How to Use this Template

1. Make a copy [File → Make a copy...]
2. Rename this file: "**Capstone_Stage1**"
3. Replace the text in green

Submission Instructions

1. After you've completed all the sections, download this document as a PDF [File → Download as PDF]
2. Create a new GitHub repo for the capstone. Name it "**Capstone Project**"
3. Add this document to your repo. Make sure it's named "**Capstone_Stage1.pdf**"

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Calorie Countdown

Description

This app helps people log their daily calories by searching the food item across a list of 671,382 food items on the Nutritionix database.User can select their food item and save it to see how many calories they consume per day.

App shows the total calorie consumed and remaining based on the goal set by he user in his profile.
App shows the micronutrient consumed (protein, fat, carbs) on a separate tab on daily basis
App has a separate tab to show the day by day calorie consumption on a MP chart plotted against day upto a year.

Intended User

This app is everyone who wants to know what they are eating on a daily basis.

Features

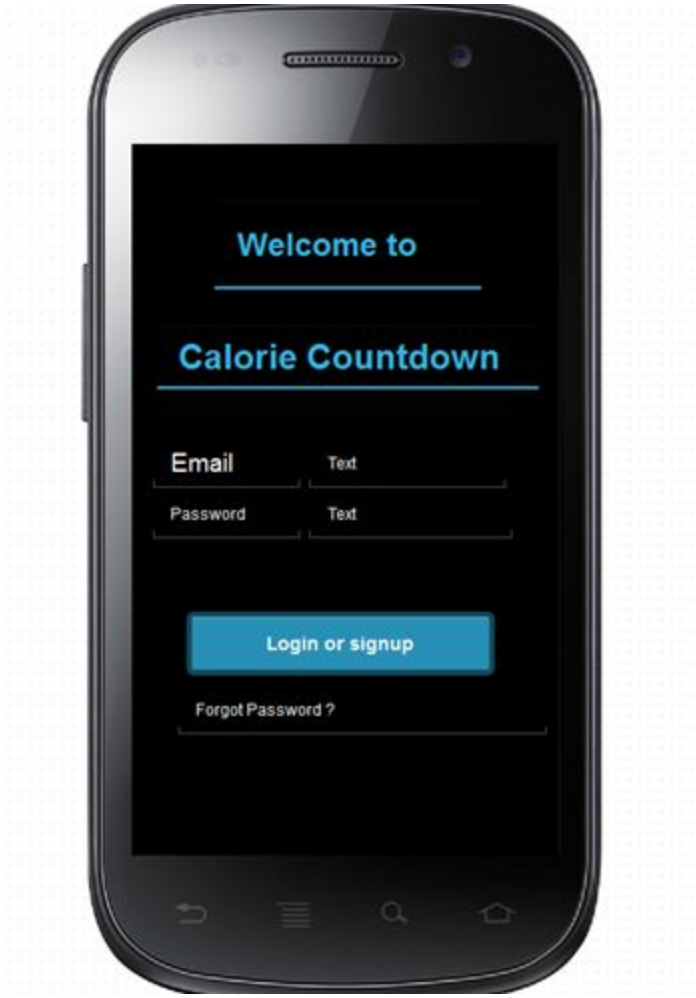
List the main features of your app. For example:

- Saves your daily food intake (including calories, protein, fat, carb)
- Shows the calories consumed and remaining on the main page
- Offer user to select food item from a vast database.
- Includes widget that shows calories remaining for the day .
- Show a progress graph with calories intake over a period of 1 year.

User Interface Mocks

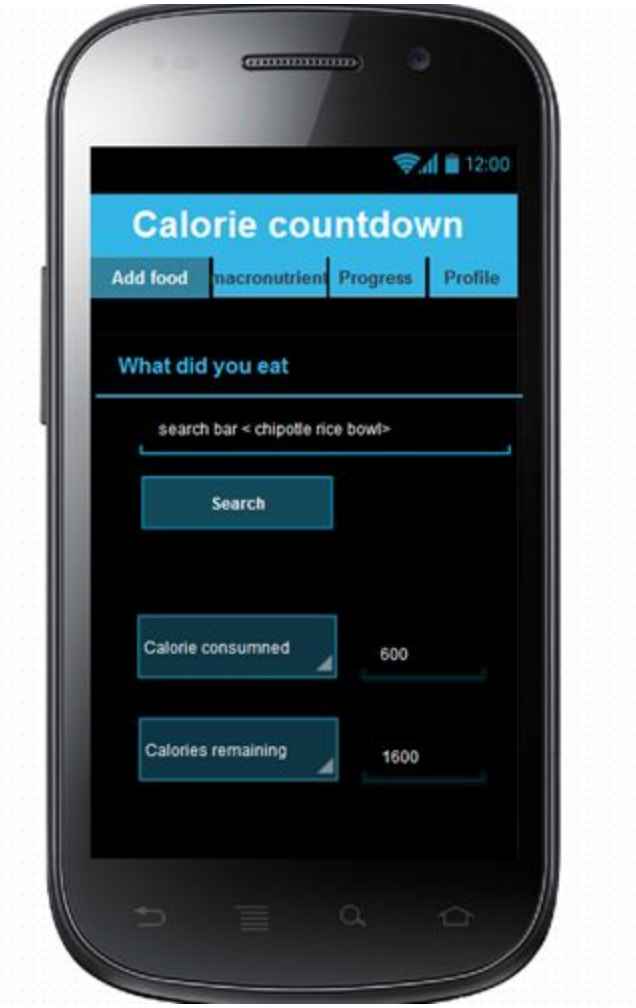
These can be created by hand (take a photo of your drawings and insert them in this flow), or using a program like Photoshop or Balsamiq.

Welcome screen



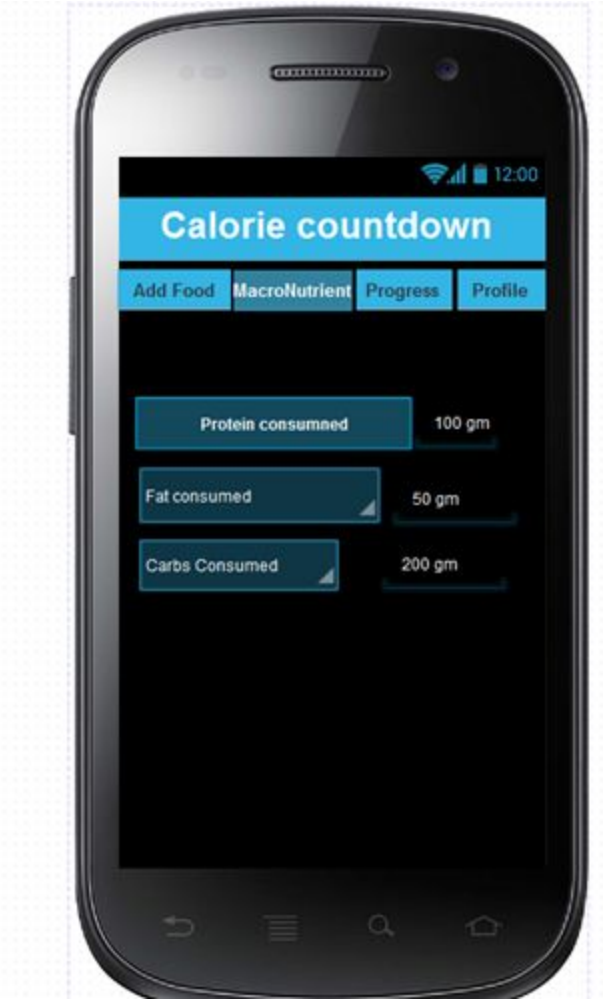
This screen will help user login or signup or reset password.If the user is existing user he will be navigated to the MainActivity screen where he can search for his food and see his existing calorie consumption.
If user is new he will be navigated to profile screen where he saved his profile for first time.
If user click on forgot password he will be taken to forgot password page and be asked a security question he saved in his profile while signup, based on that he will be allowed to enter a new password.

MainActivity screen



User will enter his food item and do a search, on click of search he will be navigated to Add food screen.This screen also shows the calorie count at real time.

Macronutrient screen

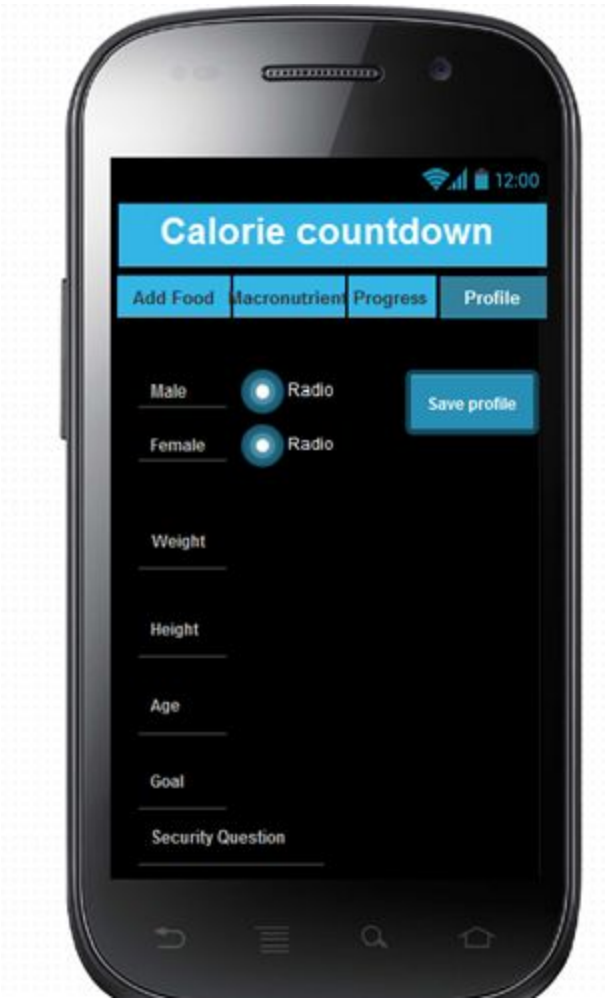


This screen shows the protein, fat, carbs eaten up till that point in time on a daily basis.

Progress screen

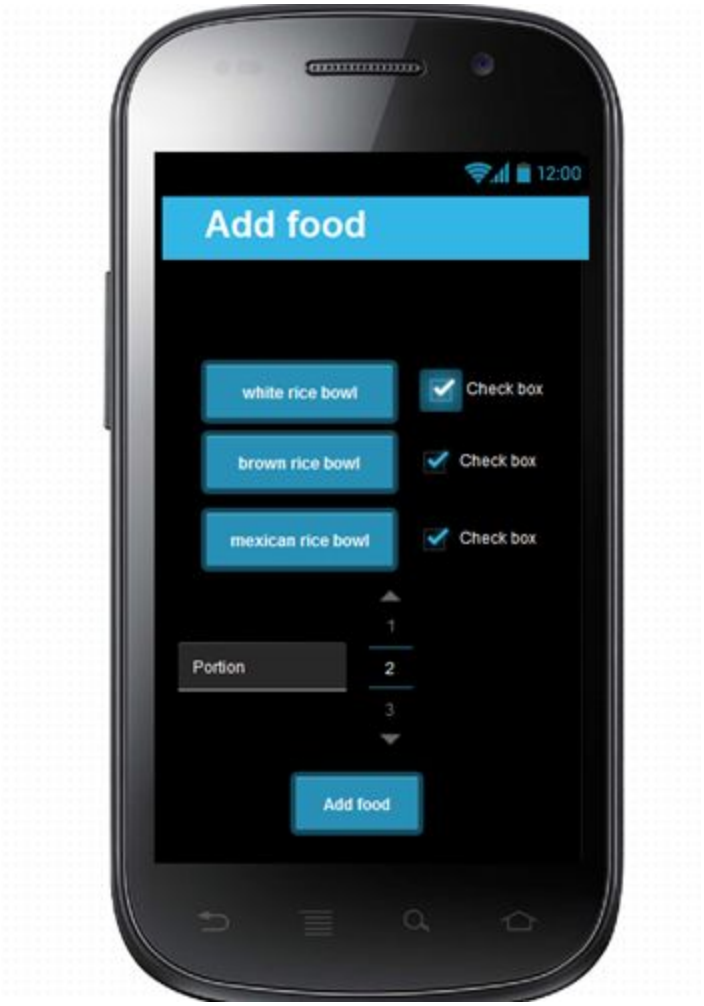
This screen shows the calories consumed by the user over a period of time.

Profile screen



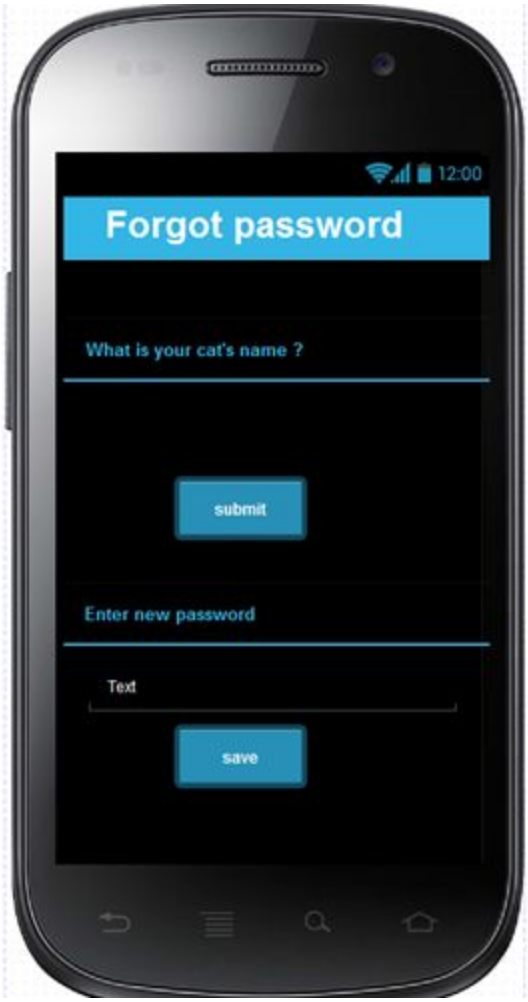
This screen captures user profile and saves it database.

Add food screen



This screen helps user select and add his food to database.

Forgot password screen



Key Considerations

How will your app handle data persistence?

App will use nutritionix.com to search food item.
Once user add the food item and select save, app will use content provider to save data to the database.Database will have two tables one for user information and one for food he consumed both tables will be linked with a primary and foreign key which will be unique per user id.

Describe any corner cases in the UX.

User can click on each tab to navigate to that screen, back button will take user to the previous screen.

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

MP chart to show calorie consumption plotted against time in year.
`com.github.PhilJay:MPAndroidChart:v2.2.5`

Describe how you will implement Google Play Services.

1- ADMOB
2- GOOGLE analytics

Next Steps: Required Tasks

This is the section where you can take the main features of your app (declared above) and decompose them into tangible technical tasks that you can complete incrementally until you have a finished app.

Task 1: Project Setup

1- Start with selecting a login activity vanilla flavour provided by the android studio.
2- Create login on https://www.nutritionix.com/
3 - Generate app id and app key

Task 2: Implement UI for Each Activity and Fragment

List the subtasks. For example:

- Modify the login page to add app name , images and forgot password option
- Create profile screen that allows user to add his weight, age, height ,gender,security question
- Create main activity page with view pager that allows navigation to sibling screen
- Create Macronutrient screen with data retrieved from database for protein, fat and carbs.

- Create Add food screen that will open once user text in food item on mainactivity and click search, This will query the nutritionix api and retrieve bunch of food item displayed in a list view with option to select item and add quantity.Click save to save it to the database.

Task 3: Implement Database

- Build Content provider to setup database tables ,
- Table 1- user profile(username, password,unique id, age, weight,goal,gender,security question , security answer.
- Table 2- User calories, date,protein, fat, carb, fooditem, item count.

Task 4: Connect to third party API

- Build url to connect to the api to retrieve data using async task
- Add snackbar to show, if no internet connection

Task 5: Add widget and signout

- Add widget to show the calorie remaining for the day.On click will take to the login page
- Add signout option in the settings .

Task 5: Add google play service

- Add admod
- Add analytics
