

Task:

Your task is to develop an Android app. This app uses the knowledge you have gained from labs and lectures, requiring you demonstrate you have understood them. Please review the lab and lecture materials carefully if you're not sure how to do something.

The app you are building is a cooking app. You should download the [template Android Studio project](#) to start working on your app. Please ensure you use the template – it will improve the speed and accuracy of our marking.

Definitions:

- Food item – the whole thing that you're trying to make
- Meal – breakfast, lunch or dinner
- Ingredients – one of the things that goes into a food item

Specifics:

The app retrieves food items from a REST API and displays them to users of the app in a **RecyclerView**. Users can select one of the food items to see the recipe and to see additional information about the food item, including a description of the food item, the ingredients required to cook it and the steps required to make it.

In addition to this, users should be able to set preferences for the application. These preferences allow users to set their preferred mealtime (Breakfast, Lunch or Dinner) and a preferred order for sorting based on cooking time. Where a preferred mealtime is set, food items of this meal type must appear first on all lists. (Read the API documentation carefully.) These preferences should be respected across the application and should be made persistent using **SharedPreferences**.

Users should be able to navigate using a **BottomNavigationView**. Reflect on which items it would be appropriate to have appear on this menu.

The application should be able to be rotated (do not lock it). Information on-screen should be maintained after rotation. The layout should be functional and appropriate after rotation.

Additional task (LM students only):

Your app should have 'favouriting' functionality. For each food item in your RecyclerView, there should be some way (e.g., a button) to add a food item to a list of favourite food items that is stored in SharedPreferences. If a food item is already in the favourites list then instead of a way to add it, the user should see a

way to remove it. The list of favourites should be accessible in the app from the `BottomNavigationView` menu. It should be possible to remove food items from this list and have the changes reflected in the main list of food items.