

PercolatePGH Software Requirements

1. Product Overview and Summary

PercolatePGH is a social networking application for android in which users can search for coffee shops in the Pittsburgh area, view the menu, view an information sheet about types of coffee-based drinks, review drinks they have tried, be recommended drinks based on a questionnaire, and view a feed of their followed profiles recent activity.

The app will provide information about the local stores such as hours of operation, location addresses, drinks and their associated prices. The user will be able to view a more detailed view on the type of drinks chosen from the menu by selecting a menu item. Drink ratings will be tracked for each drink.

2. Information Description

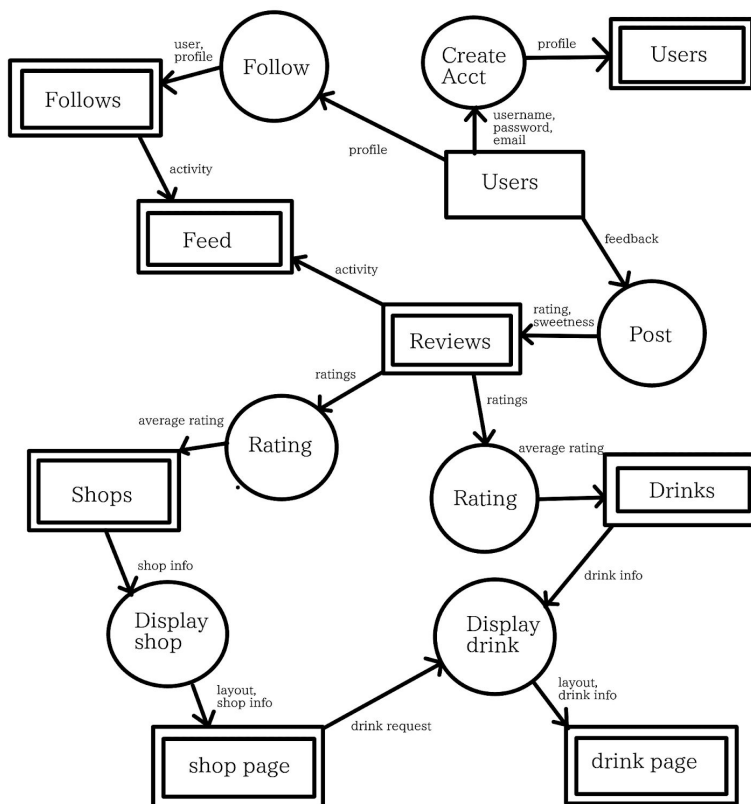
2.1. User interface

General:

The screen will have a sidebar menu which can be expanded to view options like logout, search, browse shops, drink info, profiles, and feed. The default home page of the app will be the feed view. Error messages will be displayed at the top of the screen. Buttons like “follow” and “unfollow” will toggle appropriately.


See User Manual for more detailed descriptions of the functions.


2.2. High level data flow diagram





3. Functional Description

3.1. Functions

IC Card	IC Name: User feed
Description: user activity feed Interaction Pattern:	
	
Quiet State	
My Task: display users activity for followed users	
Time Critical Condition:	
Name of Other IC: User Data	
Message to Other IC:	
Other IC's Task: retrieve selected user data	
Card 1 of 1 (If necessary please use several IC cards to describe an IC)	

IC Card	IC Name: Questionnaire
Description: User drink preference questionnaire Interaction Pattern:	
	
Quiet State	
My Task: gather users drink preferences and store in databases	
Time Critical Condition: provide recommendations	
Name of Other IC:	
Message to Other IC:	
Other IC's Task:	
Card 1 of 1 (If necessary please use several IC cards to describe an IC)	

IC Card	IC Name: Account Logout
Description: Log Out of user account Interaction Pattern:	
	
By Myself no Interaction	
My Task: log user out of account	
Time Critical Condition: login has to happen before	
Name of Other IC:	
Message to Other IC:	
Other IC's Task:	
Card 1 of 1 (If necessary please use several IC cards to describe an IC)	

IC Card	IC Name: User Creation
Description: User creates account Interaction Pattern:	
	
By Myself no Interaction	
My Task: create user account in database	
Time Critical Condition: before login & access	
Name of Other IC:	
Message to Other IC:	
Other IC's Task:	
Card 1 of 1 (If necessary please use several IC cards to describe an IC)	

IC Card

IC Name: Drink Page

Description: Information for drink

Interaction Pattern:



By Myself with Interaction

My Task: display drink information how it is made and the ratios of coffee, water, milk, other, and the overall sweetness level

Time Critical Condition:

Name of Other IC:

Message to Other IC:

Other IC's Task:

Card 1 of 1 (If necessary please use several IC cards to describe an IC)

IC Card

IC Name: Post

Description: Rate a store or drink

Interaction Pattern:



By Myself with Interaction

My Task: Update feed and Store/User data

Time Critical Condition:

Name of Other IC: Feed

Message to Other IC: Update with new post

Other IC's Task:

Card 1 of 1 (If necessary please use several IC cards to describe an IC)

IC Card

IC Name: Store page

Description: Display information for Store

Interaction Pattern:



By Myself with Interaction

My Task: display store name, hours, address, and average rating of the store

Time Critical Condition:

Name of Other IC:

Message to Other IC:

Other IC's Task:

Card 1 of 1 (If necessary please use several IC cards to describe an IC)

IC Card

IC Name: Unfollow

Description: Stop following other users

Interaction Pattern:



By Myself with Interaction

My Task: Remove link to other users data

Time Critical Condition: Must have Followed other user

Name of Other IC: User Data

Message to Other IC: Stop sending other user data

Other IC's Task:

Card 1 of 1 (If necessary please use several IC cards to describe an IC)

IC Card

IC Name: User Data

Description: Get Data from User Database
Interaction Pattern:



By Myself with Interaction

My Task: Retrieve data from database
Time Critical Condition: Database must have data
Name of Other IC: Database
Message to Other IC:
Other IC's Task:
Card 1 of 1 (If necessary please use several IC cards to describe an IC)

IC Card

IC Name: Search

Description: Search the databases for value
Interaction Pattern:



By Others with Interaction

My Task: Request data from databases
Time Critical Condition:
Name of Other IC: User Data; Shop Data; Drink Data
Message to Other IC: Request data
Other IC's Task: return data
Card 1 of 1 (If necessary please use several IC cards to describe an IC)

IC Card

IC Name: Follow other users

Description: be able to follow other users
Interaction Pattern:



By Others with Interaction

My Task: show followed users activity in feed
Time Critical Condition:
Name of Other IC: User Data
Message to Other IC:
Other IC's Task: retrieve selected user data
Card 1 of 1 (If necessary please use several IC cards to describe an IC)

IC Card

IC Name: Login

Description: User Login
Interaction Pattern:



By Others with Interaction

My Task: Allow User to enter login with username and password or create account
Time Critical Condition:
Name of Other IC: User Data
Message to Other IC: Request user data
Other IC's Task: Return user data
Card 1 of 1 (If necessary please use several IC cards to describe an IC)

3.2. Processing narrative

Account Creation:

User opens app and is presented with login or create account. Upon selecting create account, they will be asked to provide username, password, private/public and valid email. If the user submits invalid information (username taken, invalid chars, invalid email), an error message will display and they will be asked to edit the given information. If the information is valid, an account will be created and the user will be directed to a preference questionnaire.

Preference Questionnaire:

Upon entry, user will be presented with a series of statements to which they can respond between 1-5, 5 being strongly agree, and 1 being strongly disagree. This data will be stored alongside account information.

Login:

When user opens app, they are presented with login or create account. Upon selecting login, they will be directed to a login screen where they will provide username and password. Upon invalid information, (invalid username and pass combination), an error message reading: the information provided did not match our systems. Please try again. Upon successful login, they will be sent to the home screen (feed) of the application and their account info will be loaded into the session.

Logout:

The user will open the sidebar menu and select "Logout" from the menu. This will remove their data from the session and log them out.

Search:

From the search option on the menu, the user will be directed to a screen allowing them to select what they would like to search for among these options: profile, shop, drink
The user will be able to search for only public profiles using usernames. The search will display the results and the user will select the desired result.

Profile will redirect to the profile page.

Shop will redirect to the shop info page.

Drink will redirect to the drink info page.

Follow:

From another user's profile (if the user is public), the user will be able to select "Follow". This will add that profile to the user's list of followed profiles and their activity will be included in the user's feed. Button updated to "Unfollow"

Unfollow:

From another user's profile (if the user is following the profile), the user will be able to select "Unfollow" to remove that profile from their list of followed profiles and their activity will be excluded from the feed.

Feed:

From the home page, the user will be able to view their feed. The feed will include recent activities from their own and followed accounts.

Post:

From the information page for a shop or drink, the user will select the 'post' option and select a store. They will be asked to provide a rating/review. This will update their list of

visited stores/purchased drinks with the date and time. A store review will update the store's rating.

Store page:

From a store's information page, the user will be able to view the menu, hours, address, and average rating of the store. The user can select a drink from the menu to view details on that drink. From this page they will have the option to post (like a check-in). The menu will also have a section with info on the milk, flavor syrup, and sweetener options. The menu will also include ratings for individual drinks from the post functionality.

Back to store:

If a drink selected from store, have back button that when selected will redirect the user to the store they came from.

Drink page:

Provide information on the selected drink including how it is made and the ratios of coffee/water/milk/other, and the overall sweetness level.

Recommendations [Future]:

The user will be able to select the recommendations page from the sidebar menu. When selected the system will provide a drink and store recommendation based on the preference questionnaire and the user's history and drink ratings.

3.3. Design constraints

Login:

Only be able to have one account on a device

Search:

Only search by the name field of each object: username, drink name, store name

Follow:

Can only follow users, not others (stores or drinks). Only follow public profiles.

Feed:

Can only view activity of those profiles you follow, and your own activity

Post:

Can't use tags or post photos [currently], comments are limited to

Store page:

Doesn't display every size/price, will not take into account holidays/special circumstances for

Back to store:

Can only go back to the most recently viewed store

Drink page:

Only displays general information about the drink type, not the individual store's drink