## 3.2 Ethics: You Probably Do Need To Think About It

All projects fall into one of three categories:

- 1. Projects that do not require ethical approval at all, because they do not collect or process any relevant data.
- 2. Projects that can be reviewed by your supervisor under "Ethics Application 97842", because they are judged to be low ethical risk.
- 3. Projects that require full ethical review by the Faculty Research Ethics Committee (FREC).

## 3.2.1 Projects Not Requiring Ethical Review

Your project is in this category only if it does not involve any gathering of data from human or animal participants. This means you **cannot** do any of the following:

- · conduct a survey;
- ask anyone (including friends) to test and/or give feedback on your software;
- take any photos or video that contain people, **including yourself**;
- · collect data from online sources such as Facebook or Reddit;
- process existing anonymous data in a way that could de-anonymise it.

Two examples of projects that would not require ethical review are as follows:

- Jean is doing a project in graph theory studying snarks. This will involve reviewing the literature and perhaps proving theoretical results or writing some code to generate snarks. The only experiments Jean will run involve testing and profiling her own code.
- Adam is doing a project in machine learning, and he is attempting to train a neural network to recognise different art styles and periods. In doing so, he will use a large data set of public domain images downloaded from the Internet, and perhaps one or two photos of his own pieces of art.

If you and your supervisor agree that your project does not require ethical review, then you don't need to do anything except add a sentence saying so in your front matter.

## 3.2.2 Projects covered by Ethics Application 97842

This category covers projects that involve gathering data only from humans (not from animals) and are judged to be low ethical risk. Ethical approval for projects in this category has been granted unit-wide by Ethics Application 97842. You can use this option only if all of the following apply to your project:

- 1. The project does not specifically try to gather data from a vulnerable population, such as people affected by illness or economic disadvantage, primary or secondary school students (or any other under-age groups), victims of crime, disabled people, or people recruited from self-help groups.
- 2. The project does not gather data about protected characteristics including: racial or ethnic origin; religious or similar beliefs; membership of a trade union; physical or mental health; sexual orientation.
- 3. The project does not gather data about sensitive topics such as sexual activities; criminal history; drug use; or other obviously sensitive information.
- 4. All data is anonymous at collection, so that if the data were to be lost there would be no realistic prospect of the participants being identified. In particular, the project does not take photos or videos of people, and it does not ask about personally identifying information such as: names; addresses; postcodes; phone numbers; email addresses; physical features; or social media handles.

- 5. Before any data is gathered from a participant, they give full informed consent. That is, they understand what data will be collected and what the data will be used for, and they give an explicit verbal or written statement to this effect. If part of the data comes from observation, then participants are told what will be recorded before the start of the test. In particular, projects which automatically scrape data from online sources such as Facebook or Reddit are not covered by this category and must make a full ethics application.
- 6. No participants are tricked or deceived in any way, for example by being given false feedback about their performance at a task or being misled about the focus of the study.
- 7. If the participants are asked to perform a task, then this task involves no danger of physical or mental harm. For example, the project does not ask participants to sprint or to view distressing images. This applies even to data gathered from yourself.

Three examples of projects that would fall into this category are:

- Ayodya is writing a computer game for her project. As part of refining the core gameplay loop, she wants to get feedback from new players. She asks a few of her friends to play the game as she watches and take notes. Afterwards, she asks them a few questions about the game. She is careful to tell them in advance that she'll be observing them.
- Tan is writing a piece of software for research into grumkins for his project. Since Bristol researchers specialise mostly in snarks, he posts to a forum for grumkin researchers explaining his situation, asking what they would like out of a grumkin verifier and noting that any replies may be incorporated into his project. He then uses the requirements to decide what features to develop, and later releases the software as open source. When writing up his project, he removes all forum names from the feedback before including it.
- Mohammed is testing the effectiveness of a new user-interface element as part of an HCl project. To do so, he codes two versions of a user interface, one using the new element and one using a more traditional design. He divides participants into two groups, one for each version. He tells each group he is interested in testing the effectiveness of the user interface of the software and asks them to use it to carry out a task while he watches and takes notes.

This is generally the category for projects who want to create some software and do a small user study at the end. If you think your project falls into this category, then you should confirm this with your supervisor **before** you start gathering data, and you should not gather any data without your supervisor's approval. The two of you will then need to fill out a very short form available from the unit Blackboard page, and you will need to add a note to your front matter. Your project should also include an appendix with full detail on how you obtained consent from any participants, e.g. with the contents of any forum posts you made soliciting feedback. Sample participant information sheets and consent forms for in-person studies have been made available on the unit page.

## 3.2.3 Projects Requiring Ethical Review by the FREC

All other projects fall into this category. Five examples are:

- Chris is doing an HCI project to study effective survey design. They ask people to fill out one of two randomly chosen
  versions of an online survey about their favourite types of pizza. The two surveys are identical except that at the end,
  both versions ask for participants' email addresses in different ways; Chris is interested in which survey design gets
  more people to give their email addresses. The email addresses are discarded on collection to avoid gathering personal
  data. This would still require a full ethics application, since they are deceiving participants about the purpose of the
  study.
- Alan is doing a cybersecurity project on the information inadvertently leaked via Bluetooth from peoples' personal
  devices. He puts up a sign in the MVB atrium explaining that an experiment is happening, then sits there with a device
  gathering leaked data. He reads through it to remove anything potentially identifying, then includes it in his project.
  This would require a full ethics application, since it involves gathering data from participants who have not given full
  informed consent.
- · Reut suffers from clinical depression, and for her project she is writing a mobile app to help fellow sufferers track their

moods. When she has finished coding the app, she posts a link to Big White Wall (an anonymous support forum) asking for feedback. This would require a full ethics application, since it involves asking about mental health and gathering data from a vulnerable population.

- Johannes is doing a computer vision project in which he attempts to train a computer to recognise numbers on signs. As part of his test data, he walks through the department and takes photos of all the office doors. This would require a full ethics application, since it involves gathering information (namely office numbers) from participants without their consent.
- Bill is doing a computational finance project on predicting stock market movement by analysing social media, and plans to use the contents of r/wallstreetbets as training data. This would require a full ethics application, since it involves gathering information from every poster on r/wallstreetbets without their consent.

If, after discussion with your supervisor, you decide that your project is in this category, don't panic!

The next step is to make a formal Stage 1 ethics application to the Faculty Research Ethics Committee at <a href="https://orems.bristol.ac.uk/ActivityForm/Index">https://orems.bristol.ac.uk/ActivityForm/Index</a>. The application process is not hard, involving only a short form, and typically if a project is "obviously harmless" but not covered by Application 97842 then it will be approved. That said, you must make your application well in advance, as delays of three weeks or more are relatively common, and you will not be granted an extension if this stops you from completing your project before the due date. If your application is approved, then you will need to add a sentence to your front matter quoting the application number.

If the FREC identifies significant causes for concern, then they may ask you to make a Stage 2 ethics application. This is a more difficult affair, and if it happens then you should think carefully about whether your planned experiments are crucial to the project.