**CS683 Project Assignment   
Iteration 4  
Grocery Shopping  
Alaap Bharadwaj**

**Instructions**

* This document template is used for iteration 1-4 (project assignment 2 - 5). Please specify the proper iteration number in the title and the filename.
* Please name your report as CS683\_<Last Name><First Name>\_<ProjectTitle>\_IterX. It can be either a PDF or Word document.
* Please submit your source code in a zip file named CS683\_<Last Name><First Name>\_<ProjectTitle>\_IterX.zip. You should create a zip file in AS ( using the Menu item File -> Export to zip file … ).
* Please provide your feedback in the “Add comments” section when submitting your lab report. Thanks!

# 

[**Overview**](#_g6igqliy7rm) **2**

[**Requirement Analysis and Test Result**](#_9dheewbiht5g) **2**

[**Design and Implementation**](#_312k3b3li0xh) **2**

[**Project Structure**](#_hkcglxnjhrt2) **2**

[**Timeline**](#_hf7rmhk3rqx2) **2**

[**References**](#_i76cy1p2ent3) **3**

# 

# 

# Overview

(Please give an overview of your project. It should include the motivation, the purpose and the potential users of the proposed application. This can be the same as in your previous document. If you change it from the last iteration, please make a note.)

# Requirement Analysis and Testing

(For each requirement you have worked on in this iteration, please give a detailed description, completion status (completed, or partially completed) and show the testing results if completed or partially completed, such as screenshots of the application screens or log info). Please also specify if this requirement is a new requirement or a requirement you had started in previous iterations.)

For this iteration I have completed the API get requests and able to display them on the recipe list recycler list. I am able to pick various recipes and look at their information, for example, I can look at the ingredients and other stuff as well. Currently the page is just the basic page where it shows only the recipe name and ingredients used. I am in the process of making the UI look nicer for the detail page and as well the recipe list fragment. The main goal of this iteration was to complete the higher level functionality such as talking to the API and room database and then focusing on the details involved with each page.

Graphical user interface, application

Description automatically generatedChart

Description automatically generated with low confidence

The screenshots above show the recipe list page and the detail page after having applied the API functionality.

# Design and Implementation

(Please describe Android components and features you have used in this iteration to implement the above requirements in your application. For each feature you used, provide a brief description and supporting evidences, such as sample code, log info, or screenshot(s) of execution results. Please specify mapped requirements and files in your project.)

For this iteration, I have used room databases and the retrofit functionality to be able to perform a get request from an API.

Text

Description automatically generated

The code above shows the work I did to perform the API calls. This code is in the repo which enqueues the request and then completes certain tasks depending on if the request is successful or not. Some problems I ran into while implementing this was the mistake in the spelling of the api key tag for the query which ended up retrieving nothing and would create an error for the recycler list as it cannot display null values.

Now that the API is working, I have started working on storing the cart recipes. I have created a room database for the cart and have started adding the cart view model functionality into the project. After doing this I will be then calculating a grocery list for the user to be able to view.

Once all this done, for the UI I want to change up a few things to make it more pretty and more interactive. I want to put my menu options at the top of the page and create a slider which allows the user to slide between their cart and checkout page (grocery list) making it more interactive.

# Project Structure

(Please provide a screenshot(s) of your project structure, which should show all the packages, java files and resource files in your project. You should also highlight any files/packages you have changed, added/deleted in this iteration comparing with the previous iteration).

Graphical user interface, text, application, chat or text message

Description automatically generatedGraphical user interface, text, application

Description automatically generated

The screenshots above show the structure of the project now

# Timeline

(Please provide an updated status and plan to specify in which iteration each requirement is implemented (or to be implemented) using which Android features.

|  |  |  |
| --- | --- | --- |
| Iteration | Application Requirements  (E/D/O) | Android Components and Features |
| 1 | Home Page with recipes (Done) | API |
| 2 | Cart Page, displaying recipes (almost complete) | API |
| 3 | Checkout ingredients page (dependent on functionality above) | Storing all recipes that have been chosen by user, and calculating ingredients |
| 4 | Display store chosen by user with availability of the items | Display of stores, and when store chosen display closest stores to |
| 5 | Log in and sign up | Google API log in |

# 

# References

# 