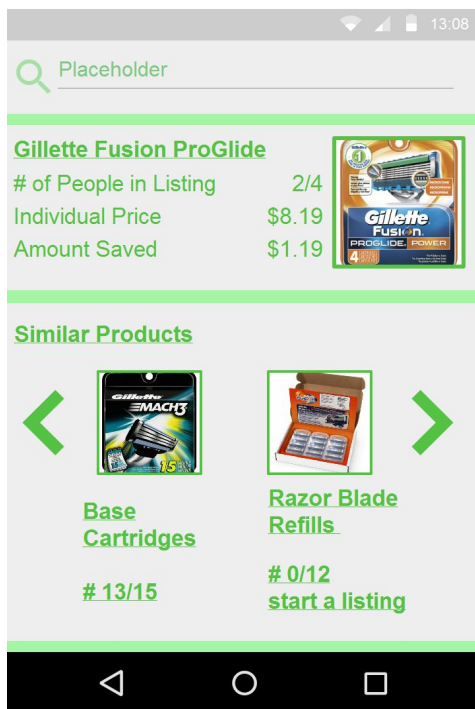


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Shave Share and Save

Shave is an app that allows users to find other people nearby that wish to buy similar items and share the costs of buying the item in bulk. Users save money since buying in bulk reduces the cost per individual item. Currently, there are many items that are available in packs that a person may want only a few of. This results in the person either buying the pack and eating the costs of the items that they do not end up using, or buying in smaller quantities that are more expensive per item. Instead, users of our app can create or find listings for items with the number of people they want to split it with.

A cursory web search found no other service that currently provides this functionality.



This is a usage example of the Shave app. User finds that their razor head needs replacement and searches for replacement heads on Amazon. User finds a 20-pack on sale for 20 dollars, resulting in a per-item cost of 1 dollar, but finds that they only want five razor heads. The user decides to create a listing for this product in our app and chooses to split this item with three other people. When enough people have interest in the item, the order will go through and the app will recommend the best place to meetup and exchange the agreed upon products. The product will be sent to the best available person (distributor) in the group depending on the search criteria and other users can pick up their portion of the product during a designated time period.

For this app, we will need access to several APIs. The overall structure of the app such as search bars and lists can be created for the Android platform using the Android Studio and SDK tool. The user should be able to search and create listings for products from shopping sites. For simplicity, we will start by only integrating with Amazon. We can search and list information about products using Amazon's Product Advertising API. It provides information about the products such as reviews, prices, and similar products. The users also need a location to pick up or receive their package. We can find user location information as well as provide directions for pick up by using the Google Map Android API. To confirm that the other

users have received the package, we can set up QR codes for the distributor to scan. There are APIs that allow developers to generate, scan, and decode QR codes such as QR Droid.

Some challenges of implementing this app involve automating the process of finding how many of each item is in a pack. We are not sure if the Product Advertising API will always provide this information or if we will have to find it from the title or product description. Another challenge is finding out the optimal place to send the package for people to pick up. Depending on whether people are willing to travel up to a certain number of miles and find ways to compensate them for it. Another challenge of this app is that this app is crowdsourced so this app would not work unless other people were willing to use it as well. Getting the initial number of users for the app to self-sustain might be difficult resulting in a bad customer experience. One of the most challenging parts of this app will be integrating each piece of these APIs together to create one fluid customer experience.

A risk of this app could be fraud: Someone could join a list and be a distributor but cut contact with the others, we could mitigate the risk by creating reviewable profiles or transaction histories.