

## Participant Information Sheet

### The role of the Internet on programming

This is a research project undertaken at the Department of Computer Science at the University of Manchester. Before you decide whether to take part, it is important for you to understand why the research is being conducted and what it will involve. Please take time to read the following information carefully before deciding whether to take part and discuss it with others if you wish. Please contact us if there is anything that is not clear or if you would like more information. Thank you for taking the time to read this.

Please take as much time as you need before deciding to participate in the study.

### **About the research**

#### ➤ **Who will conduct the research?**

*Primary Investigators*

**Name:** Omar Alghamdi and Dr. Sarah Clinch and Dr. Caroline Jay

**Address:** Department of Computer Science,  
University of Manchester, Oxford Rd,  
Manchester. M13 9PL.

**Email:** [omar.alghamdi@postgrad.manchester.ac.uk](mailto:omar.alghamdi@postgrad.manchester.ac.uk) and [sarah.clinch@manchester.ac.uk](mailto:sarah.clinch@manchester.ac.uk) and [Caroline.Jay@manchester.ac.uk](mailto:Caroline.Jay@manchester.ac.uk)

#### ➤ **What is the purpose of the research?**

We'd like to understand more about how programmers write code to solve programming problems, and the role of different websites in that process.

#### ➤ **Will the outcomes of the research be published?**

The outcome of the research will be published as an academic paper, in a PhD thesis, and/or at academic conferences. The research may also be used for teaching purposes.

#### ➤ **Who has reviewed the research project?**

The research has been reviewed by the Department of Computer Science Ethics Committee.

### **What would my involvement be?**

#### ➤ **What would I be asked to do if I took part?**

You would be asked to participate in a video or audio call using the Zoom video conferencing software. The call will be between you and one researcher, it will be recorded, and you will be asked to share your screen during the call. The call will take no more than one hour of your time.

During the call, we will ask you to solve four programming tasks using the Java programming language. All programming tasks will be based on course materials from your first year; they may be challenging but the concepts should not be completely unfamiliar to you. This portion of the call will last up to forty-five minutes. We will ask you to share the screen as you complete the tasks, and to share with us the resulting Java files once the call is over. Feel free to do the tasks in any order and to move between them as you wish. However, at the end of this part of the study (45 minutes), we will ask you to stop all work on the tasks. You should focus only on the provided tasks and aim to complete them all in the allocated time, but do not worry if one or more tasks are still incomplete. Please do not change your code once the allocated time is ended.

At the end of the call, we will ask you a set of interview questions. These questions will take no more than fifteen minutes.

➤ **Will I be compensated for taking part?**

You will be compensated with a £10 Amazon voucher.

➤ **What happens if I do not want to take part or if I change my mind?**

It is up to you to decide whether or not to take part. You are free to take as much time as you wish before deciding. If you do decide to take part, you will be given this information sheet to keep and will be asked to provide verbal consent at the start of the Zoom call. You are free to withdraw your consent at any time during the call without giving a reason and without detriment to yourself. You may also choose to withdraw your data for up to two days following the call – you can contact the research team by email to do this. After two days, we will transcribe and anonymise your data and it will no longer be possible to remove it from the dataset. You should retain your assigned ID to be able to withdraw from the study. This does not affect your data protection rights.

## **Data Protection and Confidentiality**

➤ **What information will you collect about me?**

In order to participate in this research project we will need to collect information that could identify you, called “personal identifiable information”. Specifically we will need to collect:

- Age
- Gender
- Sex

In term of the video/audio recording, the recordings will consist of:

- Screen recording video: record the screen while solving the tasks.
- Voice only: obtained during the interview session.

➤ **Under what legal basis are you collecting this information?**

We are collecting and storing personal identifiable information in accordance with data protection law which protects your rights. These state that we must have a legal basis

(specific reason) for collecting your data. For this study, the specific reason is that it is “a public interest task” and “a process necessary for research purposes”.

➤ **What are my rights in relation to the information you will collect about me?**

You have a number of rights under data protection law regarding your personal information.

If you would like to know more about your different rights or the way we use your personal information to ensure we follow the law, please consult our [Privacy Notice for Research](#).

➤ **Will my participation in the study be confidential and my personal identifiable information be protected?**

Only the research team at the University of Manchester will have access to your information, which will be anonymised. Any identifying information will be removed and replaced with a random ID number.

In accordance with data protection law, The University of Manchester is the Data Controller for this project. This means that we are responsible for making sure your personal information is kept secure, confidential and used only in the way you have been told it will be used. All researchers are trained with this in mind, and your data will be looked after in the following way:

- Your data will be anonymised (associated with a random ID instead of your name or other personal information). Any sensitive or personal information revealed during the call (e.g. on your shared computer screen) will be obscured as part of the anonymisation process.
- Recordings will be made using the Zoom video-conferencing software. We will ask you to turn off all video recording except for screen sharing, so the resulting recording will include your screen and all call audio.
- Data will be stored on an encrypted device and will be backed up to a secure data store.
- Anonymised transcripts and screen recordings will be shared with other organisations for research purposes, but you will not be identifiable from the data.
- Your data may be used in future research studies.
- The data may be shared with any other organisation.
- The interview audio files will be transcribed by the researcher, and any disclosure of personal or sensitive information during the calls will be redacted.

When you agree to take part in a research study, the information about you may be provided to researchers running other research studies in this organisation. The future research will be of a similar nature to this research project and will concern programming field. Your information will only be used by this organisation and researchers to conduct research in accordance with [UREC studies: The University of Manchester's Research Privacy Notice](#). The information will only be used for the purpose of publication and cannot be used to contact you regarding any other matter.

Please also note that individuals from The University of Manchester or regulatory authorities may need to look at the data collected for this study to make sure the project is being carried out as planned. This may involve looking at identifiable data. All individuals involved in auditing

and monitoring the study will have a strict duty of confidentiality to you as a research participant.

## **What if I have a complaint?**

### **➤ Contact details for complaints**

If you have a complaint that you wish to direct to members of the research team, please contact:

**Dr. Sarah Clinch**

Department of Computer Science, the University of Manchester  
Oxford Road, Manchester. M13 9PL.  
0161 275190 or [sarah.clinch@manchester.ac.uk](mailto:sarah.clinch@manchester.ac.uk)

**If you wish to make a formal complaint to someone independent of the research team or if you are not satisfied with the response you have gained from the researchers in the first instance then please contact**

The Research Ethics Manager, Research Office, Christie Building, The University of Manchester, Oxford Road, Manchester, M13 9PL, by emailing: [research.complaints@manchester.ac.uk](mailto:research.complaints@manchester.ac.uk) or by telephoning 0161 275 2674.

If you wish to contact us about your data protection rights, please email [dataprotection@manchester.ac.uk](mailto:dataprotection@manchester.ac.uk) or write to The Information Governance Office, Christie Building, The University of Manchester, Oxford Road, M13 9PL at the University and we will guide you through the process of exercising your rights.

You also have a right to complain to the [Information Commissioner's Office about complaints relating to your personal identifiable information](#) Tel 0303 123 1113

## **Contact Details**

If you have any queries about the study or if you are interested in taking part then please contact the researcher:

**Omar Alghamdi**

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Oxford Road, Manchester. M13 9PL.  
[omar.alghamdi@postgrad.manchester.ac.uk](mailto:omar.alghamdi@postgrad.manchester.ac.uk)