Pop ’N’ Booze
Version 1.0

Pravin Kandala
May 27, 2016.

Pop ‘N’ Booze

Objective:

Pop’ N’ Booze is an android application prototype that serves as a digital vending machine. It lets the user choose/select/buy beverages, both alcoholic and non-alcoholic. The prime motto is to actually showcase the logic of a vending machine online and in the form of an application. It contains only the beverages mentioned in the CSV (as per the requirements).

Technologies and Tools:

IDE - Android Studio IDE 2.1.1

Programming Language – Java 1.7.0_79

Libraries – Android Support – v7:23.4.0, Parse.bolts – Android v1_4_0, Parse_1_13.0’

Tested on:

Nexus 4 API 19 – Google API support and

Samsung Note 3 with Android Lollipop API 21

Limitations:

1. Works only with an Internet connection,
2. Items are not available in reality and so is the currency.

Design:

The items are displayed on the left side of the screen. This is made using **ListView.** The item description has the attributes like item name, no. of calories and the item price. The user can avail these services only after paying. The user can pay by choosing the list of options on the right side of the screen with the denominations $20, $10, $5, $1 and 25 cents.

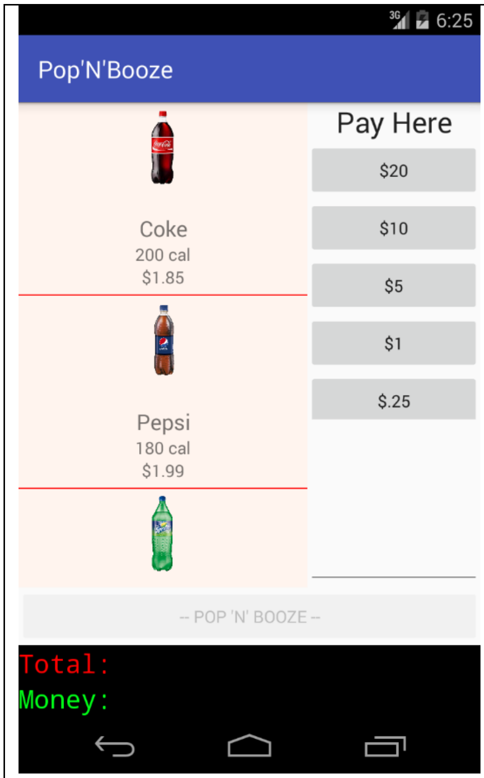
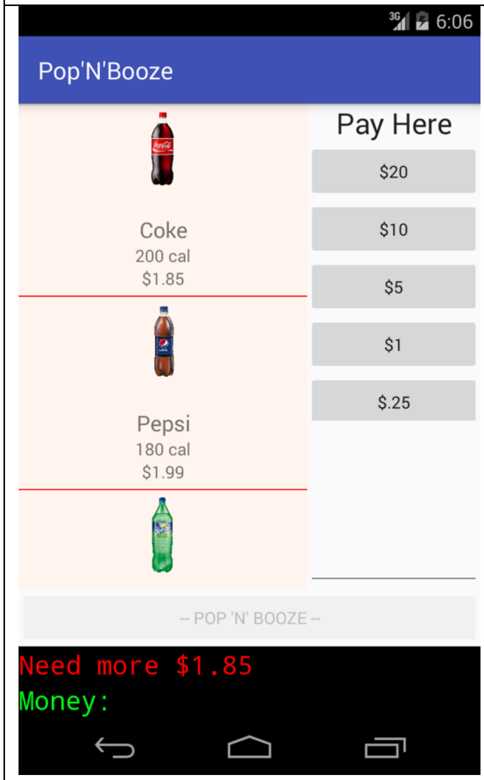
Functionality:

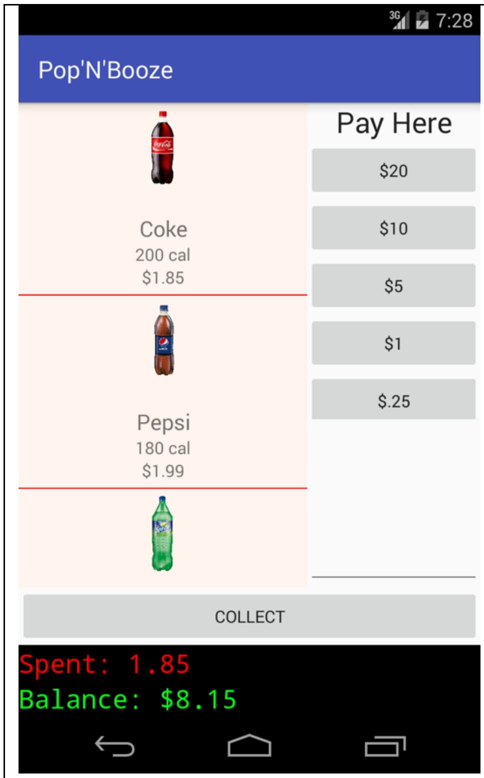
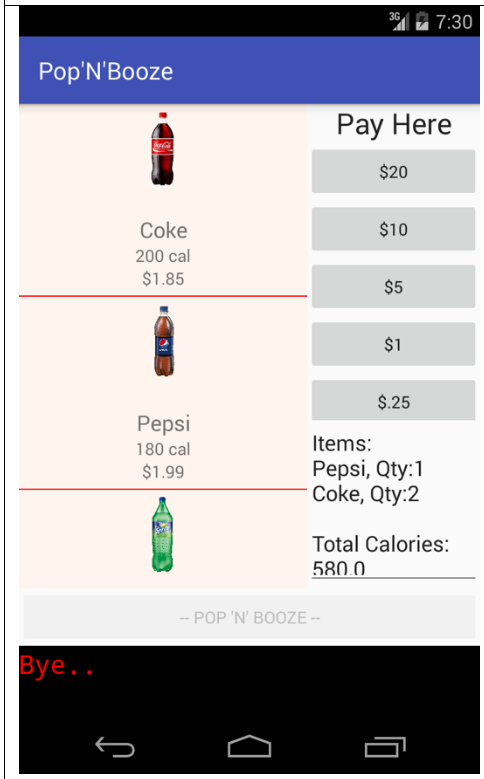
a) User inserts a monetary amount and selects the beverages he want.
b) Once the user enters the money, the user can scroll through the list to select the item.
c) Even if the user has money to buy an item and the stock is not available for that item, the app does not allow the user to select / buy the item.
d) If the stock of the item is not available, the apps provides a message that the item is out of stock.
e) Beverages once bought – the sale is final and the product is available to the user.
f) If the user tries to buy an alcoholic beverage, the app asks the user to provide an ID to derive the legal age limit so the user can buy the alcoholic beverage.
g) All the data provided into this app is through a parse.com cloud service that enables item integrity.

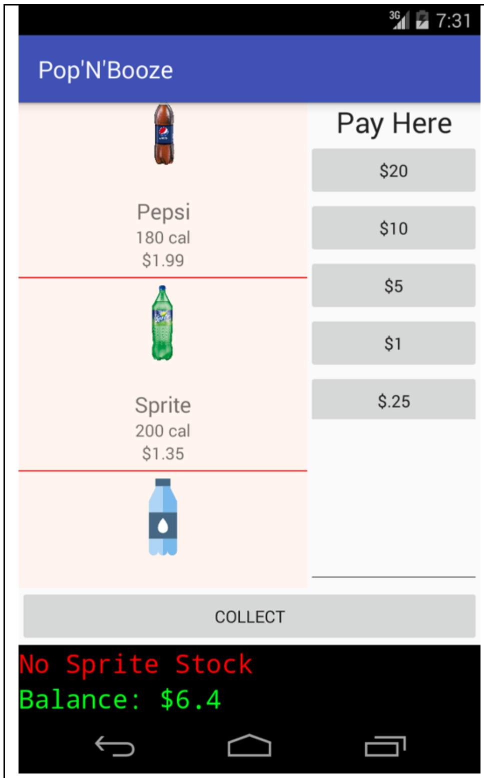
Future Enhancements:

a) Instead of updating the stock using parse website, the beverage stock can be refilled using a user interface on the app itself.
b) Include E-Commerce functionality to enable users to buy the beverages in real time.

Screenshots and description:

 6:25 Pop'N'Booze Pay Here $20 $10 $5 $1 $.25 Coke 200 cal $1.85 Pepsi 180 cal $1.99 -- POP 'N' BOOZE -- Total: Money:	**Home screen:** The home page screen displays all the items in a list view. The user can tap the denomination button on the right that adds the amount to the Money tab at the bottom. The list of beverages is scrollable from top to bottom. The user can see the beverages come from bottom as they scroll through the drinks.
 6:06 Pop'N'Booze Pay Here $20 $10 $5 $1 $.25 Coke 200 cal $1.85 Pepsi 180 cal $1.99 -- POP 'N' BOOZE -- Need more $1.85 Money:	**Action: Clicking an item without inserting money** **App Response:** Clicking an item without inserting any money prompts a message at the bottom of the screen asking the user to insert money. The amount displayed depends on the item selected by the user. Here in this example, the user clicked on the Coke item without inserting any money, thus prompting the message "Need more $1.85" which is equal to the cost of Coke.

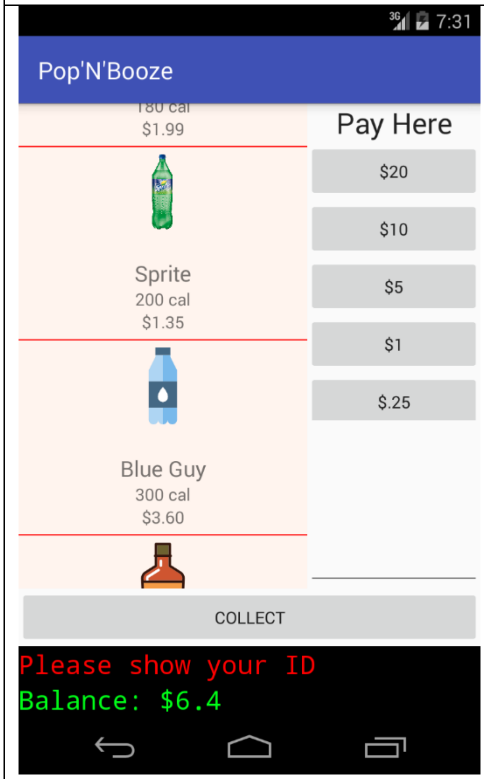
 7:28 Pop'N'Booze Pay Here $20 $10 $5 $1 $.25 Coke 200 cal $1.85 Pepsi 180 cal $1.99 COLLECT Spent: 1.85 Balance: $8.15	**Action: User inserts money to buy the beverage** **App Response:** User enters the monetary amount to buy the beverage. Here, in the example in screenshot, the user clicks the 10 dollar button and selects Coke. After the user selects Coke, you can see the messages at the bottom: Spent: 1.85 Balance: 8.15
 7:30 Pop'N'Booze Pay Here $20 $10 $5 $1 $.25 Coke 200 cal $1.85 Pepsi 180 cal $1.99 -- POP 'N' BOOZE -- Items: Pepsi, Qty:1 Coke, Qty:2 Total Calories: 580.0 Bye..	**Action:** User collects the beverages he bought. **App response:** Once the user buys all the beverages he bought, it shows the beverages list, the total quantity of the drinks that they bought and the total calorie count of the beverages. Here, in the screenshot, you can see that the user bought 1 Pepsi, 2 Coke and the total calorie count is 580 calories. 1 Pepsi (180 cal) + 2 coke (2*200 = 400 cal) = 180 + 400 = 580 calories. And the App says bye once all the transactions are completed.



```
No Sprite Stock
Balance: $6.4
```

Action: User selects an item that has no stock available.

App Response: If the user selects an item that does not have any stock left in the vending machine, the app replies saying that there is no stock available. Here, although the user has money left in the balance, since there is no sprite left, the app replies – "No Sprite Stock"

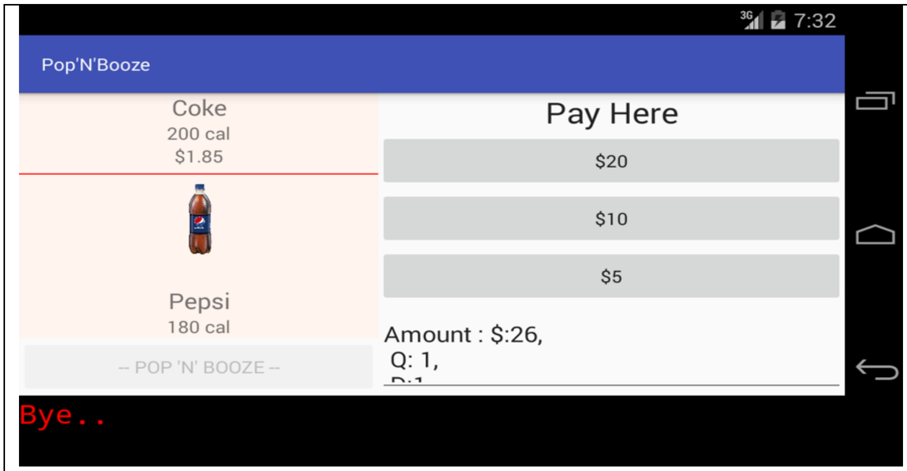


```
Please show your ID
Balance: $6.4
```

Action: User selects an alcoholic beverage

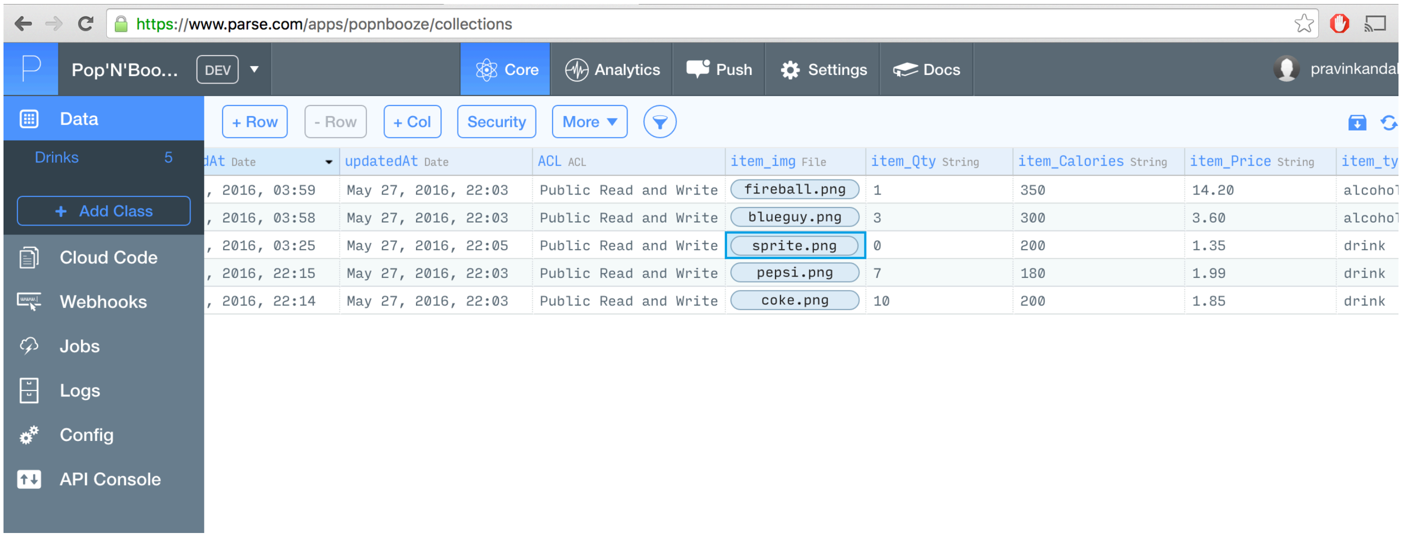
App Response: When the user selects an alcoholic beverage, the app responds by asking the user to provide an ID that looks for the Date of Birth of the user. The transaction goes ahead only if the user is of legal age limit to buy the beverage.

Here in the example screenshot – the apps says = "Show your ID" when the user selects Blue Guy.

 7:32 Pop'N'Booze Coke 200 cal $1.85 Pepsi 180 cal -- POP 'N' BOOZE -- Pay Here $20 $10 $5 Amount : $:26, Q: 1, Bye..	**Action:** User rotates the screen to use the app in a Landscape mode. **App Response:** The app rotates itself into a landscape mode and here both the Item List and the Denomination list are scrollable in a top-bottom fashion.

Screenshot to describe Parse.com website:

The following screenshot shows how the user can edit the stock details, increase or decrease the amount of items shown on the app, add or delete items to the stock, modify price and all other details



dAt Date	updatedAt Date	ACL ACL	item_img File	item_Qty String	item_Calories String	item_Price String	item_ty
, 2016, 03:59	May 27, 2016, 22:03	Public Read and Write	fireball.png	1	350	14.20	alcohol
, 2016, 03:58	May 27, 2016, 22:03	Public Read and Write	blueguy.png	3	300	3.60	alcohol
, 2016, 03:25	May 27, 2016, 22:05	Public Read and Write	sprite.png	0	200	1.35	drink
, 2016, 22:15	May 27, 2016, 22:03	Public Read and Write	pepsi.png	7	180	1.99	drink
, 2016, 22:14	May 27, 2016, 22:03	Public Read and Write	coke.png	10	200	1.85	drink