medical samples etc.

Note: If personal data is to be obtained and / or processed during the proposed research then there are certain legal obligations and principles to be followed. These are set out in the 2016 General Data Protection Regulation (GDPR) and associated Irish Law.

Note: Any data that is <u>fully and completely anonymous</u> is not considered to be 'personal data.' However, any data that is merely pseudo-anonymised is deemed to be 'personal data.' and the standard legal requirements will apply.

Further information on data protection issues is available from the University's [Data Protection Unit (DPU)](#). You should also consider consulting with your Unit's [GDPR Advocate](#) for help and advice on filling out this section of the form.

(A) Your knowledge of Data Protection			
1	Have you taken and completed the online data protection training course that is available to all staff and students? *DCU Staff can access the training via [HR's Essential eLearning webpage](#). If you have not already done so you will need to enrol first, and then unlock the Data Protection course to access it via the DCU Loop platform.* *DCU Students should navigate directly to [Loop](#) and select the student specific version of the course, '2021/2022 Data Protection – Students'. This can be found via the search function in [Loop](#).*	**YES or NO**	**YES**
2	A guide to the key data protection points to be aware of, and to apply where relevant, during a research project, is available on the [DPU's webpage](#). Please confirm, with either a 'Yes' or 'No,' that you have read and understand the guide and will apply it, where relevant, to the research being proposed.	**YES or NO**	**YES**

If you answered 'No' to the question 1 above, then the DPU strongly recommends that all applicants complete the course on Loop before completing section # 4 of the REC Application Form.

If you experience difficulties in accessing the Loop course at the link above, please log a service request via the [ISS Helpdesk](#), and your query will be directed to the appropriate support.

If you have answered 'No' to question 2 above, please contact the DPU to discuss.

(B) Initial Assessment of whether any of the data to be used in the proposed research is '<u>Personal Data</u>' (see definition above)			
1	Will the proposed research include living human subjects? *Rationale – personal data applies only to living individuals.*	**YES or NO**	**YES**
2	Will the proposed research use any data that can be linked to an identified, or an identifiable, person? *Rationale – to be personal data it must be possible to associate it with an identified, or an identifiable, living person.*	**YES or NO**	**NO**

3	Will the proposed research use any data identifiers that can be linked to a living person? Examples are a participant's name, code or ID number, their address, their IP address etc. *Rationale: fully anonymised data is not deemed to be 'personal data' but data that has been deemed to be merely pseudo-anonymised is deemed to be 'personal data.'*	YES or NO	NO

If you answered 'Yes' to any of the questions 1 to 3 in sub-section (B), then continue to sub-section (C) and answer questions 1-8. If you answered 'No' to all the questions 1 to 3 in sub-section (B), then proceed directly to section # 5 of this Application Form.

(C) Assessing the degree of risk inherent in the personal data			
1	Will the proposed research involve the use of <u>personal data</u> on individuals that reveals any of the following attributes or characteristics about them? (State 'Yes' or 'No' as appropriate to all the following)		
	Gender Identity	YES or NO	NO
	Racial or Ethnic Origin	YES or NO	NO
	Political Opinions	YES or NO	NO
	Religious or Philosophical Beliefs	YES or NO	NO
	Trade Union Membership	YES or NO	NO
	Genetic Data	YES or NO	NO
	Biometric Data	YES or NO	NO
	Data Concerning Health	YES or NO	NO
	Data concerning a Person's Sex Life or Sexual Orientation	YES or NO	NO
2	Will the proposed research involve the use of <u>personal data</u> relating to children or vulnerable individuals? *A child, for data protection purposes, is defined as an individual below 18 years of age. Where the processing relates to 'electronic marketing' the age limit is reduced to 16 years. A vulnerable individual may be anyone who is unable to consent to, or to oppose, the processing of his or her data for any reason, including disability.*	YES or NO	NO
3	Will the proposed research involve the use of data relating to an individual's criminal convictions and / or offences?	YES or NO	NO
4	Will the proposed research involve the large-scale processing of <u>personal data</u>? *This may include: a wide range or large volume of personal data; processing which takes place over a large geographical area; processing where a large number of people are affected (e.g., over 100 individuals); or where the processing is extensive, or it has potential long-lasting effects on individuals.*	YES or NO	NO
5	Will the proposed research involve any form of <u>automated processing</u> of personal data?	YES or NO	NO

	To analyse or predict aspects concerning that person's performance at work, economic situation, health, personal preferences, interests, reliability, behaviour, location, or movements.		
6	Will the proposed research involve the sharing or transferring of any personal data to a third party outside of DCU? *For example, other research partners, providers of translation or transcription services, etc.* *For clarity, this question is not intended to refer to any standard software services already provided by DCU, for example the university's email system or its cloud-based storage provider (Google Drive).*	**YES or NO**	**NO**
7	Will the proposed research require the sharing or processing of personal data outside the EU or the EEA? (e.g., the US, the UK, Canada, Australia, China etc.) *The EEA refers to the 'European Economic Area' (i.e., the EU plus Norway, Liechtenstein, and Iceland).*	**YES or NO**	**NO**
8	Will the proposed research involve the matching or combining of separate datasets of information on individuals in a way that would exceed their reasonable expectations of privacy? *This is especially important where two or more previously anonymous datasets are combined in such a way to allow for the identification of individuals. An example would be combining mobile phone location data along with any other dataset to identify individuals.*	**YES or NO**	**NO**

Important Point: Next Step

If you answered 'Yes' to one or more of the questions 1 to 8 in sub-section (C) **you must contact the Data Protection Unit (DPU) prior to submitting this application form to the REC**. The DPU will assess whether there are any further data protection issues to be addressed or additional procedures to be followed.

If you answered 'No' to all the questions 1 to 8 in sub-section (C) then there is no requirement to contact the DPU and you can proceed to section 5.

5. DATA / SAMPLE STORAGE, SECURITY AND DISPOSAL

For the purpose of this section the term 'Data' includes personal data that is in a raw or a processed state (e.g. interview audiotape, transcript or analysis, etc.). The term 'Samples' include body fluids and/or tissue samples.

5.1 HOW AND WHERE WILL THE DATA / SAMPLES BE STORED?

DCU recommends that any data stored electronically offsite should utilise the DCU Google Drive. Alternative offsite storage will need to be justified and must meet data protection and GDPR compliance requirements.

DCU Google Drive

5.2 WHO WILL HAVE ACCESS TO DATA / SAMPLES?

If people other than the main researchers have access, please name who they are and explain for what purpose.

Jack Farrell **Conall Kavanagh**

5.3 HOW LONG IS THE DATA TO BE HELD OR RETAINED?

*Note that, with very few exceptions, **Personal Data** may not be retained indefinitely. It is up to the research team to establish an upper retention limit for each category of Personal Data used within the project and to ensure it is applied at the expiry of that limit.*

Until the information gathered from the survey has been implemented into the design of the language

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5.4   WILL THE PERSONAL DATA BE USED AT A LATER DATE FOR THE PURPOSE OF PUBLICATION OF THE RESULTS OF THE RESEARCH?

YES or NO
NO

Where it is intended that the personal data used in the project will be used at a later date for the purposes of publication please explain how consent to do so will be obtained.

5.5   IF THE DATA/SAMPLES ARE TO BE DISPOSED OF AT THE END OF THE PROJECT PLEASE EXPLAIN HOW, WHEN AND BY WHOM THIS WILL BE DONE?

*Note that simply deleting files is not sufficiently secure. The additional steps to be taken to maintain data security should be given. **Personal data** must be disposed of in a safe and secure manner at the end of its retention period. If the data is stored in (a) a paper-based format, then shredding or disposal via a secure bin is recommended; or (b) in an electronic-based format, then deletion of the record or the full anonymization of the data is recommended. If data/samples are **not** being disposed of, please justify that intention.*

How will the data/samples be disposed? *Please describe the means by which the personal data will be deleted or destroyed. This includes personal data held in hard copy and digital/taped formats.*	The data will be fully anonymous throughout its use and once the results of the survey have been used then the responses will be deleted from google drive and any local copies will be deleted also
When will the data/samples be disposed? *Please indicate the intended retention period of the personal data, and reasons for this retention period. Please note that retention periods must be GDPR compliant and must be consistent with the DCU Retention Policy.*	The data will be disposed of when the information gained from it has been used and it no longer has any benefit, the submission date of the project would be the final day the data can still exist but it is planned to have it be disposed of sooner
By whom will the data/samples be disposed? *Please indicate the designated team member(s) with responsibility for deletion and/or destruction of the research project's personal data. For students, the supervisor should take responsibility for this if there is no guarantee the student will have access to the electronic data at the disposal time*	The data will be disposed of by Jack by deleting it from google drive and ensuring no local copies still exist.

6.   FUNDING OF THE RESEARCH

6.1   HOW IS THIS WORK BEING FUNDED?

6.2   PROJECT GRANT NUMBER *(If relevant and/or known – otherwise mark as N/A)*

N/A

6.3   DOES THE PROJECT REQUIRE APPROVAL BEFORE CONSIDERATION FOR FUNDING BY A GRANTING BODY?

YES or NO

...

6.4   HOW WILL PARTICIPANTS BE INFORMED OF THE SOURCE OF THE FUNDING? *(E.g. included in the Plain Language Statement)*

6.5   DO THE FUNDERS OF THIS PROJECT HAVE A PERSONAL, FINANCIAL, POLITICAL, IDEOLOGICAL, OR COMMERCIAL INTEREST IN ITS OUTCOME THAT MIGHT COMPROMISE THE INDEPENDENCE AND INTEGRITY OF THE RESEARCH, OR BIAS THE CONDUCT OR REPORTING OF THE RESEARCH, OR UNDULY DELAY OR OTHERWISE AFFECT THEIR PUBLICATION?

YES or NO

...

If YES, please specify how this conflict of interest will be addressed

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7.   PLAIN LANGUAGE STATEMENT *(Attach to this document. Approx. 400 words)*

A Plain Language Statement (PLS) should be used in all cases. This is written information in plain language that you will be providing to participants, outlining the nature of their involvement in the project and inviting their participation. The PLS should specifically describe what will be expected of participants, the risks and inconveniences for them, and other information relevant to their involvement. Please note that the language used must reflect the participant age group and corresponding comprehension level– if your participants have different comprehension levels (e.g. both adults and children) then separate forms should be prepared for each group. The PLS can be embedded in an email to which an online survey is attached, or handed/sent to individuals in advance of their consent being sought. See the link to sample templates on the REC Forms - Applications, Templates and Amendments section *of the Research Ethics website.*

PLEASE CONFIRM WHETHER THE FOLLOWING ISSUES HAVE BEEN ADDRESSED IN YOUR PLAIN LANGUAGE STATEMENT/ INFORMATION SHEET FOR PARTICIPANTS:

	YES or NO
Introductory Statement (PI and researcher names, school, title of the research)	YES
What is this research about?	YES
Why is this research being conducted?	YES
What will the participant be expected to do/have to do if they decide to participate in the research study?	YES
How will their privacy be protected?	YES
How will the data be used and subsequently disposed of?	YES
What are the legal limitations to data confidentiality?	YES
Are there any benefits of taking part in the research study?	NO
Are there any risks of taking part in the research study?	NO
Confirmation that participants can change their mind at any stage and withdraw from the study	YES
How will participants find out what happens with the project?	NO
Contact details for further information (including REC contact details)	YES
Details relating to GDPR Compliance where Personal Data is being sought	YES

If any of these issues are marked NO, please justify their exclusion:

Are there any benefits of taking part in the research study? -> it is an opinion survey so no benefits would be gained from participating in the survey.

Are there any risks of taking part in the research study? -> it is an opinion survey so there is no risk in participating

How will participants find out what happens with the project? -> this survey is used to get an idea of our target demographic's view on what is deemed more natural to them. as such participants won't be informed of the results of the survey.

8. INFORMED CONSENT FORM *(Attach to this document. Approx. 300 words)*

In most cases where interviews or focus groups are taking place, an Informed Consent Form is required. This is an important document requiring participants to indicate their consent to participate in the study and give their signature. In cases where an anonymous questionnaire is being used, it is not enough to include a tick box in the questionnaire. Participants should indicate their consent to each aspect of the research in a staged manner by checking mandatory checkboxes.
See link to sample templates on the REC Forms - Applications, Templates and Amendments section of the Research Ethics website.

NB – IF AN INFORMED CONSENT FORM IS NOT BEING USED, THE REASON FOR THIS MUST BE JUSTIFIED HERE.

9. ASSENT FORM & PLAIN LANGUAGE STATEMENT FOR CHILDREN *(Attach to this document.)*

A child specific Plain Language Statement (PLS) should be used in research where children will be involved. The PLS must be written in a way that is understandable for children within your targeted age group. It also must state, in plain language, the nature of their involvement in the project and inviting their participation. The PLS should specifically describe what will be expected of participants, the risks and inconveniences for them, and other information relevant to their involvement. In addition, child participants should also be provided with an Assent Form. Parents/guardians will be provided with the Informed Consent Form, but each child should provide assent before taking part in the research. The Assent Form needs to be understandable to the age-group you are targeting. See link to sample templates on the REC Forms - Applications, Templates and Amendments section of the Research Ethics website.

NB – IF AN ASSENT FORM IS NOT BEING USED, THE REASON FOR THIS MUST BE JUSTIFIED HERE.

Children, people under the age of 18, will not be asked to complete the survey.

10. SUBMISSION CHECKLIST *(Attach to this document)*

Please confirm that all supplementary information is included in your application (in electronic copy). If questionnaire or interview questions are submitted in draft form, please indicate this by putting (draft) after YES. A copy of the final documentation must be submitted for final approval when available.

My application has been collated as one electronic file which includes the following documentation:	INCLUDED (mark as YES)	NOT APPLICABLE (mark as N/A)
Bibliography		N/A
Recruitment advertisement	YES	
Plain language statement/Information Statement	YES	
Informed Consent form	YES	
Informed Assent form		N/A
Evidence of external approvals related to the research		N/A
Questionnaire / Survey	YES	
Interview / Focus Group Questions		N/A
Debriefing material		N/A
Other (e.g. BSC approval review letter, Data Protection Impact Assessment)		N/A

Plain Language Statement
Natural language programming language syntax survey

Contact Details
Jack Farrell (jack.farrell82@mail.dcu.ie)
Conall Kavanagh (conall.kavanagh76@mail.dcu.ie)
DCU School of Computing

Introduction
We are gathering information for a natural language programming language. We are asking users to state their preferences for certain commands, and whether or not the use of symbols is something that they would find beneficial or confusing. The data gathered will then be used to influence the design of the language

This survey is being conducted by Jack Farrell (jack.farrell82@mail.dcu.ie) and Conall Kavanagh (conall.kavanagh76@mail.dcu.ie), with supervision from Dr David Sinclair (david.sinclair@dcu.ie).

Privacy Notice
The data collected in this survey is completely anonymous and is simply asking for the participant's opinion on certain situations. The data collected will be used to determine how our language will look and how users will interact with that language in order to make functioning code.

The data will be controlled by Jack Farrell and Conall Kavanagh at all times and no other person will have access to view the data. The data is anonymous and will not have any identifiable factors within.

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.

The identity of the DCU Data Protection Officer –
Mr. Martin Ward (data.protection@dcu.ie Ph.: 7005118 / 7008257)

Statement as to whether or not the research data is to be destroyed after a minimum period
The data collected will be held until the language has been developed using the information and at which point it will be discarded, the last possible date of the data not being disposed of will be the 24th of February 2023 at which point, if not done so already, it will be discarded via deletion off the google drive and any locally stored versions.

Details of what participant involvement in the Research Study will require
Participants in the study will need to fill out an anonymous survey asking them what their preferences are for arithmetic symbols or words in certain situations.

A statement that involvement in the Research Study is voluntary
Participants can freely withdraw from the study at any time and no further data will be collected from them, if they wish they may also request that any data previously gathered not be used at which point it will be disposed of and will not be included in the project

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

Informed Consent Form

I have read the plain language statement (or have had it read to me) *

○ Yes

○ No

I have received satisfactory answers to all my questions *

○ Yes

○ No

I understand the information provided *

○ Yes

○ No

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

○ Yes

○ No

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

○ Yes

○ No

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

○ Yes

○ No

I understand the information provided in relation to data protection *

○ 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 the study *

○ Yes

○ No

Survey

Which option is more natural to you. (Comparing)

○ if 3 > 4

○ if 3 greater than 4

Which option is more natural to you. (Assigning Variables)

○ number x is 5

○ number x = 5

○ number 5 is x

○ number 5 = x

Which option is more natural to you. (Comparing)

○ 3 != 4

○ 3 not equal 4

○ 3 not equal to 4

Which option is more natural to you. (Lists)

○ number list is [1, 2, 3, 4];

○ list [1, 2, 3, 4] is number

○ list of numbers is [1, 2, 3, 4, 5]

Which option is more natural to you. (Functions)

○ on FunctionName()

○ on FunctionName() do

○ on FunctionName do ()

Which option is more natural to you. (Comments)

○ # This is a comment

○ // This is a comment

○ /* This is a comment */

○ Other...

How would you like numbers to be displayed

○ 5

○ 5.0