SCHOOL OF COMPUTING, ENGINEERING & MATHEMATICS ETHICS FORM

This ethics form is designed to help you quickly and easily identify how you should approach any ethical issues raised by your project or dissertation. It should be completed for ALL research projects and dissertations prior to the commencement of the project. Please do not approach any participants involved in the research until this have been completed and discussed with your supervisor or member of the CEM ethics committee (if appropriate).

This form must be completed by the project student or researcher responsible for the project. Once completed, you should discuss it with your supervisor to ensure that you take the right follow-up actions.

If you answer 'No' to all questions in this form and this is confirmed with your supervisor (if appropriate) then no further action is required. Please note that in signing this form you accept that it is still your responsibility for your project or dissertation module to follow the University's Guidance on Good Practice in Research Ethics and Governance, available on StudentCentral. Any significant change in the question, design or conduct of your project or dissertation that would alter your answers on this form must be notified to your supervisor who will advise you on whether you need further action.

If you have answered 'yes' to *any* of the questions in Section B of the Student Checklist your supervisor will need to make a judgment as to whether or not the research includes more than a minimum level of risk. If this is the case then your supervisor will need to email this form to the CEM ethics committee (CEMethics@brighton.ac.uk) for discussion prior to the commencement of research. This does not mean that you will not be able to do the research, but it will need to be considered by the School Research Ethics and Governance Committee.

Ethics forms, example consent forms/participant information sheets and supporting guidance are available on the **Research Ethics for Projects - CEM** area of StudentCentral.

Signed copies of this completed ethics form must be submitted with your project or dissertation. Note: the project or dissertation will not be marked if the completed checklist is not included.

PROJECT DETAILS

Name of researcher: Dominic Rathbone
 Name of supervisor: Stelios Kapetanakis

3. Title of project: Utilising peer-to-peer networking for data transfer over the browser

4. Outline of the research (up to 100 words):

My research aims to investigate the possibility of a peer-to-peer network being used as an alternative to to traditional solutions for transfering data over a web browser, normally done by client-server models. This will be investigated by creating a web application that implements WebRTC, a relatively new technology enabling two browser clients (peers) to communicate directly without the need for a server.

5. Location of research: Brighton, United Kingdom.

8. Email address: domr115@googlemail.com

9. Contact address:

32 Gladstone Place

Brighton, East Sussex

BN2 3QD

10. Telephone number: 07951711341

Please	tick the appropriate box and answer the questions where appropriate.	Yes	No
1.	Does the study involve participants who might be considered vulnerable due to age or to a social, psychological or medical condition? (e.g. children, people with learning disabilities or mental health problems, but participants who may be considered vulnerable are not confined to these groups). If yes then provide details of any such participants. See the University's 'Guidance on Good Practice in Research Ethics and Governance' for more details. Note: proposals involving vulnerable participants are often likely to require ethical approval from the Faculty of Science & Engineering Research Ethics and Governance Committee (FREGC).		•
2.	Will photographic or video recordings of research participants be collected as part of the research?		1
	If yes then please outline consent and data protection procedures (e.g. interviews cannot be overheard, details will not be accessible to others), for the use of participants' images. Example consent and information forms can be found on StudentCentral and see guidance on data collection at the end of this document. If your data will not be confidential and anonymous then outline the justification for this decision here and procedures for mitigating against potential harm.		
3.	Does the study require the co-operation of an individual to gain access to the participants? (e.g. a teacher		1
	If yes then describe the procedures that will be put in place to ensure safe and ethical direct involvement of human participants. Where necessary and as appropriate, include comments on obtaining informed consent, reducing harm, providing feedback, and accessing participants through an individual providing information such as a teacher/lecturer, manager, employer etc. Example consent and information forms can be found on StudentCentral.		
4.	Will the participants be asked to discuss what might be perceived as sensitive topics (<i>e.g. sexual behaviour</i> , drug use, religious belief, detailed financial matters) or could participants experience psychological stress, anxiety or other negative consequences (beyond what would be expected to be encountered in normal life)? If yes then describe the procedures that will be put in place to ensure safe and ethical direct involvement of human participants. Where necessary and as appropriate, include comments on obtaining informed consent, reducing harm, providing feedback. Example consent and information forms can be found on StudentCentral.		•
5.	Will individual participants be involved in repetitive/prolonged testing or vigorous physical activity, experience pain of any kind, or be exposed to dangerous situations, environments or materials as part of the research? If yes then describe the procedures that will be put in place to ensure safe and ethical direct involvement of human participants. Where necessary and as appropriate, include comments on obtaining informed consent, reducing harm, providing feedback. Example consent and information forms can be found on StudentCentral.		V
6.	Will members of the public be indirectly involved in the research without their knowledge at the time? (e.g. covert observation of people in non-public places, the use of methods that will affect privacy).		1
	coron observation of people in non-passic piaces, the use of methods that will affect privacy).	L	L

Please tick the appropriate box and answer the questions where appropriate.		Yes	No
	If yes then provide brief details here (e.g. how they will be involved and, where known, the age, gender, ethnicity and location of those who will be indirectly involved). Provide details of any negative impacts members of the public will be likely to face and that would not be		
	considered minimal impacts (e.g. invasion of privacy, harm to property, being subject to what an individual perceives to be inappropriate behaviour). Describe the risks and if appropriate explain why you believe they are only minimal.		
	Describe any procedures that will be put in place to ensure safe and ethical indirect involvement of members of the public (e.g. providing information and feedback if requested by the public). Examples of participation information forms can be found on StudentCentral.		
	Describe how you will ensure data collection is confidential and anonymous (e.g. people will not be able to be identified by photographs or notes taken by observers), how data will be stored and who will have access to the data. If the data will not be confidential or anonymous, outline the justification for this decision here and procedures for mitigating against potential harm.		
7.	Does this research include secondary data that may carry personal or sensitive organisational information? (Secondary data refers to any data you plan to use that you did not collect yourself, e.g. datasets held by organisations, patient records, confidential minutes of meetings, personal diary entrie). If yes then provide details regarding any secondary data to be used that may carry sensitive personal or organisational information.		•
	If secondary data CEMs containing sensitive personal or organisational information are to be used, outline how such use will be ethically managed (e.g. details such as anonymising data CEMs, ensuring protection of source agency, gaining consent of data owners, and how the data will be stored). See guidance on data collection at the end of this document.		
8.	Is this research likely to have significant negative impacts on the environment ? (For example, the release of dangerous substances or damaging intrusions into protected habitats.)		1
	If yes then provide details of these impacts here (for example the release of dangerous substances or damaging intrusions into protected habitats) and		
	Describe how you will mitigate against significant environmental harm and manage risks.		
9.	Will any participants receive financial reimbursement for their time? (excluding reasonable expenses to cover travel and other costs).		•
	If yes then provide details and a short justification (e.g. amounts and form of reimbursement).		

Please t	tick the appropriate box and answer the questions where appropriate.	Yes	No
10.	Are there any other ethical concerns associated with the research that are not covered in the questions above?		•
	If yes then give details here.		

All Undergraduate and Masters level projects or dissertations in the School of CEM must adhere to the following procedures on data storage and confidentiality.

All data should be encrypted and stored securely. Documentation should be kept in a locked cabinet or desk, and electronic data should preferably be kept on a removable disk or data stick which can be locked away, or if this is not possible on a password protected computer. Confidential and sensitive data should not be emailed unless it is encrypted or password protected since emails are centrally archived.

For Undergraduate/Masters projects, normally only the student and supervisor will have access to the data (see the University's 'Guidance on Good Practice in Research Ethics and Governance for further details). Once a mark for the project or dissertation has been published, all data must be removed from personal computers, and original questionnaires and consent forms should be destroyed unless the research is likely to be published or data re-used. If this is the case a justification for this should be included where appropriate in this form and in the relevant consent and participant information forms.

Student: Please sign below to confirm that you have completed the Ethics form and will adhere to these procedures on data storage and confidentiality.

Signed (Student):

Date: 16/11/2015

Supervisor: I confirm that the research *does/does not* (delete as applicable) include more than a **minimum level of risk**.

Note: If the **supervisor judges** that there is more than the **minimum level of risk** then your supervisor will need to email this form to the CEM ethics committee (<u>CEMethics@brighton.ac.uk</u>) for discussion prior to the commencement of research.