



# Shopping List

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Mobi Lab

## Overview

The application provides you a list of products which enables you to buy the product you want in addition to add any product for sale

## Goals

1. Make everyday shopping easier

## Architecture

### Architecture Overview

The app was built using MVC architecture. the app was divided into groups:

1. Model group contains files that represent the shape of the data.
2. View group contains files that display model data to the user
3. Controller group contains files handles the user request
4. Networking group contains files that handle network action
5. Helper group contains file that gives some facilitates like wrap some useful functionality that you're going to reuse over and over again

### Architecture Groups

#### 1- Model Group

Model group contains files that represents the shape of the data

#### 2- View Group

First screen: display list items

Second screen : displays basket items

Third screen: Adding item

#### 3- controller Group

### 1. Items Table View Controller

- a. It is responsible for getting items that have been stored in Firebase by using URL session and JSON codable.
- b. Enables the user to check the items he wants to buy. Once he press on basket button in navigation bar the selected items will be stored in Firebase by using Firebase function
- c. The user has the ability to delete the item . once he swipe the row, it will be deleted in table view and firebase database

### 2. Add Item View Controller

- a. Responsible for adding new items on the main view . once the user press on done button the item with picture - if it has been selected- will be stored in firebase in addition to will be sent directly to main screen by using delegation
  - 1. Note: instead of making multiple request every time to load the item that user created we can pass it by using delegation

### 3. Basket Table View Controller

- a. Once the user navigates to the basket screen. All items he selected will be loaded within view will appear function
- b. The user has the ability to delete the item . once he swipe the row will be deleted in table view and firebase database

## 4- Networking Group

### 1. Api Request File

- a. Contains multiple function responsible for dealing with Firebase database which enable us to maket get, post and delete by passing item that we want to make operation on
- b. Get func : it is loaded every time we request items stored in the firebase. This function was created here by URL request
- c. Post Function: it is called every time in case posting items to firebase . we use the posting Firebase function
- d. Delete function: it is called every time in case deleting items to firebase . we use here deleting Firebase function

## 2. Download Pic File

- a. Upload func: Responsible for uploading pictures to the firebase . we pass the image items with item id through it backs with image link that has been saved in firebase
- b. Download func : passing the image link we get back from upload func. The func checks first if the picture was cached or not. In case it is not cached will be downloaded

## 3. Reachability File

- a. Checking internet connection

## 5- Helper Group

### 1. Helper Function File

- a. It is always functions are created to gives us some facilitates during build the app
- b. Helper function file contains a convert to currency function which help us to convert the price we pass to currency formatting

### 2. Constants File

- a. Instead of using the same string in many different places . we use constant to have one definition which is easy referenced in many different paces