**Honours Project Draft**

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**Abstract**

From October 6th 2014 to the 5th of May 2015 a student, Kari McMahon developed an Android application that aims bring the tradition of recipe books to the 21st century through collaboration as her honours project. The report focusses on the software development lifecycle taken while developing the application. The report outlines the need for the application, requirement gathering, design, implementation and evaluation of the application as well as focus on the project management that goes along with this process. The report will reflect on the successes, challenges and lessons learnt from various aspects of the project.

**Introduction**

From October 6th 2014 to the 5th of May 2015 a student, Kari McMahon took part in the AC40001 individual project module at the University of Dundee. The aim of the module is for the student to gain experience in carrying out an independent software development project which is the culmination of the students years of study and relevant to your future career plans. The project chosen by Kari McMahon was an Android application named Recipes For Life which aims to bring the tradition of recipe books to the 21st century through collaboration. The motivation for the application came from research into recipe applications where she found no tools that enabled multiple people to contribute and combine recipes in shared cookbooks, the way you would with a traditional cookbook. As we move more and more into a digital age we could lose the idea and benefits of collaborative cookbooks which motivated the creation of the application. This report will explore the motivation further and focus on the software development lifecycle that was taken when developing this application. Outlining aspects such as requirement gathering, design, implementation and evaluation of the application as well as focus on the project management side of the project. The report will reflect on the successes, challenges and lessons learnt from the various aspects of the project.

**Background**

A recipe book is defined as a “book of directions explaining how to prepare and cook various kinds of foods” (Merriam-Webster, 2014). Although many successful cookbooks do not just represent directions but they represent people’s experiences and their traditions which we can identify with and get excited about often through tantalising pictures, interesting descriptions and innovative ideas (Ruhlman, 2012). Browsing through the Apple and Android application stores there is a fair share of cooking based applications such as apps that are recipe books, apps to find and store new recipes and cooking toolkits to aid your work in the kitchen. Yet none of these applications represent the way many successful recipe books are created which is through collaboration. Many of the great recipe books contain recipes that have been passed down through the generations and altered or tips have been added by friends and family testing the recipes. There is no application on the app stores that enable users to maintain a cookbook over the years collaborating with others to create personalised cookbooks between friends, families, clubs or maybe even with strangers who have similar interests. Recipe books have always enabled others to add new recipes, alterations and pass on to others and as we move more and more into a digital aid we need an application that enables us to maintain this tradition. The recognition of this sparked research into the history of cookbooks and collaborative cookbooks to see if there would be benefits to building an application based on this.

Recipes have been around for thousands of years with the earliest collection of recipes to survive in Europe being the [De Re Coquinaria](http://en.wikipedia.org/wiki/De_re_coquinaria) which dates back to the 5th century AD. Several pieces of research have looked at the history of cookbooks. For example the paper Cookbooks As A Social And Historical document – A Scottish Case Study examines whether Scottish cookbooks published between 1890 and 1990 are historical markers of major events and technological advances in society. The results from the paper validated the claim that cookbooks are a social, historic and cultural document stating that “although cookbooks might not record events in society as historical facts nevertheless their contents are often a response to historical events.” (Mitchell, 2001). In the book Eat My Words: Reading Women’s Lives Through The Cookbooks They Wrote the author examines cookery books from the US and UK from the 17th to mid-twentieth century. The book documents how women from “diverse backgrounds have found the homely cookbook a suitable place to record their stories and thoughts as well as their recipes.” With the aim to tell the untold stories of these women as well as getting others to consider cookbooks as worthy objects of serious textual analysis. The book demonstrated how recipe books told the history of that time but also how we could still maintain a connection with these recipe books are with the author making a strong point “How deep are the connections between us – a 17th century mother and myself –despite the time that has elapsed.” (Theophano, 2003) These books and papers mentioned demonstrate how cookbooks can be used as historic documents which can tell the story of the time and can be beneficial for future research and understanding of that period of time.

Since the application being developed aims to be a collaborative recipe book tool a lot of the background reading was focussed on collaborative cookbooks and the benefits of they bring. The majority of research showed collaborative cookbooks brought many benefits for example Intensifying Taste, Intensifying Identity: Collectively Through Cookbooks is a paper examining whether community cookbooks implicitly rebuke a social order that devalues women’s work by focussing on Lutheran church women. The author found that the process gave a voice to the community through building the cookbook by organizing it, discussing experiences and producing and selling them. The author found the cookbook was not just a way to raise money but also a way to recognise each of ladies knowledge and experience of cooking and share it with those who were interested. (Ferguson, 2012) Similarly in the book Recipes For Reading contains a collection of essays that demonstrate the different stories available in cookbooks and in particular community cookbooks. The book states recipes are increasingly becoming “readable with great benefit to our knowledge of women’s experiences and discourses”. The author states that cookbooks “tell stories – autobiographical in some case, historical sometimes and perhaps factious or idealized in other instances.” (Bower, 1997). Although Eat My Words was a book which focussed on the historic aspect of recipe books it made a strong point about cookbooks which summarized the benefits of community cookbooks perfectly stating that “modifications and modernizations of old recipes and the invention of new dishes in a woman’s cookbook represent the combined effort of many people. Contributions may come from past circles, sometimes from one or more cultures and while we tend to think of cooking as a delight to our senses, the relationships formed through these culinary compositions are social, cultural and economic.” (Theophano, 2003) The research into cookbooks showed that there was a possibility for this type of application in the market as it was shown through the various pieces of research that cookbooks bring people together, document history and become a way to share and bond over your experiences.

From recognising the benefits that collaborative cookbooks and cookbooks in general bring from the background research. The focus turned to researching similar products in particular apps for tablets. The research was focussed on tablets as they seem to be increasingly used more in kitchens with AllRecipes.com stating in 2013 that social referrals came from tablet devices were up 787% from 2012 to 2013 as well as an increase in page views from tablets. As well as increasing amounts of kitchen accessories for tablets such as tablet kitchen stands, covers to protect from spillages and styluses to use when cooking instead of touching the screen with dirty hands, With accessories like these making their way onto the market tablets seem the way to go when creating technology applications for the kitchen. The applications available for tablets often fall into two categories recipe discovery or recipe management with some apps merging the two categories. For example some of the most popular recipe discovery applications are All The Cooks a social cooking application available for all OS’s enables users to find new recipes, write reviews, add photos or ask questions for the recipes as well as adding your own recipes as well as neat features like shopping lists, conversion features and nutrition facts. Whereas another application is BigOven which is for all OS’s which is strong in both recipe management and recipe discovery enabling users to import recipes from websites, take images of recipes and convert to recipe as well as manually typing recipes. In BigOven users can also browse nearby or popular recipes. BigOven is a strong competitor with over 8 million downloads and won various awards. There also many other applications available on the app stores which do variations of things that have been discussed. Although there is a large amount of applications, they all lacked a collaborative tool feature enabling users to create multiple cookbooks which they could set up for others to maintain. Again this research showed there is room on the market for the project although from the research of various applications you are able to see the successes and what people like about these applications which can work in addition to the collaboration features of this project.

**Specification**

**Design**

**Implementation**

**Evaluation**

**Final Product**

**Critical Appraisal**

**Summary & Conclusion**

**Future**

**References**

**Appendix**