

UNIVERSITY OF DUNDEE
SCHOOL OF COMPUTING ETHICS COMMITTEE APPROVAL FORM

Title of project Recipes For Life : Bringing the tradition of cookbooks to the 21st century _____

Name of Lead Investigator (Student in case of project work) Kari McMahon _____

Module Code if applicable AC40001 _____ Module Name Individual Project _____

Research Supervisor / Other Academic Staff involved Dr Keith Edwards _____

Email address k.v.mcmahon@dundee.ac.uk _____ Funding Body (if applicable) _____

Estimated start date 28/10/2014 _____ Estimated end date 01/05/2015 _____

Date submitted 28/10/2014 _____ SoCEC Ref no. (LEAVE BLANK) _____

DECLARATION:

I have read and understand the University of Dundee Guidelines for ethical practices in research and the School of Computing Code of Practice for Research involving Human Participants. I confirm that my research abides by these guidelines as embodied in the statements in Part A below.

Print Name KARI MCMAHONDate 28/10/2014
(Lead Investigator)

Students must ensure that their supervisors review their application before submission as this can prevent delays in being able to commence a study.

I confirm that I have reviewed this application and consider this application ready for submission.

Print Name KEITH EDWARDSDate 28/10/2014
(Supervisor)

PART A

The declaration above confirms that you will:

- Provide an information sheet to participants which describes the main procedures to participants in advance so that they are informed about what to expect;
- Tell participants that their participation is voluntary (both in information sheets and consent forms);
- Obtain written informed consent for participation and provide participants with a copy;
- Ask participants for their consent to being observed, should the research be observational;
- Ensure that participants are able to read and understand the participant information sheet;
- Tell participants that they may withdraw from the research at any time without penalty and for any reason;
- Give participants the option of omitting questions they do not want to answer if a questionnaire is used
- Tell participants that their data will be treated with full confidentiality and that, if published, it will not be identifiable as theirs;
- Tell participants that all recordings, e.g. audio/video/photographs, will not be identifiable unless prior written permission has been given by the participants;
- Debrief participants at the end of their participation (i.e. give them a brief explanation of the study).

PART B

Please answer the following questions:

		YES	NO
1	Will your project involved deliberately misleading participants in any way?		X
2	Is there any realistic risk of any participants experiencing either physical or psychological distress or discomfort? If Yes, give details on a separate sheet and state what you will tell them to do if they should experience any problems (e.g. who they can contact for help).		X
3	Do participants fall into any of the following special groups? Note that you will also need to obtain satisfactory Disclosure Scotland (or equivalent) clearance when working with vulnerable people.	Children (under 18 years of age)	X
		People with Intellectual or communication difficulties	X
		People in custody	X
		People engaged in illegal activities (e.g. drug-taking)	X
		Non-human animals	X
		NHS Patients	X

PART C

You must provide the information listed below:

<p>1. Title of project.</p> <p>Recipes For Life - Bringing the tradition of recipe books to the 21st century</p>
<p>2. Purpose of project, background and its academic rationale.</p> <p>Recipes For Life is the project I will be working on for my honours year individual project. Recipes For Life is a cooking application for android devices predominantly for tablets but will also work on smartphones. The application will enable multiple people to collaborate on recipes and cookbooks through their device. Recipes For Life will act as a way to maintain their recipe books and help move the tradition of community cookbooks into the 21st century. The core feature will be the collaborative tool allowing multiple people to create a community cookbook where they can add recipes to the cookbook and make alterations for example as you would with a traditional family cookbook where over the years notes are added to the side of the recipe. As well as the core feature the application aims to include social aspects where you can view others cookbooks and kitchen features such as scaling tools, grocery lists and timers which have made cooking and recipe apps so popular in the past few years.</p> <p>The motivation for the project is my research into recipe management applications. At first I was looking into building an application where users could manage their old family recipes as well as new recipes they found online in one area. In particular focussing on the idea of being able to import recipes from URL and I found a few apps already had this feature to varying successes. While looking at the apps I noticed there were no applications where you could create cookbooks where multiple people could add or edit recipes. From personal experience I have always enjoyed cooking recipes from family cookbooks which have been passed down through generations with changes made over time in the sides of the recipes or found great recipes from PTA or church cookbooks where multiple people have contributed and combined their recipes. As we move more and more into a digital age the benefits of collaborative cookbooks could be lost which is why I feel it is necessary to create application that enables families, friends, colleagues, clubs and people online who have similar interests to be able to collaborate. Following my own personal interest and belief that community cookbooks are beneficial I did some more research and found several papers that backed this up showing that cookbooks held autobiographical and sometimes historical stories as well as a way to share experiences with others, form relationships and maintain tradition over years. These papers strengthened the motivation for this application.</p>

The academic rationale behind the AC40001 individual project module is to gain experience in carrying out an independent software development project which is the culmination of my years of study in Applied Computing and relevant to your future career plans.

1. Brief description of methods (e.g. interviews) and data analysis.

I plan on using several methods to aid the design and development of my application over the course of the year. The methods are:

- Anonymous surveys to help better understand my key requirements.
- Interviews/focus groups to discuss design sketches.
- User testing
- Evaluation against another application

Anonymous survey :

The survey will gather data about potential target market for the application. I will use the survey to find out about the users interests in cooking, whether the user frequently uses technology generally as well as in the kitchen and whether they use apps for cooking and recipe searching and if they would be interested in core feature of the application as well as ranking the application features in terms of usefulness. The survey will enable me to understand who my target market is, if they would use an application like this and help finalise my requirement specification for the project.

The survey should take no more than 15 minutes to do, will be anonymous and will be circulated to friends and family with an interest in cooking as well as online forums and social networks where people who have an interest in cooking gather. The survey will be done online.

Participants:

As many as possible with a mix from the age range of 18 - 60 and an equal gender split with preference for those with an interest in cooking and those who use technology with cooking.

Procedure:

1. Participants will be given an information sheet online.
2. If they agree participants will be directed to the survey which they will then fill out.

Interviews/Focus Groups:

Interviews/focus groups will be done with participants for around 15 - 30 mins where I aim to gain opinions on my design sketches of my application. The interviews/focus groups will be largely unstructured with me just walking the participant through the designs and noting their opinions on the design helping me to decide whether I should keep or change aspects of my application design.

I plan on having 2 interview/focus group sessions for the design sketches on paper and the second for interactive design sketches

Participants:

5 participants for each of the sessions with a mix from the age range of 18 - 60 and an equal gender split with preference for those with an interest in cooking and using technology with cooking.

Procedure:

1. Participants will be given an information sheet and invited to read it.
2. Participants will be given a consent form.
3. Participants will sign consent form.
4. Participants will be given a demographic questionnaire.
5. Participants will be asked about the design sketches
6. Feedback will be noted
7. Once tasks are done, participants are free to go.

User Testing:

For user testing I plan on observing the user use the application for 15 - 20 mins without too much direction to understand if the user finds the application usable, easy to navigate and clear. I will gain feedback from comments made during the testing and the System Usability Scale evaluation form.

I plan on having 4 user testing sessions throughout the course of the project to get continual feedback on the application as it progresses.

Participants:

5 participants for each user testing session with a mix from the age range of 18 - 60 and an equal gender split with preference for those with an interest in cooking and using technology with cooking.

Procedure:

1. Participants will be given an information sheet and invited to read it.
2. Participants will be given a consent form.
3. Participants will sign consent form.
4. Participants will be given a demographic questionnaire.
5. Participants will be introduced to the system which is demonstrated by the experimenter.
6. Participants will be given the user testing task which should take no longer than 15 - 20 mins.
7. Participants will be given a System Usability Scale evaluation form.
8. Once tasks are done, participants are free to go.

Evaluation:

For evaluation I plan on evaluating my application against a current application on the market that does similar things. I will then evaluate whether my application meets the user's needs more than the current application through evaluating usability and ability to achieve tasks laid out.

Tasks: (Subject to change based on functionality of application)

- Participant will try to browse for a recipe.
- Participant will try to add a recipe. (manually and/or import depends on functionality at end of

project).

- Participant will try to edit a recipe.
- Participant will create a cookbook and try to add other users to the book.
- Participant will try to edit other user's recipes.
- Participant will try to create an account and profile.
- Participant will try to share recipe.

Our dependant variables:

- Ability to achieve task.
- Time taken to do task.

Our independent variables

- The system

Participants:

10 participants for the evaluation with a mix from the age range of 18 - 60 and an equal gender split with preference for those with an interest in cooking and using technology with cooking.

Procedure:

1. Participants will be given an information sheet and invited to read it.
2. Participants will be given a consent form.
3. Participants will sign consent form.
4. Participants will be given a demographic questionnaire.
5. Participants will be introduced to the system which is demonstrated by the experimenter.
6. Participants will be given the evaluation task which should take no longer than an hour and a 15 min break will be given if needed.
7. Participants will be given a System Usability Scale evaluation form.
8. Once tasks are done, participants are free to go.

1. Participants

I require participants of the ages 18-60 and of any gender to participate in the evaluation with preference for those with an interest in cooking and using technology with cooking. I am aiming to try and not reuse participants for methods as they may form an attachment to the application and no longer be impartial in their opinions towards the application.

4a recruitment methods:

The recruitment methods will be to recruit participants with an interest in the app and in cooking. I will recruit these participants through family and friends, online forums or social media where those with an interest in cooking gather, university email such as hermes and contacting baking clubs, community clubs as well as cafes/restaurants.

4b number: 40+ (dependant on the amount for retrieved for the survey)

4c age: A mixture from the ages of 18-60

4d gender: Ideally an even split of male and female participants.

4e exclusion/inclusion criteria: Our inclusion criteria are people of the ages 18 - 60 who have an interest in cooking and the use of technology. Our exclusion criteria are those who are under the age of 18, over the age of 60 and cannot read/write English.

2. Consent and participant information arrangements:

Consent forms and an Information Sheet have been attached to this application. The demographics questionnaire, system usability scale form, task sheet and survey have also been attached.

3. Debriefing / Feedback:

Each participant will be provided with the following statement in writing after the study is complete:

The study aids the development of my Recipes For Life application which aims to bring the tradition of community cookbooks to the 21st century. With your data I am aiming to further improve my application as well as understand if it useful and an improvement on current applications on the market in terms of usability and usefulness. If the participant would like feedback I would like to get there email so I can send them a brief report of the results.

4. A clear but concise statement of how you will ensure confidentiality, any ethical considerations raised by the project and how you intend to deal with them.

Each participant will be assigned a unique id. The id will be the sole identification used throughout the entire study to identify that the set of data has come from a single participant. Data will be stored in an anonymized manner. No photographs or video footage will be recorded of any participants. If any findings are published no references to your identity will be made and no data will be identifiable as yours.

This study presents no obvious ethical risks to any participants.

8. Participants forms (See code of practice for examples and standard consent form).

I have attached 1 information sheet/s.

I have attached 1 consent form/s

I have attached 0 combined information/consent form/s

I have attached 0 release form/s.

I have attached [1] demographics questionnaire.

I have attached [1] survey.

I have attached [1] task sheet.

I have attached [1] system usability survey.

9. If external ethical approval has been granted, please attach approval letter and tick box ☐.

There is an obligation on the lead researcher to bring to the attention of the Ethics Committee any issues with ethical implications not clearly covered by the above checklist.

Email this form and accompanying attachments as a zip file with your name and date submitted to ethics@computing.dundee.ac.uk

Information Sheet

A mobile application to bring the tradition of cookbooks to the 21st century

I would like to invite you to take part in our research study. Before you decide, I would like you to understand why I am doing the research and what it involves. I will go through the information sheet with you and answer any questions you have.

What is the application?

The application is to aims to bring the tradition of cookbooks to the 21st century via a mobile app where users can contribute and collaborate on recipe books and share with others online or keep it private between friends, family or yourself.

Do I have to take part in the study?

It is up to you whether you join the study or not. After going through this information sheet with you, if you agree to take part we will ask you to sign a consent form. You will be given a copy of each of the forms to keep. Before the study starts you will be given time to ask any questions you may have. Please also feel free to ask questions at any time throughout the study.

What happens if I wish to withdraw from the study?

You are free to withdraw from the study at any time, without giving reason and without penalty.

What will I have to do?

You will be seen by a member of the research team at the School of Computing, University of Dundee, in a user-based lab study session.

The researcher will begin by taking you through a questionnaire in order to get some general demographic information about yourself (e.g. age).

You will then complete a study. There are 3 tasks you could be asked to do as the study – an interview/focus group, user testing or an evaluation. You may be asked to do one or more of these tasks over a set time period; each task will be done on different date. The study should take no longer than an hour and breaks will be provided.

After each task we will give you a quick questionnaire which should take no longer than 10 minutes to fill out.

Once again, the aim of this research is not to test you but evaluate if my application is usable, useful and at the same level if not stronger than similar applications on the market. The timing and location of the sessions shall be discussed and agreed with you and we will inform you of how much time you will be expected to spend with the research team. Maximum time spent on the study will be an hour.

What are the possible disadvantages and risks of taking part?

There are no risks associated with this study.

What are the possible benefits of taking part?

Your involvement in the study will help understand if my product is marketable, usable and useful as well as improve the development of the product. The benefits of taking part in this study ~~is~~are that you are contributing

to the development of a product that could simplify collaborative recipe work which could have the potential to benefit many people. You are also enabling a student to gain experience in aspects of an independent software project which will be beneficial to the student in the future.

What happens at the end of the study?

The analysis of the data will be completed by the start of May 2015. The results of the study will be used in our final report and presentation. If you would like to know the outcome of the study, I will send you a copy of the report by start of May 2015.

What if there is a problem?

If you have a concern about any aspect of this study, you should speak to the lead investigator Kari McMahon, who will do her best to answer your questions [phone: 07788252604 or email: k.v.mcmahon@dundee.ac.uk]. If you remain unhappy and wish to complain formally, you can do this by speaking to Dr Janet Hughes, Dean and Head of School of Computing, University of Dundee [phone: 01382 385195 or email jzhughes@dundee.ac.uk].

Will my information be kept confidential?

Yes, all of your information will remain completely confidential. Each participant will be assigned a unique id. The id will be the sole identification used throughout the entire study to identify that the set of data has come from a single participant. Data will be stored in an anonymized manner. No photographs or video footage will be recorded of any participants. We will follow ethical and legal practice and all information about you will be handled in confidence. To ensure anonymity, personal records will only be available to the research team for the duration of the study and will not be kept together with the results of be presented in the report.

If any findings are published no references to your identity will be made and no data will be identifiable as yours.

Who has reviewed this study?

The School of Computing's Ethics Committee, which has responsibility for scrutinising all proposals for non-clinical research on humans at the University of Dundee's School of Computing, has examined the proposal and has raised no objections from the point of view of ethics.

Who can I contact in connection with this research?

This research is being lead by Kari McMahon, an undergraduate student at the University of Dundee. Her contact details are:

Kari McMahon
Email: k.v.mcmahon@dundee.ac.uk

The module is being lead by Dr Keith Edwards, a senior lecturer at the University of Dundee

Dr Keith Edwards contact details are:

Dr Keith Edwards
Email kjedwards@dundee.ac.uk
Telephone: +44 (0)1382 384463

Please feel free to contact any of these people during the study.

Thank you very much

Thank you for taking the time to read this information sheet and for considering taking part in this study.

Demographic Questionnaire

A mobile application to bring the tradition of recipe books to the 21st century

All questions are optional

1. Please specify your gender that suits you best:

Male

Female

(Circle one)

2. How old are you? _____

3. Occupation: _____

4. How many hours, on average, would you say you worked with computers in a week? _____

5. Rank how computer literate you feel you are: (Circle one)

Excellent

Good

Not Bad

Poor

Terrible

6. When using a computer, what would you mostly be using it for? (Circle one or more)

Social networking

Work Related

Leisure

Other _____

7. On a scale of 1 – 5 (1 being no interest and 5 being extremely interested) how interested are you in cooking?
(Circle One)

1

2

3

4

5

8. On a scale of 1 – 5 (1 being never and 5 being all the time) how frequently do you use cookbooks, recipe websites, cooking apps, family recipes and cooking shows for ideas or recipes when cooking? (Circle One)

1

2

3

4

5

9. Do you use recipe websites? (Circle One)

All the time Occasionally Never

10. If yes please list the recipe websites use in terms of frequency?

11. Do you use cooking or recipe apps? (Circle One)

Yes No

12. If yes please list the apps use in terms of frequency?

13. Do you own a tablet or smartphone? (Circle One)

Yes No

14. If yes please list the devices?







15. If yes do you ever use these devices in the kitchen? (Circle One)

All The Time Sometimes Never

Consent Form

A mobile application to bring the tradition of cookbooks to the 21st century

(Please initial the box)

1. I have read and understand the above information sheet dated for the above study. I have had the opportunity to consider the information, ask questions and have had these questions answered satisfactorily. 
2. I understand that my participation is voluntary and that I am free to withdraw from the study at any time without giving any reason and without penalty. 
3. I understand that my data collected during the study may be looked at by individuals from the research team where it is relevant to my taking part in this research. I give permission for these individuals to have access to my data. 
4. I understand that the data that is collected about me from the study only relates to the use of the application. 
5. I understand that all information will be kept confidential and data will be stored in an anonymized manner. No photographs or video footage will be recorded of any participants. If any findings are published no references to my identity will be made and no data will be identifiable as mine. 
6. I agree to take part in the above study. 

Name of participant:

Signature:

Date:

Name of Researcher taking Consent:

Signature:

Date:

The System Usability Scale

The System Usability Scale is a 10 item questionnaire with 5 response options.

1. I think that I would like to use this system frequently.
2. I found the system unnecessarily complex.
3. I thought the system was easy to use.
4. I think that I would need the support of a technical person to be able to use this system.
5. I found the various functions in this system were well integrated.
6. I thought there was too much inconsistency in this system.
7. I would imagine that most people would learn to use this system very quickly.
8. I found the system very cumbersome to use.
9. I felt very confident using the system.
10. I needed to learn a lot of things before I could get going with this system.

The System Usability Scale uses the following response format:

Strongly Disagree 1	2	3	4	Strongly Agree 5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Online Survey

All questions are optional

1. Please specify your gender that suits you best:

Male

Female

(Circle one)

2. How old are you? _____

3. Occupation: _____

4. How many hours, on average, would you say you worked with computers in a week? _____

5. Rank how computer literate you feel you are:

(Circle one)

Excellent

Good

Not Bad

Poor

Terrible

6. When using a computer, what would you mostly be using it for?

(Circle one or more)

Social networking

Work Related

Leisure

Other _____

7. On a scale of 1 – 5 (1 being no interest and 5 being extremely interested) how interested are you in cooking?
(Circle One)

1

2

3

4

5

8. On a scale of 1 – 5 (1 being never and 5 being all the time) how frequently do you use cookbooks, recipe websites, cooking apps, family recipes and cooking shows for ideas or recipes when cooking? (Circle One)

1

2

3

4

5

9. Do you use recipe websites? (Circle One)

Yes

No

10. If yes please list the recipe websites use in terms of frequency?

11. Do you use cooking or recipe apps? (Circle One)

Yes

No

12. If yes please list the apps use in terms of frequency?

13. Do you own a tablet or smartphone? (Circle One)

Yes

No

14. If yes please list the devices?

15. If yes do you ever use these devices in the kitchen?

16. Would you benefit from an application where you could store and view, collaborate and edit recipes within virtual cookbooks with friends, family, likeminded individuals online to maintain the tradition of cookbooks in an online world?

Yes

Possibly

No

17. Please give a reason for your response?

18. Could you rate these features in terms of usefulness in a cooking/recipe application, numbering them from 1 – 17 (1 being the most useful feature and the 17 being the least useful feature)

- Ability to convert measurements
- Ability to scale ingredients up or down
- Ability to share recipes with others via social media, email , text.
- Ability to have collaborative cookbooks where friends, family etc can add, edit and view recipes.
- Ability to print recipes and cookbooks out
- Recipes should be image and video focused.
- Ability to add photos of handwritten recipes to app.
- Ability to import recipes from URL into app.
- Ability to enlarge font when using recipes in kitchen
- Ability to view recipe full screen in kitchen
- Ability to stop screen going to sleep when in kitchen cooking and reading recipe from the website.
- Ability to add recipe or ingredients to a shopping list in app.
- Ability to set kitchen timer in the application.
- Ability to browse and view other cookbooks and recipes.
- Ability to view users profile and follow them for updates.
- Ability to review and ask questions about recipes.
- Social aspects such as following other users and seeing favorite/popular/featured cookbooks

19. Do you have any other feature suggestions for a recipe application?

Task Sheet (Subject to change based on functionality)

Please do the following tasks within the application:

- 1) Browse for a recipe of your choice.
- 2) Add a recipe (manually and/or import depends on functionality at end of project)
- 3) Edit a recipe.
- 4) Create a cookbook and try to add other users to the book so they can contribute
- 5) Edit other user's recipes
- 6) Create an account and fill out profile.
- 7) Share recipe