iREACH Mobile App
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What is iREACH
The use of Smart Phone to promote healthy living has become a major focus in today's society. Many of these mobile applications require the use of cellular data or Wi-Fi in order to find food nutritional information. Without a data connection users are required to look up the food item in question and manually input the information which is very time consuming and does not provide an accurate estimation and requires a high level of honesty. iREACH Application provides solutions to overcoming the difficulty of looking up foods and listing what and how much was eaten. Although there are other similar apps on the market already, iREACH provides quick, easy access to the USDA food database that allows users to update food faster, as well as easy to read graphs that tell you how close you are to your goal. What distinguishes iREACH and other applications from the rest are:

- Runs on all android devices.
- No data connectivity required.
- Food data is stored locally no need for server.
- Nutritional information.
- Displaying calorie consumption graphical or numerical data.
- Daily Steps.

Mobile Application
Similar apps on the android platform, iREACH provides quick, easy access to the USDA food database that allows you to update food faster, as well as easy to read graphs that tell you how close you are to your goal. What distinguishes iREACH and other applications from the rest are:

- Local database to store both food and calories for a given user.
- User set goals for both steps and calories.
- Track long graph that shows user calories per day against their goal.
- Steps counter with circular progress bar measuring percentage of goal met.

Feature Rich
iREACH is designed as a self-monitoring mobile application which users can use to help keep track of both food and steps. Listed below are the advantages for choosing iREACH over the competition.

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- Displaying calorie consumption graphical or numerical data.
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User Interface
Food Log Page:
- Diet Summary Tab contains a graphical summary of calorie intake.
- My Food Diary Tab contains a list of food entries.
- Search Foods Tab.
- Browse Foods Tab.

Fitness Page:
- iREACH Fitness Tab.
- Steps Today Tab.

User Operations:
- How to new food entry:
  1. Click + to add new food entry.
  2. Click FIND CALORIE INFO to find food calorie data.
  3. Click SEARCH FOODS Tab to search food using keyword.
  4. Click BROWSE FOOD GROUPS to search using food groups.

Database Implementation:
iREACH SQLite database is broken down to two database files. FoodSQLite.db3 and usda.sql3. An SQLite library connects the Android app to the database files.

Calories and Nutrition Info
Calories for foods items entered into the user database can be found by clicking Find Calorie Button.

Results and Impact
Currently there are Mobile apps that monitor and track user food intake as well as log exercise and fitness level. However many of these apps rely on:

- An active internet connection either Wi-Fi or cellular data.
- A subscription to access nutritional food information.
- Costly membership.

Having a dedicated database for nutritional info distinguishes iREACH from all the other mobile applications that are currently on the market.

Future work
- Cross-platform iOS and Windows phone.
- Activity tracking and monitoring.
- Saving user data to a server.
- Sharing of data with clinicians.

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Team iREACH