Final Project Design Doc

Review Feedback

One suggestion that was made was to really focus on our badge concept for our final product milestone, which is something that we pivoted towards and achieved. In the initial project planning phases, our initial idea was to implement incentivization and authentication for users and businesses on Zelp. Instead, all of our new final product features are badge-related in some way. For example, we now display custom badge icons with tiers to indicate overall approval, give users the ability to rank badges that inform how we sort the businesses presented to them when filtering, and allow businesses to see metrics about how the community is reacting to their posted badges. We ultimately pursued this instead of other general-purpose review site features to make our badge concept deeper and more distinct.

Additional Design Decisions

User Policy Preferences

To give users more customization in their Zelp business feed, we introduced the concept of "Policy Preferences." Policy Preferences allow users to indicate the safety policies (a.k.a badges) that are most important to them and rank them from least to most important. This ranking influences the order in which businesses show up for the user on the main business feed such that businesses that have the user's preferred preferences or do exceptionally well with their preferences are listed higher. This is different from filtering because all results are still shown, only the order is influenced, whereas filtering removes business results.

Business Feed Sorting

To enhance the experience of the website, the businesses in the business feed are now sorted by multiple criteria. First, if a user is logged in then their policy preferences are taken into account first. A user's policy preference is observed in order starting from most important. If business A contains the user's most important badge and business B does not then business A is ranked above business B. If the two businesses both have the most important badge then the ratio of affirms to denies of that business badge is compared and the business with the higher ratio is ranked first. This sorting ensures that the businesses that do best in the safety policy most important to the user are ranked highest. We decided, however, that when the difference in ratios is too close

(less than 5%) then we check for the next most important badge. We believe that this creates a ranking that puts the best overall business first for the user, in terms of their preferences. After preferences have been taken into account, overall business rating is compared, so that the safest businesses get shown first. Zelp's priority is to help people go to businesses that they feel safe in and so we believe it makes sense to highlight the businesses that do well overall and specifically in the criteria that are important to the user.

Updated Ethics Protocol

Ethics Protocol Analysis

How can bad actors be prevented?

Choice: limit number of reviews per user

This system prevents any kind of "review bombing". Users would have to go through an incredible amount of effort in order to create subsequent reviews of a business, and reviews could easily be tracked based on users reviewing the websites. In our final product, users are still only limited to one review, but they can now edit that review if their thoughts on a business change.

Business authentication

How can small businesses be supported?

Choice: use ratio system

This system allows for all businesses to be treated more fairly. Businesses with smaller numbers of customers would not have to worry about hitting a minimum threshold of likes on a business in order to appear as though they are actively putting effort into following the practices. By adaptively weighting reviews as more feedback is added, businesses are all on the same playing field. The ratio system also determines the badge tier we display to users. We support businesses in another way using this by using gold, silver, and bronze tiers, none of which signal explicitly negative quality. By doing this, even small businesses who may not have the best adherence to policies will not be any more negatively impacted by our ratio system.

How can user experience quality be standardized?

Choice: Pagination

Because of the large number of businesses in the Cambridge community, rendering them all on the business feed would put undue stress on users with weaker internet tools and would be less effective at conveying information. Thus, we used

pagination such that all of the computers/smartphones of users could reasonably render the information with ease. This also ensures that information is presented in a digestible way that all users on the platform can understand.

How can Zelp mitigate outside influences when presenting business information?

Choice: User Policy Preferences

Because of our access to the business database, we as Zelp theoretically have the power to display businesses in any way we choose by using any metric. One can imagine a scenario where we take money from businesses in order to present them higher in the order. However, we want Zelp to be an app for the community. So, in order to avoid this, we gave users the ability to choose the safety policies most important to them. Then, whenever they apply filters looking for businesses in the Cambridge area, we sort the results by these user preferences. This puts all businesses, regardless of size or capital, on equal footing with regards to user visibility, and it also maintains the power of the user as they search for establishments that most align with their needs.