

Dublin City University RESEARCH ETHICS COMMITTEE

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

Application No. (office use only)

DCUREC/2017/

<u>Please read the following information carefully before completing your application. Failure to adhere to these guidelines will make your submission ineligible for review.</u>

- Applications must be e-mailed to the DCU Research Ethics Committee at <u>rec@dcu.ie</u> -no hardcopy required.
- > Student applicants must cc their supervisor on that e-mail this applies to all masters and postgraduate students. The form should be checked, approved and signed by the supervisor in advance of submission to REC.
- The application should consist of one electronic file only, with an electronic signature from the PI. The completed application must incorporate all supplementary documentation, especially that being given to the proposed participants. It 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 <u>must not</u> commence until written approval has been received from the Research Ethics Committee.

Note: If your research requires approval from the Biosafety Committee (BSC), or review by the School of Nursing and Human Sciences Ethics Advisory Committee (SNHSEAC), this must be in place prior to REC submission. Please attach the responses from these committees to this submission as directed below.

PROJECT TITLE	College Carpool
PRINCIPAL INVESTIGATOR(S) The named Principal Investigator is the person with primary responsibility for the research project. In the case of Taught Masters projects the supervisor is the Principal Investigator. START AND END DATE	Marija Bezbradica Start: 17/9/16 End: 22/5/17
LEVEL OF RISK Please indicate whether this project requires (a) expedited or (b) full committee review. Justification for your choice is required under section 3.1	Expedited

Please confirm that <u>all</u> 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	INCLUDED	NOT APPLICABLE
file which includes the following documentation:	(mark as YES)	(mark as N/A)
Bibliography		N/A
Recruitment advertisement		N/A
Plain language statement/Information Statement	YES	
Informed Consent form	YES	
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, SNHSEAC review letter)		N/A

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

1. ADMINISTRATIVE DETAILS

PROJECT TYPE: (mark Y to as many as apply)	Research Project		Funded Consultancy Clinical Trial	
	Student Research Project (please indicate level, e.g. PhD/MSc Research/MSc Taught) PhD / Other Doctorate MSc Research		School of computing 4 th year project	Y
	MSc Taught			

1.1 INVESTIGATOR CONTACT DETAILS

PRINCIPAL INVESTIGATOR(S): Doctoral researchers and Research Masters or their supervisors 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
Marija Bezbradica	School of computing	marija.bezbradica@dcu.je
		manja.bezbradica@dcd.ie

OTHER INVESTIGATORS: (including Taught Masters students)

NAME	SCHOOL/UNIT	EMAIL

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 2.7.)

Any Street Area Where Driving is Applicable

IS THIS PROTOCOL BEING SUBMITTED TO ANOTHER ETHICS COMMITTEE, OR HAS PREVIOUSLY SUBMITTED TO AN ETHICS COMMITTEE? YES or NO NO (If YES, please provide details and attach copies of approval(s) received etc.)	IT BEEN
The information contained herein is, to the best of my knowledge and belief, accurate. I have an inversity's current research ethics guidelines, and accept responsibility for the conduct of the process of the interest, and accept responsibility for the conduct of the process of the interest, and accordance with the form guidelines, the REC and antique of the interest, and accordance with the form guidelines, the REC and antique of the interest, and accordance with the form guidelines, the REC and accordance with the form guidelines, and accordance with the form guidelines, and accordance with the form guidelines, and accordance with the form guidelines and guidelines a	edures se guidelines Conflict o University
there exists any affiliation or financial interest for researcher(s) in this research or its outcomes or ircumstances which might represent a perceived, potential or actual conflict of interest this seclared in accordance with Dublin City University policy on Conflicts of Interest.	
and my co-investigators or supporting staff have the appropriate qualifications, experience and to onduct the research set out in the attached application and to deal with any emergencies and con elated to the research that may arise.	
lectronic Signature(s):	
rincipal investigator(s):	

Last updated April 2017 Page 3

Print Name(s) here:_____

Date: _____

2. PROJECT OUTLINE

2.1 LAY DESCRIPTION (Approx. 300 words)

Please outline, in terms that any non-expert would understand, what your research project is about, including what participants will be required to do. Please explain any technical terms or discipline-specific phrases.

Carpooling App. Users sign up and can participate in a crowd sourced carpooling system where they can make friends/chat and organise rides together.

2.2 AIMS OF AND JUSTIFICATION FOR THE RESEARCH (Approx. 400 words)

State the aims and significance of the project. Where relevant, state the specific hypothesis to be tested. Please provide a brief description of background research, a justification as to why this research project should proceed in that context and an explanation of any expected benefits to the community. NB – all references cited should be listed in an attached bibliography.

Undertaken for final year project – Computer Applications

Doing research to gather information, test the suitability of the app layout on users and test usability/functionality.

2.3 DESCRIBE THE METHODOLOGY BEING USED TO ACHIEVE YOUR STATED AIMS

Provide an outline of the proposed method and state who is doing which task – include details of data collection techniques, the tasks participants will be asked to do, the estimated time commitment involved, and how data will be analysed. If the project includes any procedure which is beyond already established and accepted techniques please include a description of it. There should be enough detail provided to facilitate ethical review, but applicants are encouraged to keep it as succinct as possible.

Users sign up and data is stored in a secure database form that point on. Location is used for GPS satellite navigation and ride sharing. User can optionally use the inbuilt satellite navigation system and display their location to others. People can then accept rides and message them. I will then test if the messaging/friend system is working and query tester on usability of the sat nav.

2.4 PARTICIPANT PROFILE

Provide the number, age range and source of participants. Please provide a justification of your proposed sample size. Please provide a justification for selecting a specific gender, age, or any other group if this is done in your project.

Number: 5-10 Age: 18+

Source: Friends and Family

2.4(a) PARTICIPANT VULNERABILITY

Are some or all of 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.)? If they are, state what this vulnerability (or vulnerabilities) is and justify why this research is being done with such participants.

N/A

2.4(b) 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 in "Keeping Children Safe - Policies and Procedures supporting Child Protection at DCU" - available at: https://www4.dcu.ie/sites/default/files/policy/157%20-%20child protection handbook rev1%282%29%281%29.pdf

Please indicate your compliance with the following guidelines:		
I	We confirm that we have read and agree to act in accordance with the DCU Child	

Research and Innovation Support				
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)				
EXPLAIN HOW PARTICIPANTS ARE TO BE RECRUITED Please provide specific details as to how you will be recruiting participants. How will people be informed that you are doing this research? How will they be approached and asked if they are willing to participate? If you are mailing or phoning people, please explain how you have obtained their names and contact details. If a recruitment advertisement is to be used, please ensure you attach a copy to this application.				
I will recruit commuters to college and people who are able to drive and own a car.				
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? The results will be kept private and only viewed by me.				
ARE OTHER APPROVALS REQUIRED TO GAIN ACCESS TO ANOTHER LOCATION, ORGANISATION 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.)				
HAS A SIMILAR PROPOSAL BEEN PREVIOUSLY APPROVED BY THE DCU REC? YES or NO NO				
(If YES, please state both the REC Application Number and Project Title)				

2.5

2.6

2.7

2.8

3. RISK AND RISK MANAGEMENT

3.1 JUSTIFICATION OF STATED LEVEL OF RISK TO RESEARCH PARTICIPANTS

You must provide a justification for the stated level of risk, 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 Types of Submission information on the website: https://www4.dcu.ie/researchsupport/research_ethics/guidelines/types.shtml

Very little risk. It is a hands-free system while driving and since I know all of the people involved it will be a very controlled group.

3.2 DOES THE RESEARCH INVOLVE:

		YES or NO
•	use of a questionnaire? (attach copy)?	YES
•	interviews (attach interview questions)?	NO
•	observation of participants without their knowledge?	NO
•	participant observation (provide details in section 2)?	NO
•	audio- or video-taping interviewees or events?	NO
•	access to personal and/or confidential data (including student, patient or client data) without the participant's specific consent?	NO
•	administration of any stimuli, tasks, investigations or procedures which may be experienced by participants as physically or mentally painful, stressful or unpleasant during or after the research process?	NO
•	performance of any acts which might diminish the self-esteem of participants or cause them to experience embarrassment, regret or depression?	NO
•	investigation of participants involved in illegal activities?	NO
•	procedures that involve deception of participants?	NO
•	administration of any substance or agent?	NO
•	use of non-treatment of placebo control conditions?	NO
•	collection of body tissues or fluid samples?	NO
•	collection and/or testing of DNA samples?	NO
•	participation in a clinical trial?	NO
•	administration of ionising radiation to participants?	NO

3.3 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. Please explain what risk management procedures will be put in place to minimise these risks.

N/A			

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

YES or NO NO

(If YES, provide details.)			

3.5 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.)
3.6	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.
	N/A
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 with 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.
	Finding will be passed on anonymously to supervisor
3.8	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.
	N/A
3.9	DO YOU PROPOSE TO OFFER PAYMENTS OR INCENTIVES TO PARTICIPANTS? YES OF NO NO
	(If YES, please provide further details.)
3.10	DO ANY OF THE RESEARCHERS ON THIS PROJECT HAVE A PERSONAL, PHILOSOPHICAL, FINANCIAL 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 OF NO NO
	(If YES, please specify how this conflict of interest will be addressed.)

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

List the academic qualifications and outline the experience and skills relevant to this project that the PI, other researchers and any supporting staff have in carrying out the research and in dealing with any emergencies, unexpected outcomes, or contingencies that may arise

Marija is acting as a chair of the Modelling & Scientific Computing Group and, as part of it, she is an area
leader for Social systems, specifically for Smart cities, Environment and Transport.

5. CONFIDENTIALITY/ANONYMITY

5.1 WILL THE IDENTITY OF THE PARTICIPANTS BE PROTECTED?

YES	or	NO
YES		

1	£ N	\sim	m I		01/0	1-:-		
(1	IIV	U,	DI	ease	expi	airi	VVII)	/.

IF YOU ANSWERED YES TO 5.1, PLEASE ANSWER THE FOLLOWING QUESTIONS:

5.2 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.

Accounts will be removed from the database on request.

5.3 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, or give a justification if this will not be done.

6 DATA/SAMPLE STORAGE, SECURITY AND DISPOSAL For the purpose of this section, "Data" includes that in a raw or processed state (e.g. interview audiotape, transcript or analysis). "Samples" include body fluids or tissue samples. HOW AND WHERE WILL THE DATA/SAMPLES BE STORED? 6.1 Note that the REC recommends that all data be stored on campus - please justify any off-site storage N/A 6.2 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. N/A 6.3 IF DATA/SAMPLES ARE TO BE DISPOSED OF, 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. If data/samples are NOT being disposed of, please justify this decision. N/A 7. **FUNDING** 7.1 HOW IS THIS WORK BEING FUNDED? N/A 7.2 PROJECT GRANT NUMBER (If relevant and/or known – otherwise mark as N/A) N/A DOES THE PROJECT REQUIRE APPROVAL BEFORE CONSIDERATION FOR FUNDING BY A GRANTING 7.3 BODY? YES or NO NO HOW WILL PARTICIPANTS BE INFORMED OF THE SOURCE OF THE FUNDING? (e.g. will it be included in 7.4 the Plain Language Statement) N/A

7.5 DO THE FUNDERS OF THIS PROJECT HAVE A PERSONAL, FINANCIAL 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 NO

(If Yes, please specify how this conflict of interest will be addressed.)

8. PLAIN LANGUAGE STATEMENT (Include in 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 link to sample templates on the website: <a href="http://www4.dcu.ie/research/research_resea

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 happen if the person decides 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?	NO
What are the benefits of taking part in the research study (if any)?	YES
What are the risks of taking part in the research study?	YES
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?	YES
Contact details for further information (including REC contact details)	YES

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

Data Confidentiality – N/A for task at hand.	

College Carpool

DCU School of Computing

Investigator: Stephen Cassedy

Supervisor: Marija Bezbradica

Investigation is being undertaken as user testing for my final year project.

The participant will fill in a questionnaire based on their experience in the application. It will take 5 minutes to fill in after the user has tried the application. Results will be kept confidential.

There is no risk involved.

User information will be used to assess how well the application performs with multiple users.

There are no benefits for participants.

User information will only be accessed by me and will be deleted on request.

Data will be destroyed after May 26th.

Participants may withdraw from testing at any time if they feel uncomfortable with how it works. I will delete user accounts and all associated information in request.

If users wish to get more information please contact me at stephen.cassedy2@mail.dcu.ie

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

9. **INFORMED CONSENT FORM** (Include in 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. If your participants are minors (under 18), it is best practice to provide them with an assent form, while their parents/guardians will be given the Informed Consent Form. In cases where an anonymous questionnaire is being used, it is enough to include a tick box in the questionnaire (underneath the information section for participant), where participants can indicate their consent.

See link to sample templates on the website: http://www4.dcu.ie/research/research_e	ethics/rec_forms.shtml
NB – IF AN INFORMED CONSENT FORM IS NOT BEING USED, THE R	EASON FOR THIS MUST BE JUSTIFIED HERE
Informed Consent Form	
DUBLIN CITY UNIVERSITY	
Project: College Carpool Undertaken for final year project for school of computing DCU. Investigator: Stephen Cassedy Supervisor: Marija Bezbradica	
Research is being undertaken to gather information on the functional will be used to test how the application functions with multiple design/functionality into account for changes to be made to it.	
Participant - please complete the following (Circle Yes or No for ea	
I have read the Plain Language Statement (or had it read to me) I understand the information provided	Yes/No 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 I am aware that my location may monitored and shared	Yes/No Yes/No
I may withdraw from the user-test at any time and my informati conclusive results of the investigation.	on will be removed and taken out of the
I am aware that my user information will only be accessed by Step an unlikely event, it will be anonymous.	hen Cassedy and if it is to be passed on ir
I acknowledge that the user group is small and that I may be in user-test. I understand that some people may value privacy more users for information.	
I have read and understood the information in this form. My quest the researchers, and I have a copy of this consent form. Therefore, project	•
Participant:	
Name (Block Capitals):	
Witness:	
Date:	

Proposed Questionnaire

College Carpool

- Open Application
- If already have existing account, press login. Else signup with a valid DCU email and password that you will remember.
- Use navigation bar in the top right to explore the application.
- If Planning a journey, go to journey planner and search for at least two stops (search bar at top of planner screen) and pick a date. The date must not be in the past.
- Attempt to start a journey now by entering at least one location and pressing the 'Go Now' button. This will initiate the satellite navigation and display your current route to other users.
- If looking for a ride, go to the Home Screen and look for any active journeys. These are indicated by blue lines. Click on the line once to view stops of the journey and click on any of the waypoints that pop up to message the user or request a ride. The driver will be notified and if he accepts, you will receive a notification in turn.
- Attempt to message other users and attempt to add friends. Adding friend can be done from the 'Find Carpool' area. Navigate to here by going to the Journey Planner and pressing the 'Find Carpool' button. Search for the destination you want to go to and if there is a matching journey, hold down on the option and select and choices from the context menu.

Questions

Questions bellow are rated on a scale of 1-5.1 being poor and 5 being excellent

- 1. Please rate the accessibility of the app, i.e. the ability to navigate around and fins what you were looking for:
- 2. Rate planning capability of the app:
- 3. Rate usability of payment system (if you have NFC):
- 4. Rate sufficiency of satellite navigation if you used it:
- 5. Rate the messaging system and if it is usable:
- 6. I the application fit for purpose, would you use it? If so, then why?
- 7. Do you think there are potential security flaws with the application? Please Explain:
- 8.If you could make any changes, what would they be? Please Explain: