

Introduction for using the mobile app – coffee shop

This mobile app is developed based on NodeJS, express and MongoDB in the back end and Zepto, JQuery in the front end.

1. Database

The database is named as mobile, 3 collections were created for storing user accounts, production data and coupon data.

1.1 collection – users

The users collection includes “name, email, password” data. If the user allows notification, the “keys” data will be generated as “[publicKey, privateKey]” and saved into the database.

```
> db.users.find()
{ "_id" : ObjectId("5bd1f9c55035417158e7ee9f"), "name" : "john", "email" : "john@gmail.com", "password" : "1234", "keys" : [ "BK1GnOM2VIUfoNJUpW9rztYfDMTVW_KNwP KT6B5r4m7zpe041lFJidHzalRAvJ_x1pqL-dhIbiVvzRs2B6JDNVc", "7djAjeLogj6lhzli7uEtg4QUVLf84vJ4s1vtYg4wqGg" ] }
{ "_id" : ObjectId("5bd28f4b9f95e85d84ef5787"), "name" : "papa", "email" : "papa@gmail.com", "password" : "123" }
{ "_id" : ObjectId("5bd49e567dc6766c481292b6"), "name" : "sara", "email" : "sara@gmail.com", "password" : "123", "keys" : [ "BNjql5bBZ4FrTtcZ7QhBoFVGRhcoOegioh9sTii6uyOR2Iyg-Ty9UvEeSuI2LEQvYtul9efMF8CDRK6jfiHWN6k", "8P2443Ur6fuCd02rhcri73DWgaczCMOnleRdQZHSbJ8" ] }
{ "_id" : ObjectId("5bd52d8e2230cb7bbcaf70bc"), "name" : "andy", "email" : "andy@gmail.com", "password" : "123" }
{ "_id" : ObjectId("5bd530ce13e6fe74385818ae"), "name" : "serena", "email" : "serena@gmail.com", "password" : "123" }
{ "_id" : ObjectId("5bf72994a601e4394cfaea5d"), "name" : "sara3", "password" : "12345", "email" : "sara3@gmail.com", "keys" : [ "s1", "s2" ] }
```

1.2 collection – products

The products collection stores the detailed product information data including “id, imgsrc, product, price”. When showing the product list in the production list page, these data will be retrieved from database.

```

> db.products.find()
{ "_id" : ObjectId("5bd32c27498df86678e058e6"), "id" : 1, "imgsrc" : "img/1.jpg",
  "product" : "Americano", "price" : "1.89$" }
{ "_id" : ObjectId("5bd32c27498df86678e058e7"), "id" : 2, "imgsrc" : "img/2.jpg",
  "product" : "Cappuccino", "price" : "1.89$" }
{ "_id" : ObjectId("5bd32c27498df86678e058e8"), "id" : 3, "imgsrc" : "img/3.jpg",
  "product" : "Mochacho", "price" : "3.49$" }
{ "_id" : ObjectId("5bd32c27498df86678e058e9"), "id" : 4, "imgsrc" : "img/4.jpg",
  "product" : "Latte", "price" : "3.49$" }
{ "_id" : ObjectId("5bd32c27498df86678e058ea"), "id" : 5, "imgsrc" : "img/5.jpg",
  "product" : "Iced Coffee", "price" : "2.49$" }
{ "_id" : ObjectId("5bd32c27498df86678e058eb"), "id" : 6, "imgsrc" : "img/6.jpg",
  "product" : "Iced Tea", "price" : "1.99$" }
{ "_id" : ObjectId("5bd32c27498df86678e058ec"), "id" : 7, "imgsrc" : "img/7.jpg",
  "product" : "Iced Latte", "price" : "3.89$" }
{ "_id" : ObjectId("5bd32c27498df86678e058ed"), "id" : 8, "imgsrc" : "img/8.jpg",
  "product" : "Iced Mocha", "price" : "3.89$" }
{ "_id" : ObjectId("5bd32c27498df86678e058ee"), "id" : 9, "imgsrc" : "img/1.jpg",
  "product" : "Americano", "price" : "1.89$" }
{ "_id" : ObjectId("5bd32c27498df86678e058ef"), "id" : 10, "imgsrc" : "img/2.jpg",
  "product" : "Cappuccino", "price" : "1.89$" }
{ "_id" : ObjectId("5bd32c27498df86678e058f0"), "id" : 11, "imgsrc" : "img/3.jpg",
  "product" : "Mochacho", "price" : "3.49$" }
{ "_id" : ObjectId("5bd32c27498df86678e058f1"), "id" : 12, "imgsrc" : "img/4.jpg",
  "product" : "Latte", "price" : "3.49$" }
{ "_id" : ObjectId("5bd32c27498df86678e058f2"), "id" : 13, "imgsrc" : "img/5.jpg",
  "product" : "Iced Coffee", "price" : "2.49$" }
{ "_id" : ObjectId("5bd32c27498df86678e058f3"), "id" : 14, "imgsrc" : "img/6.jpg",
  "product" : "Iced Tea", "price" : "1.99$" }
{ "_id" : ObjectId("5bd32c27498df86678e058f4"), "id" : 15, "imgsrc" : "img/7.jpg",
  "product" : "Iced Latte", "price" : "3.89$" }
{ "_id" : ObjectId("5bd32c27498df86678e058f5"), "id" : 16, "imgsrc" : "img/8.jpg",
  "product" : "Iced Mocha", "price" : "3.89$" }
>

```

1.3 collection – coupons

The coupons collection stores coupon data including "id, coupon, price". When the data of "coupon" is percentage off instead of discount for certain product, the coupon has blank string as it's data. This is for easily manipulating and retrieving data from database.

```

> db.coupons.find()
{ "_id" : ObjectId("5bd3445d3c77f246306d35e8"), "id" : 1, "coupon" : "", "price" : "10% off" }
{ "_id" : ObjectId("5bd3445d3c77f246306d35e9"), "id" : 2, "coupon" : "", "price" : "15% off" }
{ "_id" : ObjectId("5bd3445d3c77f246306d35ea"), "id" : 3, "coupon" : "Iced Latte", "price" : "-1$" }
{ "_id" : ObjectId("5bd3445d3c77f246306d35eb"), "id" : 4, "coupon" : "Iced Mocha", "price" : "-1$" }
>

```

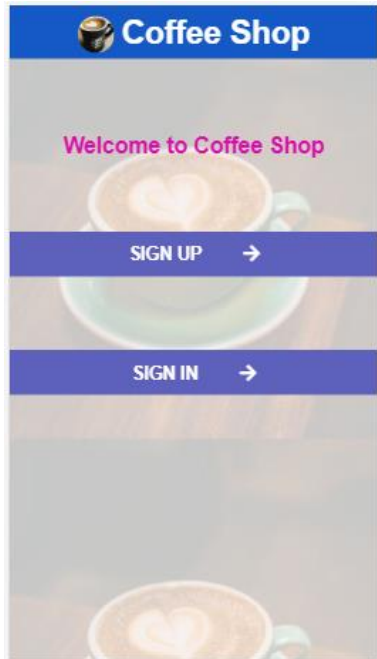
2. App pages

Page 1: first time start the app, will show this sign up / sign in page.

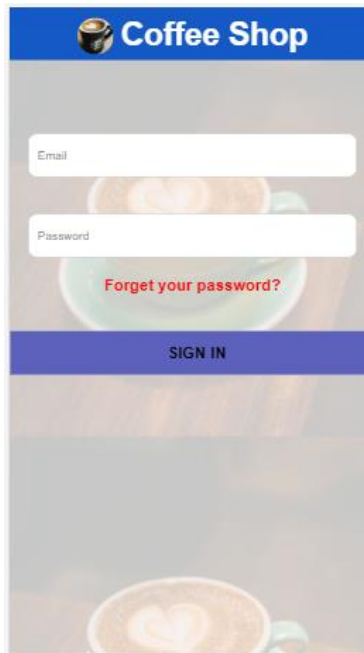
Page 2: the sign in page, the user's email and password will be compared with user data from the database ; after signing in, user name will be saved into the cookie. Next time when starting the app, the app will check the cookie to get the user name, compare this user name with database and then sign in directly with this user name.

Page 3: the sign up page, all the data from this page will be stored into the database.

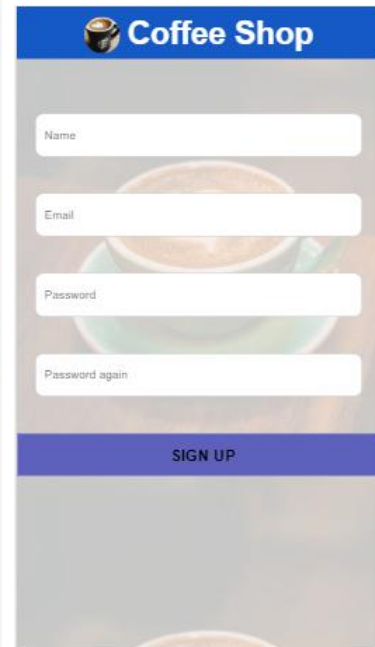
For page 2 and page 3, basic validation will be checked when filling the form.



Page 1



page 2

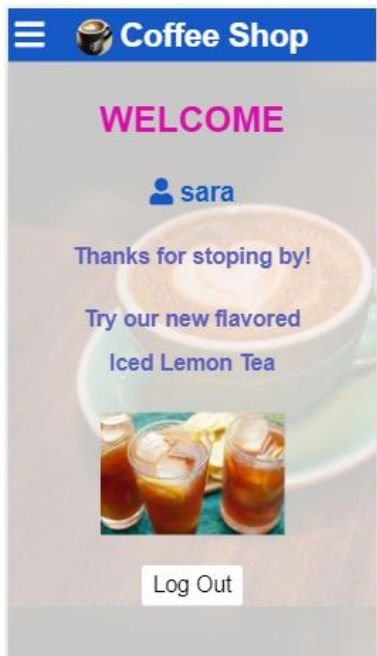


page 3

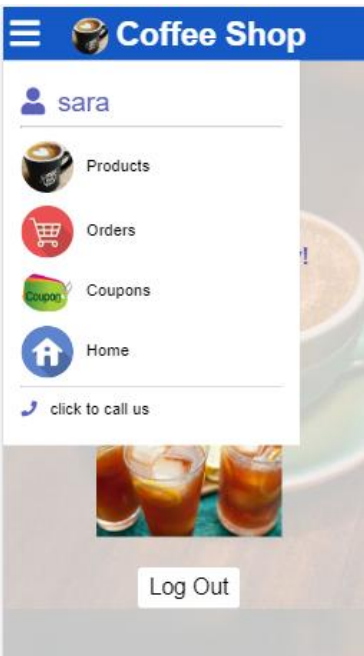
Page 4: after signing in, it will show the main page with user name and log out button.

Page 5: click the up-left three line button, will show this navigation page; the three line button also serves with toggle function. The home button is a shortcut for main page-page 4;

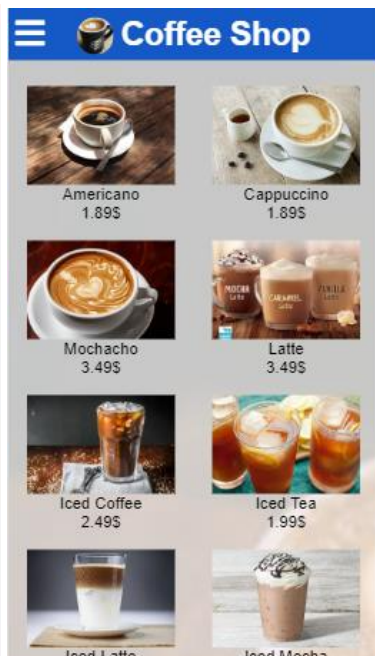
Page 6: click Products button, will show this products list page;



Page 4



Page 5

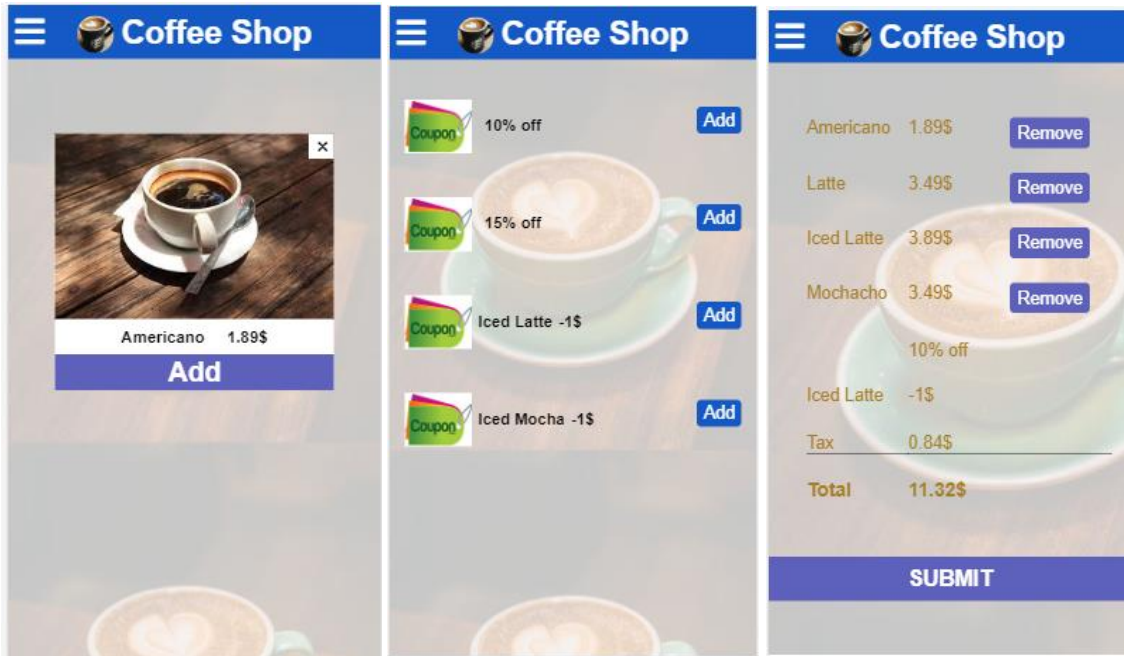


Page 6

Page 7: click on each product from page 6, it will show the single product page; from here, the product can be added to the order list.

Page 8: click coupons from the navigation page, it will show this coupon list page.

Page 9: click orders from the navigation page, it will show this order list page.



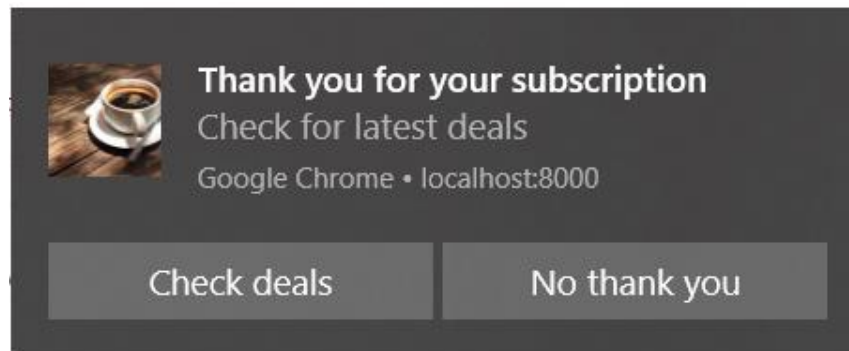
Page 7

Page 8

Page 9

3. Notification

The notification is used with web-push to create vapid keys. Every time after user logging in, if notification is allowed, it will check if user has the keys. If yes, the app will send notification to this user; if not, it will generate public key and private key and stored the keys to this user and then send notification to this user.



4. Manifest and cache

Manifest file is created with an online manifest generator. The service worker caches the static files and files retrieving from database.

More details and introduction about this app can be found from my youtube vedio:

<https://www.youtube.com/watch?v=hsiRWeieiBE&feature=youtu.be>