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
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
Description: User drink preference questionnaire
Interaction Pattern:

Quiet State
My Task: gather user's 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
Description: Log Out of user account
Interaction Pattern:

Quiet State
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
Description: User creates account
Interaction Pattern:

Quiet State
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

Description: Information for drink
Interaction Pattern:

By Myself with Interaction

My Task: display drink information how it is made and the ratio 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

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

Description: Display Information for Store
Interaction Pattern:

By Myself with Interaction

My Task: display store menu, 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

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 users data
Other IC's Task:
Card 1 of 1 (If necessary please use several IC cards to describe an IC)
IC Card

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: Other IC's Task
Card 1 of 1 (if necessary please use several IC cards to describe an IC)

IC Card

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

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

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