

For the People - Documentation and Guide

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How-To Guide

This section of the guide is intended for general users who are not familiar with software engineering principles. It will detail the main usage of the application, how to utilize the database, and points where the group feels could be improved upon in future iterations of the application. Please see [Software Information](#) Software Information for more details about the software components.

Using the App

The first thing that must be done is register. This will prompt you to provide information that can be changed later. Once this is done, you will see a page with checkboxes with zip code information. This is the filter page (Figure 1). Select as many as you would like and scroll down to click next. This will pull up the category page (Figure 2) which you can select more filters if wanted. Clicking submit will direct you to the businesses that match these filters. If you wish to view other components of the application, use the bottom navigation bar. Account will pull up an account page where you can edit your information. When selecting a business, users have the option to review or flag a business (Figure 3). Search all will display all businesses in the application (Figure 4).

For The People: Possible ZipCodes
DEBUG

30308	<input type="checkbox"/>	30337	<input type="checkbox"/>
30309	<input type="checkbox"/>	30339	<input type="checkbox"/>
30310	<input type="checkbox"/>	30340	<input type="checkbox"/>
30310	<input type="checkbox"/>	30341	<input type="checkbox"/>
30311	<input type="checkbox"/>	30342	<input type="checkbox"/>
30312	<input type="checkbox"/>	30345	<input type="checkbox"/>
30313	<input type="checkbox"/>	30354	<input type="checkbox"/>
30314	<input type="checkbox"/>	30363	<input type="checkbox"/>

Next: Select Business Type

Logout
Filters
Account
Search All

Figure 1. Zip code filters

←
For The People: Types of Businesses
DEBUG

Black	<input type="checkbox"/>		
Hispanic	<input type="checkbox"/>	Women	<input type="checkbox"/>
Asian	<input type="checkbox"/>	Non-Binary	<input type="checkbox"/>
Pacific Islander	<input type="checkbox"/>	LGBT+	<input type="checkbox"/>
Native American	<input type="checkbox"/>		
Middle Eastern	<input type="checkbox"/>		

Submit Filters

Logout
Filters
Account
Search All

Figure 2. Category Filters

←

Fabrics and Things

✓

★★★★★

0 reviews

DEBUG

Category: Women

Phone Number: 6784328899

Hours: 9AM-5PM

Address: 555 Peachtree St.

Zipcode: 30318

Website: www.fabricsandthings.com

Been Here?

Review

See something off?

FLAG

Logout

Filters

Account

Search All

Figure 3. Business Information for flagging and reviewing.

4

← Account Information

DEBUG

To edit, text or use fields.

Name
E

25

Gender
Woman

Ethnicity
Asian

☐ LGBTQ+?

Save

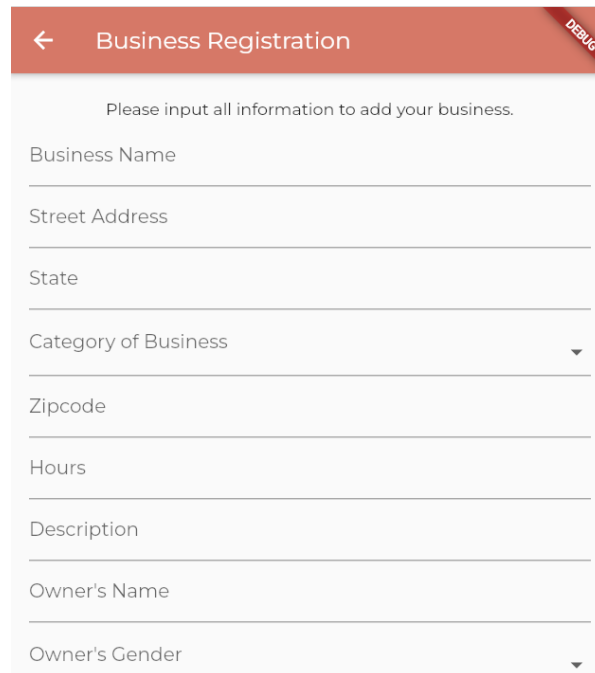
Add a Business

Logout Filters Account Search All

Figure 4. Account Page

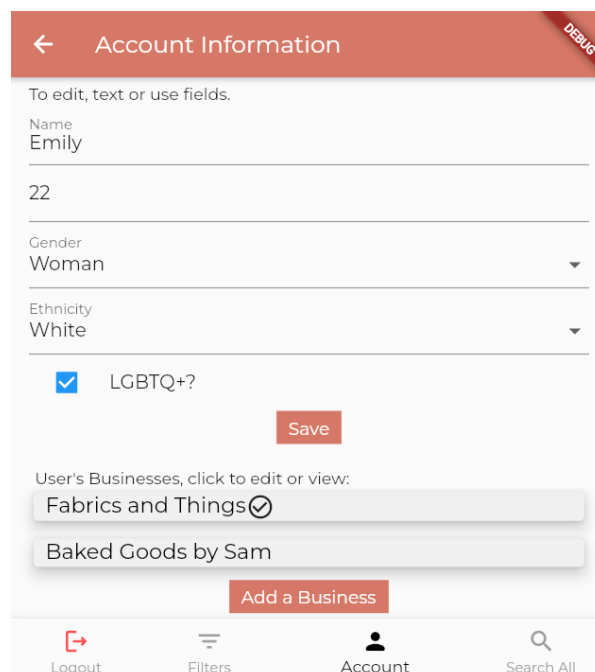
For Business Owners

Business owners can do everything described in the [Using the App](#) section. In addition to this, on the Account page (Figure 4 above), business owners can click add a business. From there a business registration page will appear (Figure 5). All information must be filled out to complete registration. Once this is done, businesses will appear in the account page and will have a verification icon once it has been verified by the admins (Figure 6). These businesses can be clicked on to edit their information



A mobile app screen for business registration. The header is red with a back arrow and the text "Business Registration". A "DEBUG" label is in the top right corner. The main content area is light gray and contains a list of input fields: "Business Name", "Street Address", "State", "Category of Business" (with a dropdown arrow), "Zipcode", "Hours", "Description", "Owner's Name", and "Owner's Gender" (with a dropdown arrow). A message "Please input all information to add your business." is at the top of the form.

Figure 5. Business Registration Page



A mobile app screen for account information. The header is red with a back arrow and the text "Account Information". A "DEBUG" label is in the top right corner. The main content area is light gray and contains a list of input fields: "Name" (with the value "Emily"), "Age" (with the value "22"), "Gender" (with the value "Woman" and a dropdown arrow), and "Ethnicity" (with the value "White" and a dropdown arrow). There is a checkbox labeled "LGBTQ+?" which is checked. A red "Save" button is below the checkbox. Below the "Save" button, there is a section titled "User's Businesses, click to edit or view:" with two items: "Fabrics and Things" (with a checkmark icon) and "Baked Goods by Sam". A red "Add a Business" button is at the bottom of this section. The bottom navigation bar has four icons: "Logout", "Filters", "Account" (selected), and "Search All".

Figure 5. Account page with one verified business and 1 unverified business

For Admins

Admin login like regular users, however they will open up to different screens. In order to set your account to admin, you can login to the firebase on the web, click Firestore Database on the left hand side as seen in Figure 6. Then select the account from the database. From there click on isAdmin and switch that to true as is seen in Figure 7.

Once an admin has successfully been selected, they can login with this account. The home page will now be the see all page. The admin can then toggle onto the flagged and deleted business pages in order to see businesses that have been flagged or deleted. As is seen in Figure 8, admins can either clear flags or delete a business. Admins can add the deleted business back to the app by clicking the Add Business button shown in Figure 9.

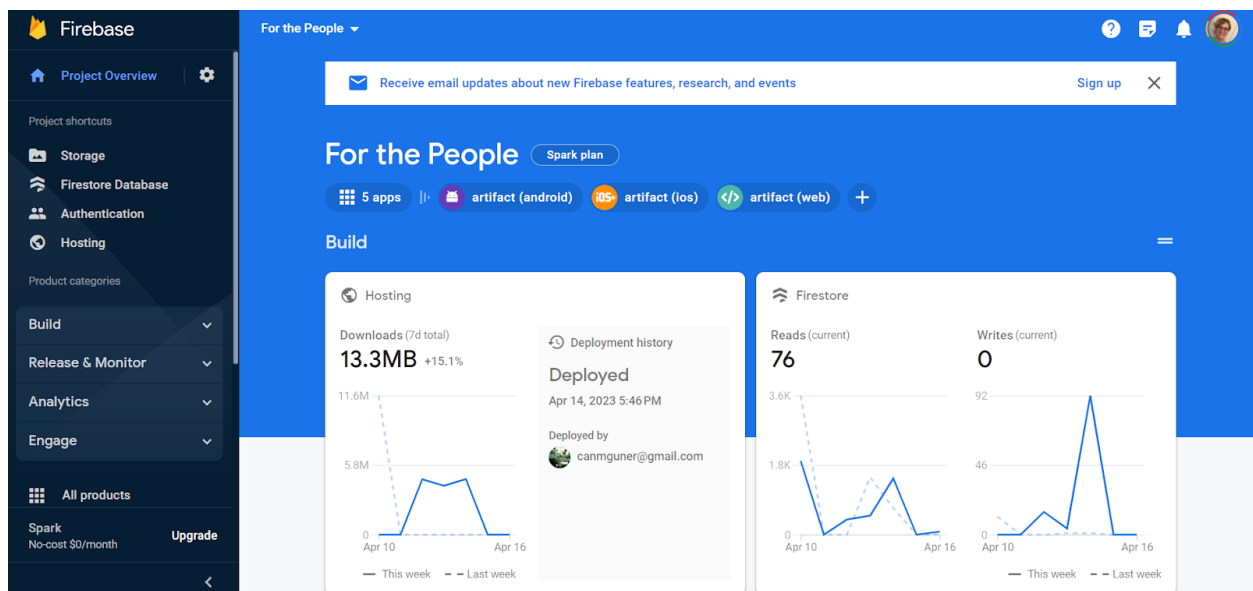


Figure 6. Firebase database

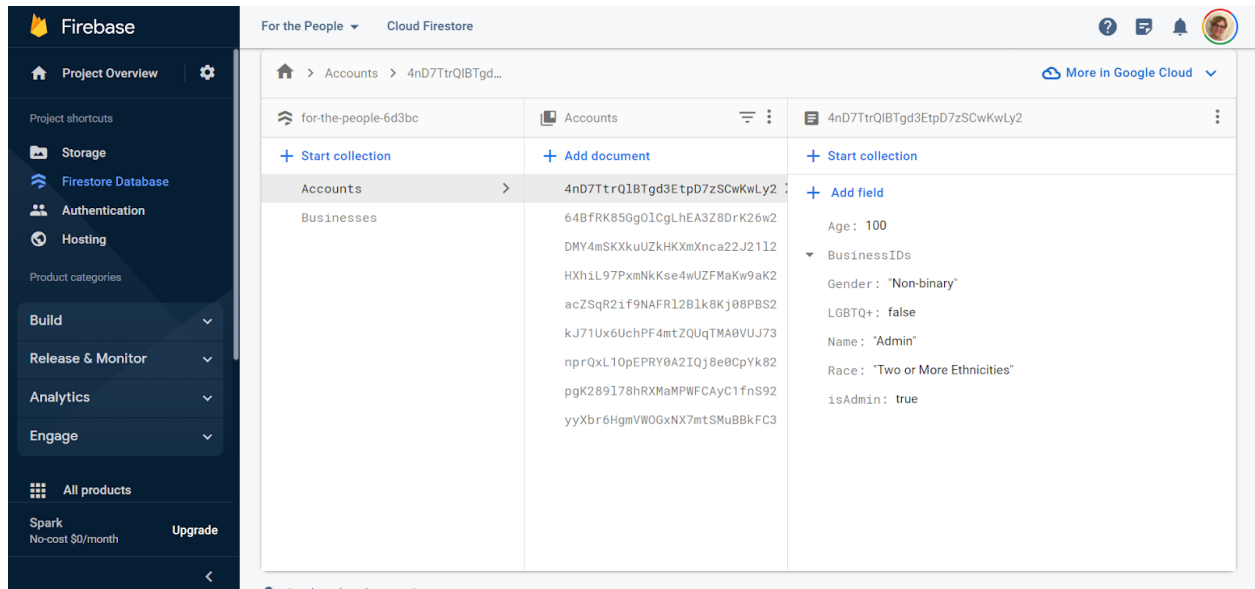


Figure 7. Accounts page

←
Test Business 1
★★★★★ 1 reviews
DEBUG

Back
Details: Test Business

Category: Women

Phone Number: 1234567890

Hours: 8-5

Address: 1234 State St NW

Zipcode: 30318

Website: testbusiness.com

Actions:

Remove Business

Clear Flags

Logout
Flagged
All
Deleted

Figure 8. Business details for admins.

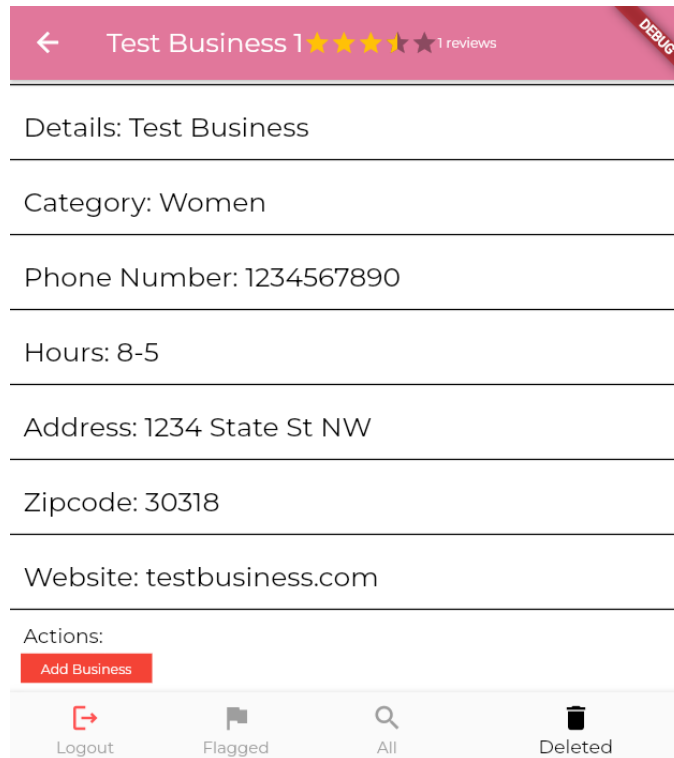


Figure 9. Deleted Business Information with the Add Business button

Software Information

Intended for those who are familiar with software engineering concepts

Please see our [Detailed Design Document](#) for more information. Ultimately, the code is set up where each page has a separate file:

Dart File	Purpose
main.dart	Starts up the application and is the first thing that comes up on the screen
login.dart	Uses firebase login screens and authentication
home.dart	This is the landing page after the user logs in. It is the zipcode filter page
category_filters.dart	Second filter page for categories
business_search.dart	Shows results of filters or when you click the search all button.
business_info.dart	Displays business information
RegistrationPage.dart	For user registration

account_page.dart	User account page
BusinessRegistrationPage.dart	For business registration
UpdateBusiness.dart	Updating of businesses
admin_business_info.dart	Displays business information on admin pages
admin_business_search.dart	For searching for flagged businesses in admin view
admin.dart	This is search all for admin
admin_deleted_businesses	Page for viewing deleted businesses
firebase_options.dart	To interface with firebase
functions.dart	Has any reusable functions. (If in any file you see Functions.<method name> look here for the method.)

Our database is Firebase, for which Mamie has access to. We are using this to store account, business, and authentication information. Changes to businesses and accounts can be made here directly as well as in the application (such as described in the [How-To Guide](#)). More information about the database can be seen in the Detailed Design document linked above.

Our code was largely written as individual members instead of a large work leading to things being copied and pasted repeatedly instead of reused. The functions file is meant to alleviate that

slightly, however this is the main issue that exists in the code base. Improvements would be making the amount of files smaller, and reusing code more frequently. More improvements are listed below.

This is for features we think future groups should implement. Adding this document for any documentation we might create at the end of the year for continuing the project:

BUGS/THINGS TO UPDATE:

1. Users can flag a business multiple times
 - a. A user can flag a business multiple times. Then, when an admin goes to review a business, it might show the business as being flagged 200 times when a single user (or bot) just spammed the flag button
2. No text limit for reports
 - a. A user has no limit on the number of characters they can type in their report of a business. This means that theoretically someone could just enter in an entire textbook and this would take up a massive amount of space on Firebase Database
3. No logo changing
 - a. Currently, a user cannot change their logo. In order to do so, you would need to implement code to delete the current logo, then upload the new one and update the “Logo” filepath.
4. No file size limit for logos
 - a. A user can currently upload an image for a logo with unlimited size. They could theoretically upload a 4 GB or even 1TB image and completely skyrocket the firebase storage/database limit.

5. When adding a business with some missing data fields and press submit the popup where you press ok is bugged and adds duplicate businesses
 - a. If it is unsuccessful, the okay popup doesn't go away and adds the unfilled information business creating multiple duplicates in the database...

THINGS TO NOTE:

1. When a business is deleted, their logo stays up on Firebase Storage. This eats into the storage limit, so you may want to consider deleting the image. In the event the business is re-added, the user would just need to reupload the picture. Or, you can leave it up and eat the cost of storage.

NEW FEATURES WANTED:

1. Moving businesses to new accounts
 - a. A company might want to switch their company to a new account. This could be because ownership changed, or the employee whose account the business was registered under got replaced. Instead of making a new account and recreating the business, they might want to keep their reviews and ratings.
 - b. This transfer could either occur via a request to the admins, who manually change the database, or through a UI page in the app.
2. Using phone's location to search for local stores
 - a. This would let people just tap a button and use their current zipcode/location. Especially helpful if someone is vacationing/visiting an area. I know from

personal experience that when going on vacation many prefer to avoid tourist traps and instead visit authentic local businesses.

3. Searching in a radius or by city

- a. Instead of just searching in your current zipcode, maybe one can search within a number of zipcodes centered around your current position? This would help people in a car who can travel to see businesses that are nearby but technically located in a different area.
- b. For example, I live a mile away from GT and I am in a different zipcode, so I would not see restaurants that I can drive to in 2 minutes unless I searched every zipcode around me.