

# GroupBuy

## Team: 4for4

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## Executive Summary

More and more people now prefer to shop online. However, sometimes people need to spend a lot of money on shipping or they need to buy something they don't need to reach the lowest cost for free shipping. If people group together and purchase online, they can share shipping cost or easily reach the lowest cost for free shipping. Therefore, we decide to design a platform called GroupBuy for them to buy online together.

## Detailed Project Description

Users of GroupBuy will sign in and use their account name and password to login into the system. User can post sharepoint which has three type of things: the merchant they want to buy from, the things they want to buy and the shipping cost or the lowest free shipping purchase. Other users who want to purchase at same merchant can follow the sharepoint. Each sharepoint can support up to 5 different users to buy together. Platform also offers a group chat function for the users to discuss. JUnit Test will be used for unit testing. Log4j2 will be used for authentication. MongoDB is used to store persistent data.

## Technologies

Development Framework/APIs: Swing/JavaFX, Morphia

Static Analysis tool: PMD, Checkstyle

Logging/Testing tools: JUnit Test, Log4j2

Data Store: NoSQL (MongoDB)

## User Stories

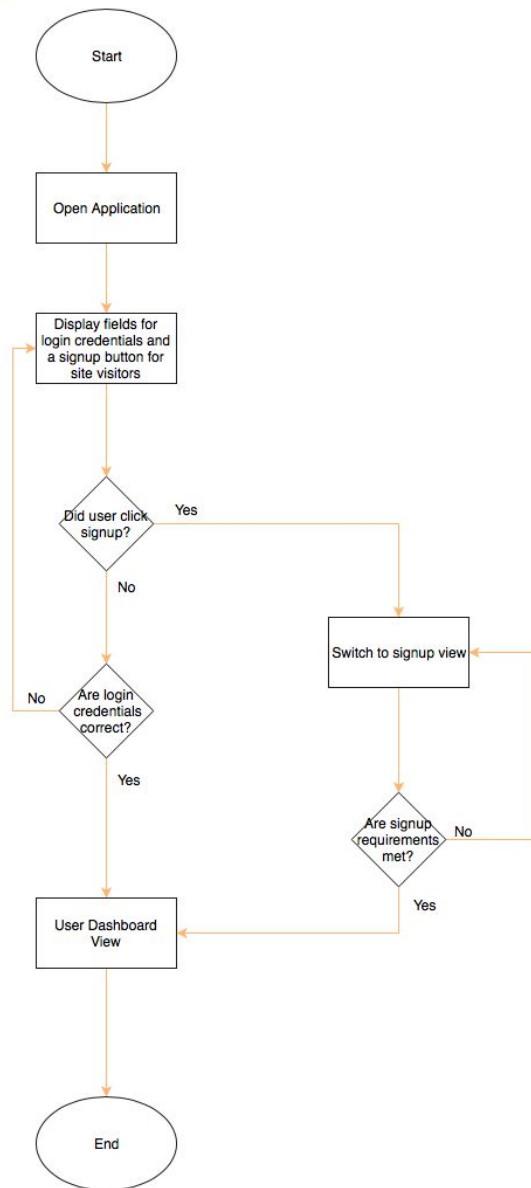
1. As a college student, I want to see the items that my friends are buying online so that I can join their conversation and become more popular. My conditions of satisfaction are:
  - I can view other people's posts on the platform, such as a group purchase request for a pair of trendy shoes.

- I can leave a “like” on my friend’s post
  - I can leave a comment on what my friend wants to purchase
2. As an online customer who wants to save money, I want to buy some items online with people who want to purchase in the same online store so that we can share the shipping cost or reach the lowest requirement for free shipping. My conditions of satisfaction are:
- I can post my needs and create a group purchase request on GroupBuy including the store I want to buy from, the item(s) I want to buy, the lowest purchase amount to be eligible for free shipping, and my address.
  - Anyone who is interested in the request can join me.
  - Once the desired number of people has reached, which I have specified when I created the request, I can close my post and proceed to purchase with my group.
3. As a potential customer who want to buy items with my neighbors, I can see who is around me so that I can invite them to join the request that I created. My conditions of satisfaction are:
- I can see the people who are around me within half a mile.
  - I can submit an invite to nearby people.
  - I can confirm/reject other people’s requests.

## **Usage Scenarios**

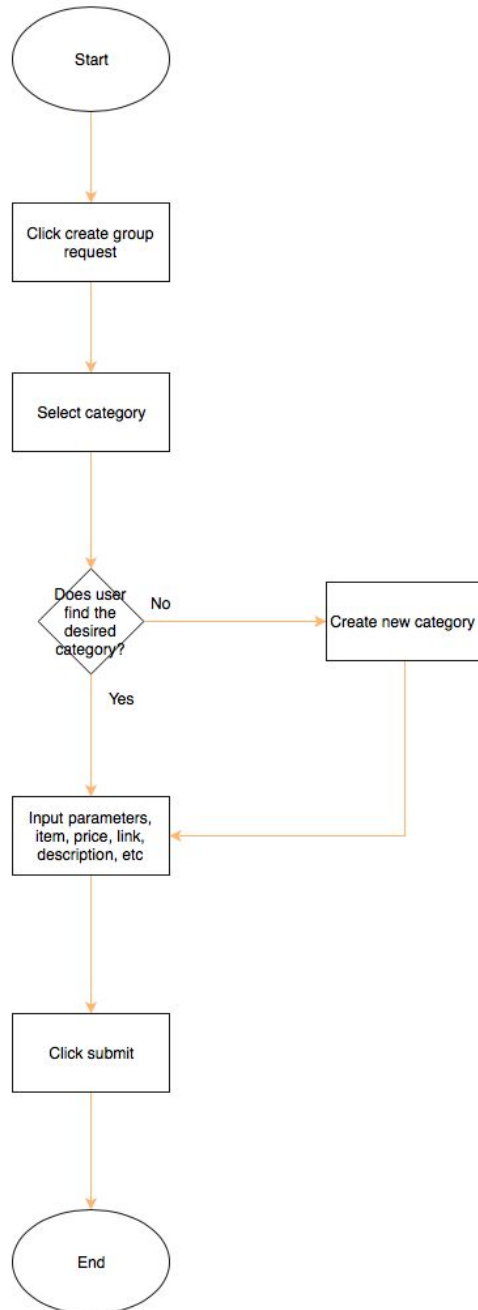
1. User signup/login

## User Signup/Login



2. Create a new group request

### Start a new group request



### 3. Join existing group

## Join an existing group

