<div align="center">**Working Prototype Known Problems Report**</div>

Heading: Working Prototype Known Problems Report, Foodographer, Suicode, 11/29/2018

List of functions not working correctly:
- "Recommended Restaurant" has not been implemented. The "Recommend" button will dynamically direct to a new page with nothing, after click this page, will direct back to homepage.
  - Cause: didn't have time to implement recommend algorithm.
  - Fix: spent more time to make the recommended algorithm, and implement it in the app.

- The "Recommended Article" section in the Home Page does not change dynamically with respect to the user's interests and preferences, and we are .
  - Cause: Did not have time to finish the algorithm for recommended restaurants
  - Fix: Need more time to fix filter and figure out the algorithm.

- Once favorited a restaurant, the user cannot "unfavorite" it afterward; favoriting a restaurant is immutable/irreversible.
  - Cause: didn't include the functionality to check if the selected restaurant has already been favorited by the user.
  - Location of fault: *updateUserFavRestaurant* function in *RestaurantInfo.java*
  - Fix: check user's "favorite status" of the selected restaurant, and alter its state in the Database as the user clicked the "Favorite" button.

- The application only supports English. We did not implement any Translation API to provide a multi-language environment for our users.
  - Cause: lack of time and low-priority level of this function.
  - Fix: spent more time to implement other language API.

- The search bar requires both the name and the location of the restaurant to be entered to work properly. The application cannot detect user's current geographic location if the "location" field is left out blank.
  - Cause: the default feature to get the user's current location is working in the older version, but it couldn't get implemented after relevant activities were modified with fragment structure(dynamic pages).
  - Location of fault: *SearchBarFragment.java* and *Search Result*, where the input fields by the users are passed into the Yelp API.
  - Fix: transfer older version codes into the newest dynamic page structure.

- The search result restaurant card requires distance display. But the distance is hard-coded from Yelp API's getDistance() function.
  - Cause: our virtual device does not work properly on coordination. And our restaurant distance are fixed numbers in firebase.
  - Fix: Get coordinate from device. Need multiple devices with different coordination to test.

- The filter has not been implemented. The filter button only shows the selections but the "complete" button is not working.
  - Cause: the internal functions for filter has already been written to sort the list properly, but still not implemented into the newest version(dynamic page).
  - Location of fault: *Filter.java*; currently not compatible with fragment(dynamic view).
  - Fix: transfer older version codes into the newest dynamic page structure.

- Have not implemented the "Map" function, which displays nearby restaurants in a map view.
  - Cause: the map activity caused the app to crash on launching, therefore it is removed in the current version. It is still under development.

- The "Call" and "Get Direction" buttons inside the User Profile are not working.
  - Cause: lack of time, the low priority level of this function, and some difficulties with Google Map API.

- RestaurantInfo page, Profile Setting page, Sign up page, Favorites page, and Recently Viewed page of this application is not dynamic.
  - Cause: Don't have enough time to implement fragment in Android Studio to make the page dynamic.
  - Fix: Need more time to make it dynamic.

- All searches in search page only work when "search" icon is clicked. Clicking the whole line does not work. After clicking "search" icon, the whole line becomes clickable.
  - Cause: Do not make the whole search views clickable.
  - Fix: Set whole search views clickable.
- In homepage, when restaurant is clicked, not all restaurant informations can be viewed in the app, some restaurant will direct to wikipedia page.
  - Cause: Do not implement right restaurant web link to each restaurant.
  - Fix: Implement right link for each restaurant.

- For all restaurants, the review number in first cardview of RestaurantInfo page only shows 15 reviews.
  - Cause: Review number is not loaded from Firebase, instead it is hardcoded on RestaurantInfo page. We do not have review number in our Firebase.
  - Fix: Make review number field in our Firebase. Erase the hard code and load the information from Firebase and show it there

- In search result page, all restaurants have the same tags.
  - Cause: Tags are hardcoded. Should be loaded from our Firebase.
  - Fix: Make fields that contains tag for each restaurant. Erase the hard code and load information from Firebase.

- In RestaurantInfo page and UserProfile page, review time is not dynamic.
  - Cause: Review time is not loaded from Firebase, instead it is hardcoded. We do not have timestamp field in our Firebase.
  - Fix: Make review time field in our Firebase. Erase the hard code and load the information from Firebase and show it there

- All restaurant images for the same restaurant are the same.
  - Cause: We used yelp API instead upload images for different restaurants by ourselves
  - Fix: Upload the image url of restaurants in our Firebase

- The are no purpose of using "Interests" anymore.
  - Cause: user's interest supposed to be used in recommend restaurant algorithm for each user. There is no time to finish the recommend restaurant algorithm.
  - Fix: available to user but user cannot see their interest in the app.

- When user "favorite" a restaurant, the color of bookmark does not change
  - Cause: Did not implement the feature that makes color of bookmark dynamic
  - Fix: Implement the feature in RestaurantInfo.java

- "More time information" section in RestaurantInfo page does not show more time information of the restaurant
  - Cause: Did not implement business time field for each restaurant in our Firebase
  - Fix: Make business time field for restaurant in our Firebase.

- On RestaurantInfo page, rate restaurant does not change actual ratings in Firebase.

- ○ Cause: We want to make ratings and review unchangeable unless user press "WRITE REVIEW" button to go to "post review" section.
- ○ Fix: Either erase rating section on RestaurantInfo or make rating button work.

- Only can post/add reviews. Cannot edit/delete review.
  - ○ Cause: Did not implement edit/delete feature.
  - ○ Fix: Need more time to learn and implement them.

- "Recently Viewed" does not display restaurant in time order.
  - ○ Cause: Firebase alphabetically orders them.
  - ○ Fix: make restaurant in arraylist recentViewRestaurantList order in time

- After we press search, keyboard is displayed on search result.

- "Favorites" does not display restaurant in time order.
  - ○ Cause: Firebase alphabetically orders them.
  - ○ Fix: make restaurant in arraylist favoriteRestaurantList order in time

- User is not able to add limit tags to the restaurant
  - ○ Cause: Do not have time to implement this feature .
  - ○ Fix: Need more time to work on this feature.

- In account setting page, any changes to expertise and interest will be updated. Even if user does not make any change and leave it blank, they will be updated to be blank in user profile.
  - ○ Cause: App assumes you always update the expertise and interest

- In signup page, the dynamic page will be disappear if the user click back to login. The dynamic page is a page that can display a different view.
  - ○ Cause: forget to add dynamic page when user click back to login
  - ○ Fix: Create a connection that goes back to userlogin dynamic page when user click back to login.

- In search result, the address of some restaurants contains "null".
  - ○ Cause: In yelp API, some restaurants have address1, address2, and etc. Some of them do not. We loaded all addresses. For those who only have 1 address line, they display null for other address lines.
  - ○ Fix: add some conditions to check

- In profile page, user can't see which restaurant that they comment before after clicking reviews.
    - Cause: do not have time to set up the onlicker that connect restaurantimfo page
    - Fix: setup onclick method that able to connect restaurantinfo page