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

Unifeed

1.2 Applicant Details

Name	Student or Supervisor	E-mail
Hephzibah Bode-Favours	Student	hephzibah.bodefavours2@mail.dcu.ie
Jordan Tallon	Student	jordan.tallon3@mail.dcu.ie
John Mckenna	Supervisor	john.mckenna@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
09/02/2024	20/02/2024	23/02/2024

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).

DCU

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

None

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 research aims to develop an RSS feed app that collects articles and RSS feeds from various sources and utilizes artificial intelligence (AI) to analyze their political bias. This involves training the AI to recognize patterns in language and content that indicate political leanings or biases, such as the framing of issues, choice of language, and sources cited. The theoretical background of this study lies in the fields of natural language processing (NLP) and machine learning, where algorithms are trained to understand and interpret human language.

This research is crucial in the context of today's information landscape, where individuals are increasingly exposed to diverse perspectives and opinions online. However, the proliferation of biased or misleading information poses ethical challenges, as users may unknowingly consume content that reinforces their existing beliefs or distorts their understanding of important issues. By developing a tool that can detect and identify political bias in news articles, this research project can empower users to make more informed decisions about the information they consume, thereby promoting media literacy and critical thinking.

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

The project's goals and objectives are to:

Create an artificial intelligence (AI) algorithm that can recognize political bias in news stories and RSS feeds. By utilizing theories from machine learning and natural language processing, teach the algorithm to identify linguistic patterns that indicate political leaning.

Give users clear information into the political slant of articles and RSS feeds so they can interact with news material more ethically and critically.
By providing consumers with an easy-to-use tool to discern the political slant of news sources, you can improve media literacy and encourage people to make well-informed decisions.
Reduce the impact of skewed information and stop the dissemination of false information in the digital era.

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	The process will be two-fold. Firstly, the user testing partakers will be presented with a pre-testing survey. This survey will indicate their willingness to take part in the survey. After user testing, the users will be presented with a feedback form. This form will include questions such as: "How easy was it to navigate the website" to gauge the experience of the user into meaningful feedback for development decisions.
☐ 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)

The participants will be comprised of 3-10 individuals studying Computer Science and will have high technical proficiency.

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 are sourcing our participants from DCU's school of computing, these are students that we personally know to be highly competent. During the pre-testing survey we will gather more detailed characteristics that will allow for better insights into the participants. This will help to inform any potential exclusions or skew in the participant set.

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:

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 participants will not be provided with any information as to the findings or outcomes of the 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

Potential issues during research:
- Incorrect AI political bias classification
- Handling user data (e.g. username, password, email)
- Collecting user analytics (preferences, read history)
- Scraping the content of news websites

To address these concerns, we will be highly transparent with both how the A.I is developed and operates, and how user data is collected and use. To this end we will employ the following:

1. All of the Machine Learning AI will be public documented. This includes the Dataset used, the modifications to the Dataset, the potential bias in the model, and the training parameters for the model.
2. Each time a bias assessment is made towards an article, the user will be provided a message indicating that the assessment was done by an artificial intelligence and may be inaccurate. In addition to this, the confidence rate of the bias classification will be made public and provided to the user.
3. Following the bias assessment, the user may provide feedback on the results the machine learning provided. This will allow monitoring and adjustments to the AI depending on the perceived in accuracy from users.
4. All data stored will be highly encrypted with the latest encryption technologies. Any data that will be collected from the user, such as their article reading history or their preferences, will be collected on an opt in basis. The collection will default to opted out, and if the user chooses to opt out after opting in, all data will be destroyed. All collected data will be provided to the user in their analytics dashboard
5. Lastly, when scraping from news websites for article content to be used in political bias identification, Unifeed will follow European Commission HICP Web Scraping Guidelines. This includes rules such as: avoiding repetitive requests to the same host, respecting the robots.txt file of websites, and not storing any scraped content on the platform.

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

Attendees will be able to interact with a technology that offers information on the political bias present in news stories and RSS feeds. This can improve their capacity for information analysis and help them choose the content they consume with greater knowledge.

Participants can feel more capable of navigating the media landscape with greater assurance and discernment if they have a better awareness of the political slants of news sources. They could feel better able to spot inaccurate or biased information and look for different viewpoints.

By supplying data for the AI algorithm's training, participants help to expand our understanding of natural language processing and machine learning. Their involvement enhances the tool's efficacy and accuracy, which is good for the users down the road.

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:

To detect any unanticipated results or negative impacts on participants, a regular monitoring of the research process will be carried out. We will continue to be on the lookout for any indications of participant discomfort, upset, or adverse reactions.

The ethical review board shall be notified of any unanticipated results or negative impacts. In order to resolve the problems and guarantee participant safety and wellbeing, the board will evaluate the circumstances and offer advice on the best course of action.

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)

The Supervisor will oversee the research activities on a frequent basis to make sure they comply with ethical principles and approved procedures. They will keep an eye on the project's development and handle any problems or queries that come up.

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 <u>not</u> 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

Jordan Tallon Hephzibah Victor Bode-Favours

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 is important for informing development and design decisions. The data will be retained until full completion of the project.

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 <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	The data will no longer be required for the development or grading of the project.
Name the DCU researcher responsible for destruction of data	
Confirm when the data will be destroyed (specify date)	Until the grading of the project is complete (07/06/2024)
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.

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

We will be asking participants if they are open to participating in this research. We will use a form such as the one illustrated below.

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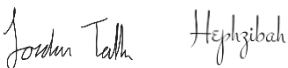
I and my co-investigators and/or supporting staff have the appropriate qualifications, experience and facilities to conduct the research set out in the attached application and to deal with any emergencies and contingencies related to the research that may arise. Research will not commence until required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

Electronic Signature(s):

Supervisor:_____

Print Name here:_____John McKenna_____

Date: 12/02/2024

Student(s) signature(s):

Print Name(s) here: Jordan Tallon, Hephzibah Victor Bode-Favours

Date:06/02/2024

SECTION 7 – SUPPLEMENTARY DOCUMENTATION

Accountable Organization: Dublin City University (DCU) is the accountable organization overseeing this research project. The study is conducted within the guidelines and ethical standards set by DCU to ensure integrity and participant
Protection.

Data Protection Officer (DPO) and Contact Details: For any concerns or inquiries regarding data protection and privacy, participants can contact DCU's Data Protection Officer. The DPO ensures compliance with GDPR and oversees data protection strategies for research activities.
Contact details: Mr. Martin Ward
E: martin.ward@dcu.ie
Phone: 01 700 7476.

Data Protection and Privacy Statement: "This research adheres to the General Data Protection Regulation (GDPR). Personal information collected during the study will be processed in accordance with GDPR, ensuring confidentiality and security. Data will be anonymized and securely stored, accessible only to the research team for analysis purposes."

What is this research about?
This study aims to evaluate the usability and effectiveness of a newly developed political bias identifying website.

Why is this research being conducted?
This research aims to test the websites effectiveness, gather user feedback, and identify areas for improvement to ensure it meets user needs and expectations.

Why have you been invited to take part?
You have been chosen for your perspective as a competent individual

What will happen if you decide to take part in this research study?
Participation involves interacting with the website. You will be asked to test some very basic functionalities of this website such signing up and scraping articles and RSS feeds. The time it takes for you to complete these tasks will be noted. You will also be providing feedback via questionnaire.

How will your data be used?
Feedback and data collected will be used to assess the websites performance and will allow us to identify areas on which to improve.

How will your privacy be protected?
Personal information and questionnaires will be anonymized and securely stores, they will only be accessible by the research team.

What are the benefits or taking part in this research study?
Participants will be able to interact with a technology that offers information on the political bias present in news stories and RSS feeds. This can improve your capacity for information analysis and help them choose the content they consume with greater knowledge.

What are the risks of taking part in this research study?
There are minimal risks.

Can you change your mind at any stage and withdraw from the study?
Yes, participation is entirely voluntary, and you can withdraw at any time without penalty.

How will you find out what happens with this project?

A summary of the outcomes will be made available to participants upon completion of the study. Contact details for further information.

Researcher's Contact: jordan.tallon3@mail.dcu.ie, hephzibah.bodefavours2@mail.dcu.ie
Supervisor's Contact: john.mckenna@dcu.ie
Research Study Title: "Identifying Political Bias".
Researcher Details: Jordan Tallon, jordan.tallon3@mail.dcu.ie, Hephzibah Bode-Favours, hephzibah.bodefavours2@mail.dcu.ie

• I confirm that I have read and understood the Participant Information Sheet for this study.
• I agree to take part in this research project and understand the purposes and procedures.
• I consent to the collection and use of my data as outlined in the Participant Information Sheet
• I understand how my privacy will be protected and the limits to confidentiality.
• I acknowledge that I can withdraw from the study at any stage without any penalty.

Participant:
Date: _____
Signature: _____
Researcher:
Date: _____
Signature: _____

1. General Experience:
- How would you rate your overall experience with the website? (Poor, Fair, Good, Very Good, Excellent)
- What was your first impression when you visited the website?

2. Ease of Use:
- How easy was it to navigate the website? (Very Difficult, Difficult, Neutral, Easy, Very Easy)
- Were you able to find what you were looking for without any difficulties?

3. Sign Up:
- How satisfied are you with functionality of the sign up system? (Very Unsatisfied, Unsatisfied, Neutral, Satisfied, Very Satisfied)
- Did you encounter any issues signing up?

4. Login:
- How efficient did you find the login system? (Very Inefficient, Inefficient, Neutral, Efficient, Very Efficient)
- How satisfied are you with functionality of the login system?

5. Website Design and Aesthetics:
- What are your thoughts on the visual appeal and design of the website?
- Is there anything in the design or layout that you would change?

6. Functionality and Features:
- Were all features of the website functioning properly? (Yes, No)
- If no, please specify which features did not work as expected.
- If yes, please specify if they worked fast enough

7. User Feedback:
- What did you like most about the website?
- What did you like least about the website?

8. Suggestions for Improvement:
- Do you have any suggestions or features you would like to see added to the website?