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Daily Dish

Description

Do you love to cook? Or love giving your family healthy homecooked meals? How much time do you spend in the isles of the super market wondering what to buy and what to cook in the coming week? How much time do you spend everyday thinking of what to cook and wondering whether the ingredients are available?

Cooking and preparing meals is not a simple tasks as it seems. There are lot of hidden microtasks which eventually results in a good meal which often goes unnoticed like planning the meal, buying groceries, etc. Daily Dish is here to help you and make cooking easier so you can speed up the whole process and save time. Time which you earn for yourself to do whatever you love.

Daily Dish is a simple meal planner app. You tell us what you want to cook for the next week and we will give you the grocery list. You can store recipes and reuse them whenever you like. You can use the grocery list to add other items you need for the week as well.

Intended User

This app is anyone who wants their cooking simplified with a plan. The first version of this app will be implemented in English language.

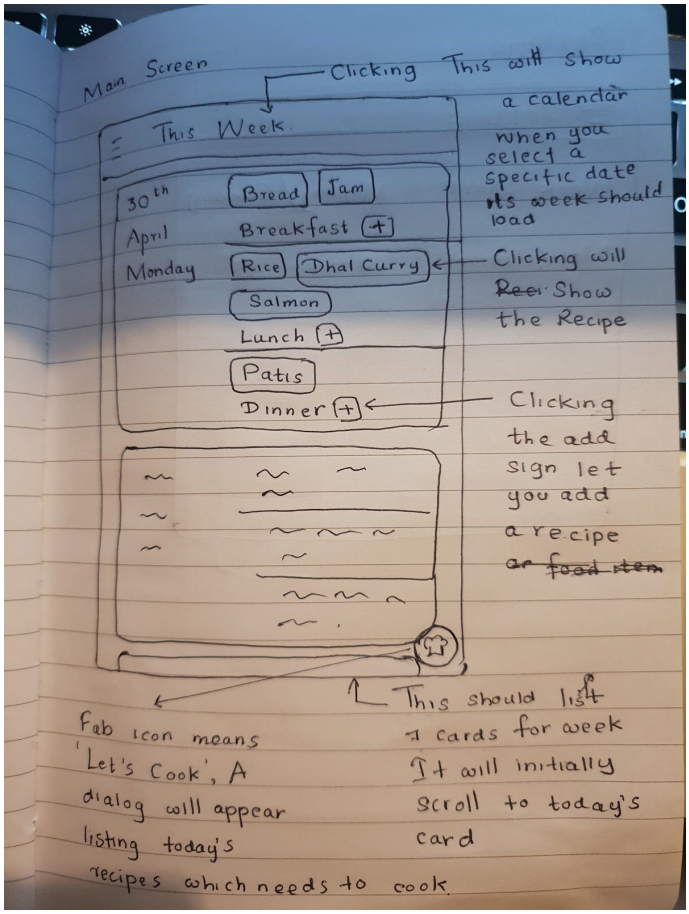
Features

The app will have the following features:

1. You can add a set of recipes (Ingredients, steps to make, Cooking time, any other extra details you want) and use this app to store your recipes.
2. You can plan your week by linking specific recipes to dates
3. You can generate a grocery list with the aggregated list of food items and their expected expiry dates

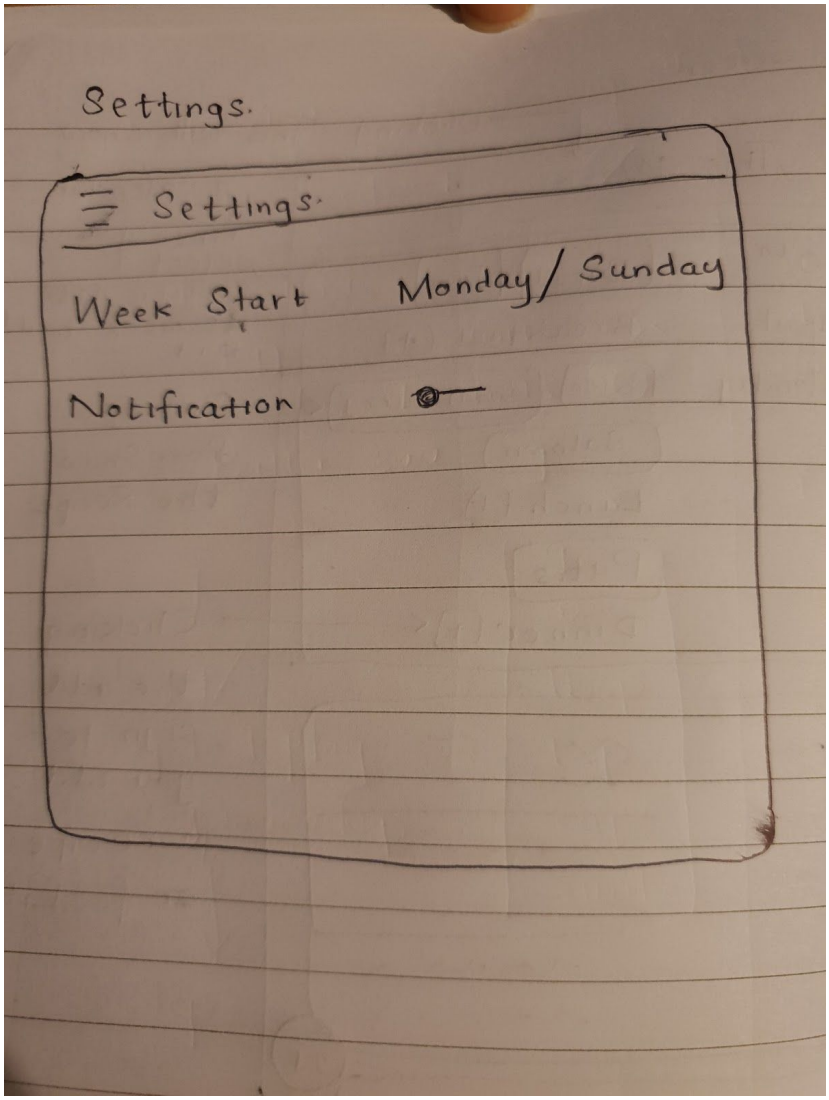
User Interface Mocks

Screen 1 - Main Screen



This is the main screen of the app. When you click the app icon from the launcher, the app start with this page. It defaults to the current week as per your phone's date and time settings. The focus will be on the card for the current date and you can scroll up and down for the other dates. If you haven't add any recipes for the dates, they will remain blank. If you want to change a recipe or add a new one you can either click on the recipe you want to change or click the add button. There is a floating action button at the right bottom corner which will give the "Let's Cook" action which will give a dialog with the today's recipe list for you to select. If you long click on a recipe, it will give you the option to delete it from the calendar view.

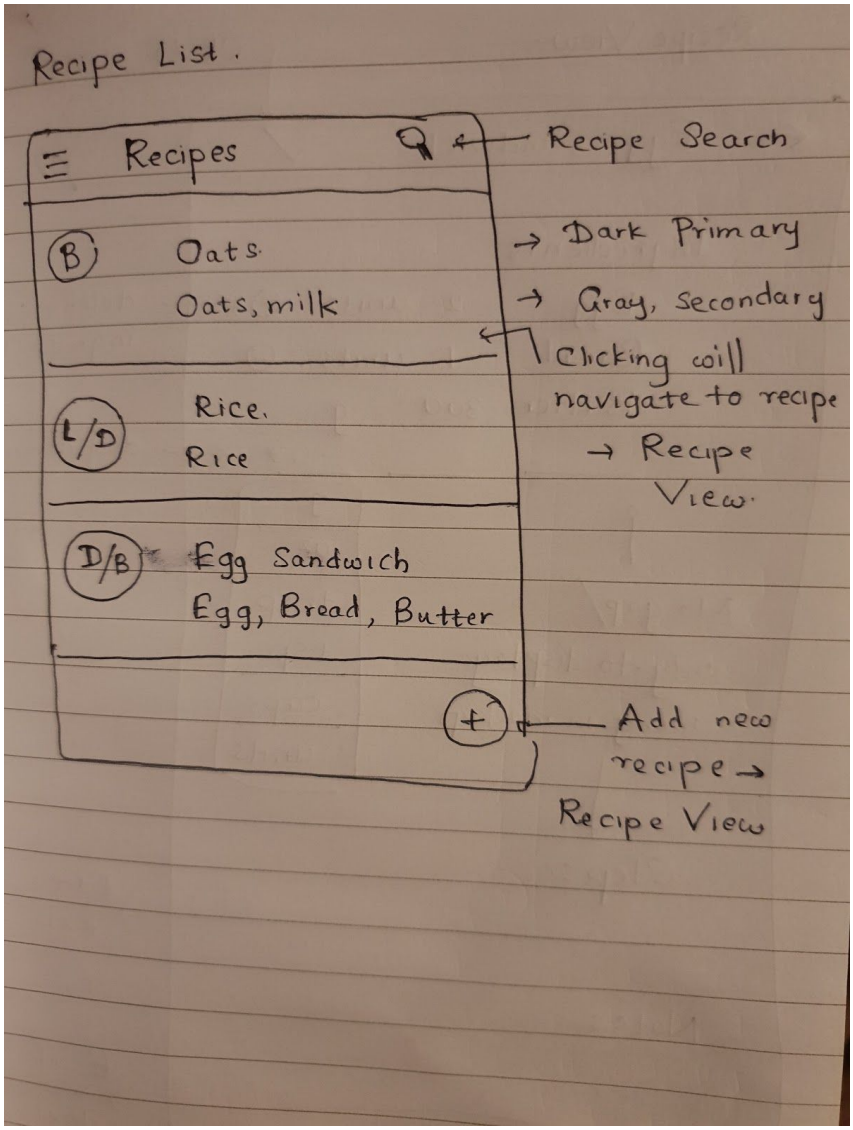
Screen 2 - Settings Screen



This is the Settings screen. There are two main settings for the app. The first one is to select your preffered week start. Some prefer Monday to Sunday weeks and some prefer Sunday to Saturday week. Your calendar (which was in the main screen will adapt to this setting.) This will be a drop down.

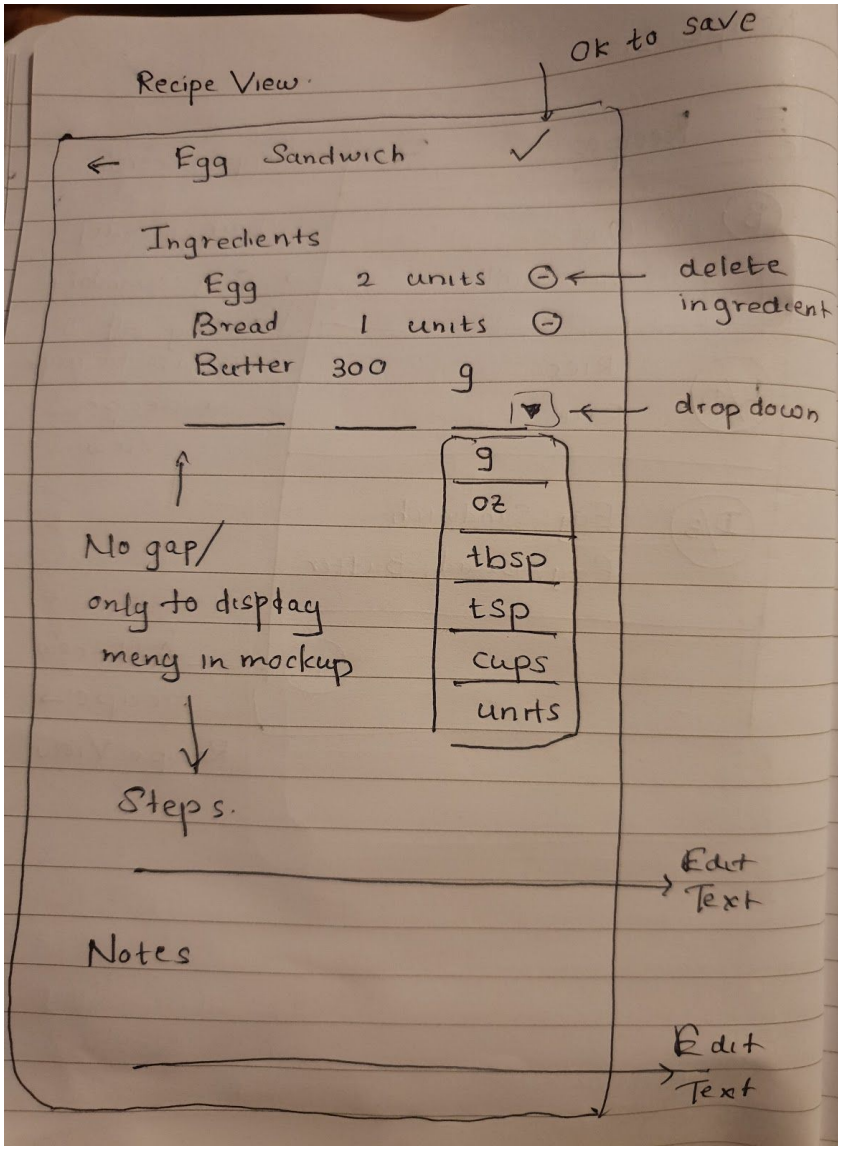
There is also a check box to select. If you don't want the app to send any reminders or notifications, you can untick this.

Screen 3 - Recipe List Screen



This is the Recipes screen. This will list down all the recipes you have. It has a search button in top right corner to make the searching for a recipe easier. Each list item has its name and ingredients shown. And at the left there is a circle icon which marks whether the recipe is suitable for breakfast, dinner, or lunch. There is a floating action button with an add sign at the right bottom to add new recipes.

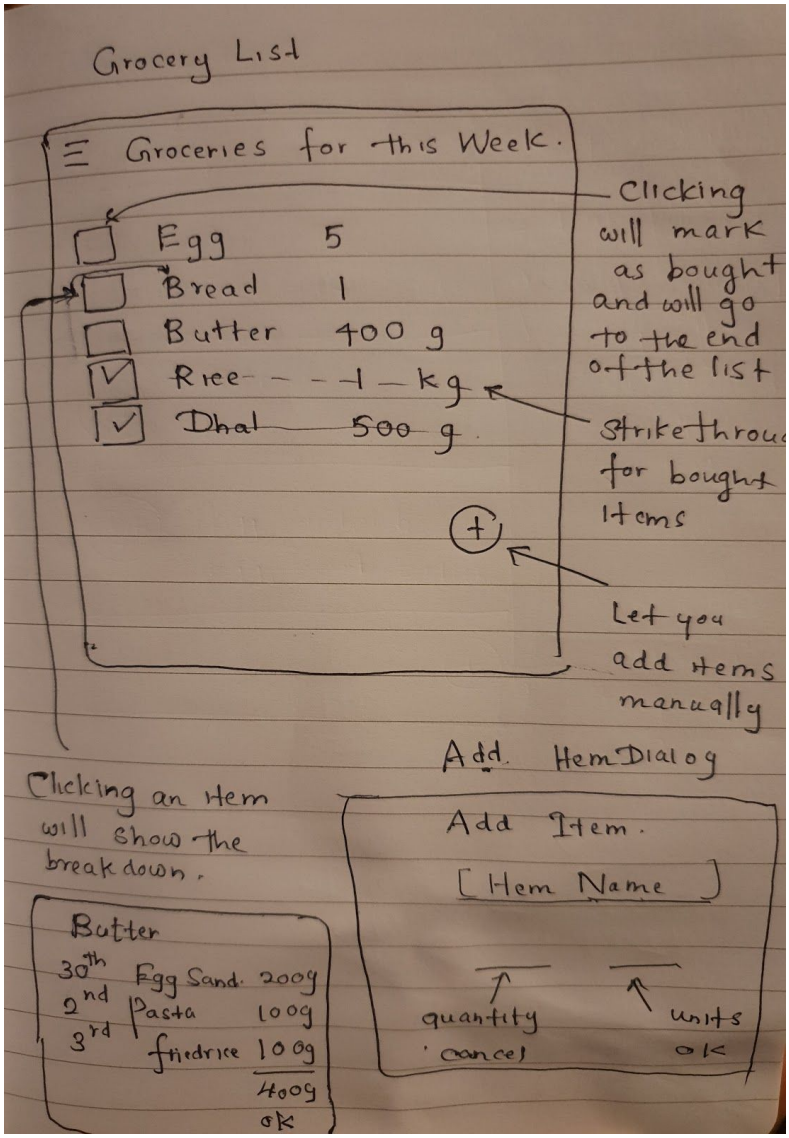
Screen 4 - Recipe View



This is the recipe view. When you select a certain recipe from the list, you will be directed to this screen. Each recipe has three main sections; ingredients, Steps and Notes. When adding ingredients you can type the ingredient name, type the quntities numerical value. Quantity unit can be selected from the drop down.

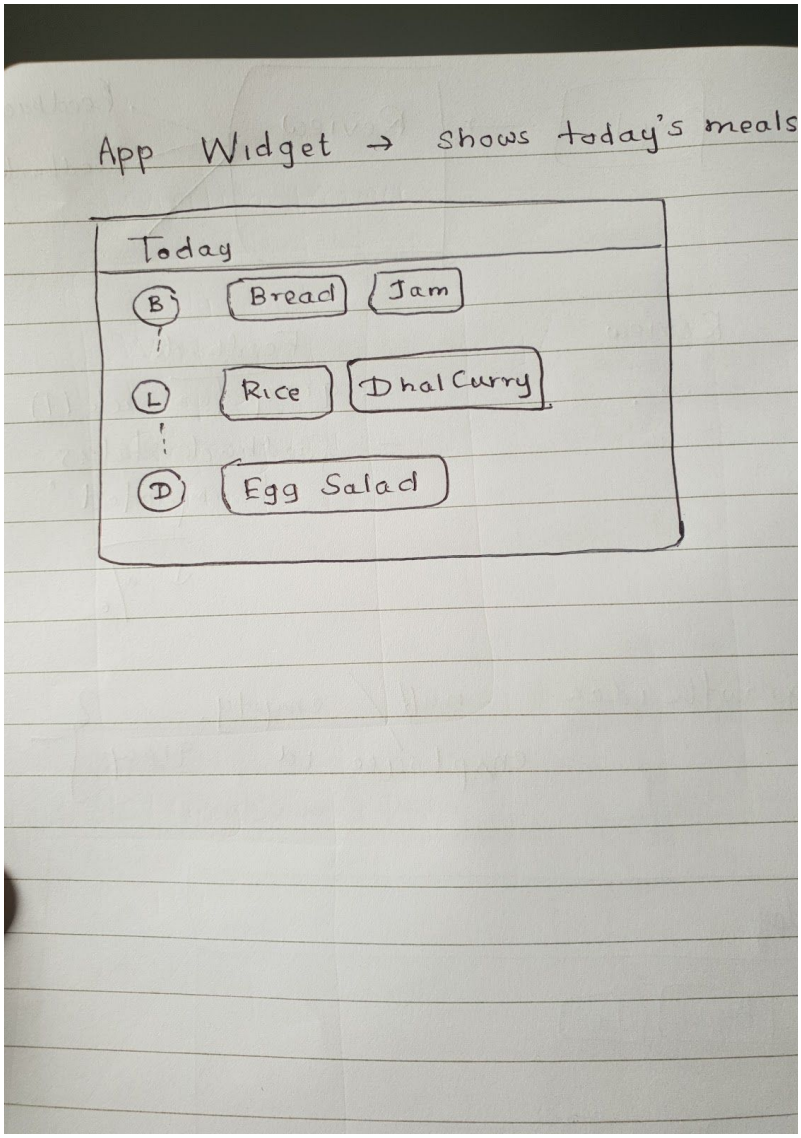
Steps and Notes are Edit texts where you can add anything.

Screen 5 - Grocery List



Grocery List page is aspecial page. It will give you the grocery list for the week based on your selections for the recipes in your calander. The app will automatically calculate the quantities. If you need to add any new items you can do that by clicking the floating action button. If you click on an item, it will show you the breakdwon of that item mentions in that week's recipes. This will be super helpful determining the expiry dates when shopping.

Screen 6 - App Widget



App's widget will show up the meals planned for today so they can be easily acessed.

Key Considerations

Implementation details

The app will be implemented in Java language using the following Android Studio and Gradle versions.

Android Studio	3.1.2
Gradle	4.7

How will your app handle assecibility?

The following actions will be taken to ensure that the app supports accessibility.

1. Label UI elements which will allow the screen readers to explain the functionalities properly.
    a. Content Descriptions for images
    b. Hints for editable elements
    c. “Label for” for views
2. Create easy to follow navigations
3. Make touch targets large
4. Provide adequeate color contrast

How will your app handle data persistence?

This is a simple app which do not need any data through a network. Hence all the data related to recipes, groceries, date mappings will be stored locally in an SQLite database.

The app will use a content provider to expose the application data to widgets.

Describe any edge or corner cases in the UX.

Capitalization: Since the user inputs data for the recipes, some data can be inconsistent with the capitalization. Imagine case where in one recipe, user adds ‘bread’ as an ingredient, and another recipe it is added as ‘Bread’. When the app creates the grocery list, these two items are considered as one. Also to keep consistency between the inputs, when user types an ingredient, the app will suggest from already entered ingredients.

Recipe Not Found Error: When a user searches a recipe which is not there, the app will suggest to add it while giving the “Recipe Not Found” dialog.

Describe any libraries you’ll be using and share your reasoning for including them.

Lombok (1.16.20) - https://projectlombok.org/ - This library will be used to simplify the coding
Butterknife (8.8.1) - http://jakewharton.github.io/butterknife/ - To make the view bindings easier
Leak Canary (1.5.4)- https://github.com/square/leakcanary - To identify any memory leakages

Describe how you will implement Google Play Services or other external services.

Google Analytics:
The following user events will be tracked

1. Visits to each activity/fragment
2. Performing a recipe search
3. Usage of navigation drawer menu
4. Viewing previous weeks
5. Usage of notes text field in Recipe Detail

Google Admob:

1. Add Banner ad on main screen
2. Add Interstitial ads when user going back from recipe details, grocery list

Describe how the app manages resources of the projects

1. Layouts
    a. When required the app will have different folders to define different layouts (eg: Landscape, Tabs, etc)
2. Colors
    a. To support the accessibility the colors will have an adequate color contrast.
    b. The color theme will be consistent throughout the app using primary and secondary color and matching variants according to material design guidelines.
    c. The colors will be defined in colors.xml resource file and referenced from there.
3. Strings
    a. All the strings in the UI will be stored in strings.xml file
4. Themes
    a. App theme extends App Compat

Next Steps: Required Tasks

Task 1: Project Setup

1. Create a launcher icon and branding assets
2. Configure libraries
3. Create the project and have an up and running application without any functionalities.

Task 2: Implement UI for Each Activity and Fragment

1. Implement UI for Main Activity
2. Implement UI for Setting Activity

3. Implement UI for Recipe List Activity
4. Implement UI for Recipe View Activity
5. Implement UI for Grocery List Activity
6. Implemet trasitions between activities

Task 3: Create a Data Model

1. Create a data model to handle recipes and grocery list
2. Create Handlers to handle sqlite database
3. Create a data model and handlers to handle sqlite database
4. Create a content provider for the data

Task 4: Implement Recipe Functionalities

1. Create recipe class
2. Implement Recipe View Functionality
3. Implement Recipe List Fuctionality
4. Implement Recipe Search using AsyncTask

Task 5: Implement Main Screen Calander Functionality

1. Add the functionality to Main Screen
2. Implement AsyncTasks to retrieve data from SQLite database

Task 6: Implement Grocery List Functionality

1. Create a grocery list functionality with in screen adding items
2. Extend the grocery list functionality handle calander updates
3. Use a loader to update the grocery list when recipes changes for the week.

Task 5: Bug fixing and Finalizing

1. Fix bugs and check whether the app works as expected.
2. Clean up code
3. Add leak canary and find any memory leaks
3. Publish app to the Google Play.