Freeify

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App Description

Freeify is perfect for anyone who wants to give away old stuff or who wants to get free stuff. After logging in with Facebook, users can upload bundles of items they want to give away with a title, category, tag and a description of the bundle. The bundles also include images of the items that are included inside. Freeify displays the available bundles around a user based on geographic location and can also search for items by category from the search screen and click on a result to get more details about the bundle including multiple images that the user can scroll through.

Login Screen

Users log in with their Facebook accounts after clicking the "CONTINUE WITH FACEBOOK" button. If they don't have a Facebook account they can sign up for Facebook on the next page. Sign up and login buttons are not implemented currently but will be fully implemented in the future.

Bundles

Bundles are a custom class (named Box.swift) that represent the bundles that contain the free items users are willing to give away. Here's a list of the

- title: String of title for the bundle

- category: String for the category for the bundle

- tag: String with a tag for the bundle

- coverImage: UIImage which is used as the thumbnail for bundles when seen in search

- items: an array of UIImages of items in the bundle

- description: String for the description for the bundle

- location: String for location coordinates of the bundle

- owner: String for the id of the owner of the bundle

Main Page

Displays bundles that are available near the user. Users can click the icon on the top right for a map view to set radius/range. In order to expand/reduce map range, use one finger and drag away/towards the pin respectively. Zoom in and out by pinching the screen with two fingers outwards/inwards respectively.

- API Info

  - MKMap kit used for location services

Search Page

Users can search for bundles by category. Clicking the bundles opens up a page with the images from the bundle and the Messenger contact button to open Facebook Messenger and contact the owner.

- API Info

  - Firebase is used to retrieve information of bundles. Clicking on the bundle retrieves the images, the category and description from Firebase and displays it to the user in the bundle page

Messaging Page

Displays people the user has connected with on Messenger to receive or give away a bundle. A table view of all the contacts with a link to contact them on Messenger is displayed

Profile Page

Each user has a profile page where their profile picture, name and their available bundles are displayed

- Adding a bundle
    - Click the plus button on the profile page to add a bundle
        - A new screen will be displayed where users can add a thumbnail photo, a title, a category, a tag and a description of the bundle
        - Uploading a photo utilized ImagePicker where you can take a picture or select one from the Photos app
        - The location of the bundle is automatically recorded at the location of when the bundle is added
        - Click Add to finish uploading the bundle
- Deleting a bundle
    - Tap and hold any of the bundles in the profile page to cause every bundle to start a shake animation and allow users to delete a specific bundle by pressing the red minus on the top right-hand corner
        - Press Done to finish deleting

Bundle Page

Each bundle page displays all the item photos as well as the title, category, tag and description for each specific bundle. Displayed below the description of the owner of the bundle's profile picture, name and a Messenger link to contact them

- Adding items to uploaded bundle
  - Click the plus button on the bundle page to add an additional photo to the bundle. Using ImagePicker, this process will add all the photos selected and display them in the bundle page

APIs

- Facebook: Used for user login.
- Firebase: Used to store the bundles that users upload and retrieve bundle information users search for.
- MKMapkit

CocoaPods used

- Facebook-iOS-SDK
  - Integrates Facebook into the app which allows users to sign into the app with their Facebook accounts.
- Firebase
  - Allows the app to upload bundles to Firebase database and retrieve information from these bundles when needed.

- ImagePicker
    - Allows users to take a photo with their camera app or get photos from their gallery when they first add a bundle or add an item to an existing bundle.
- SwiftyJSON
    - Makes using APIs that use JSON simpler
- SVProgressHUD
    - Displays progress of ongoing tasks
- RangeRadiusMKMapView
    - Used to change the circle radius on the map
- IQKeyboardManager
    - Used for managing keyboards on our UI. Either to hide it or to move it along with text fields so that it doesn't block the fields.
- SwiftValidator
    - Used to validate text field input.

Possible errors or confusions

- **Always run the simulator on iPhone XS (NO Auto Layout)**
- Tap and hold on a bundle then release for hidden delete feature to appear.
- Tap on screen to have keyboard get out of the way.
- The user must type in every field when adding a bundle and add a cover image as well. Validation is on.
- The search works with the category ONLY. Make sure you aren't typing in the title because it doesn't filter according to the title. It filters according to the category.

- When the app loads up, make sure you set location on the Map (top right corner)

- Maps don't work accurately on the simulator so use an actual iPhone to test this.

- If you don't have a Facebook account, you need to create one before using this app.

- You can contact users using the Facebook Messenger link.

- If nothing shows up on the main screen "Bundles near you", try setting your range on maps. You can do this by clicking the map icon on the top right corner of the main screen. A map will appear with a red circle on it. Click and drag the circle outwards or inwards to set a range and press the red exit button on the top right corner to take you back to the main screen.