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## Word on the Street

### The Problem:

In this day and age, we've become disconnected from the community, and spend more time interacting with digital screens than exploring the world around us. It's not so much that we have become sedentary, but that there aren't good resources to find what makes our neighborhoods inherently unique, lively, and fun to explore. As you go about your day, walking the streets around you, what would you want to know about the neighborhood if you could hear it from people who know the area best?

### The App:

Word on the Street is a mobile web-app that allows a user to find "shoutouts" (little notes, images, or other media detailing some event, place, or piece of information tailored to a specific location), that are within a close proximity to where the user is currently. Since you can only see what is near you, you are incentivized to go out and explore, or to check the app on your travels to new places. On the other side, shoutouts are created by other users and allow them to share the things they love most about their area with others. These could be places of interests, events happening now, or informational notices about things such as safety.

We envision that shoutouts will disappear over time unless they are sufficiently upvoted, indicating that the content is useful and interesting to people. The experience is not intended to be a commercial promotion of specific restaurants or entities, but to provide a living, breathing representation of what is going on currently in the community.

### Use Cases:

1. Food: Find a hole-in-the-wall ethnic restaurant, small tucked away cafe, passionate sports bar...etc
2. Entertainment: Notify people about a party, gathering, concert, sporting event...etc
3. Sightseeing: Find a new scenic view, out of the way park, city skyline, historical monument...etc
4. Safety: Leave a notice for others that certain streets may be dangerous during certain hours of the day, that incidents have occurred before, alert people about potential inclement weather such as flooding...etc

Technical Design: We see the app, although very mobile oriented, built out as a responsive mobile web-app rather than a native mobile app. The advantages to this kind of product would that it would be a consistent cross platform experience irrespective of operating system, and that it allows easier future transition between a mobile or desktop client experience. For the front end, we would be using a combination of AngularJS with HTML5, SCSS, and the Google

Maps API to build out a responsive UI with geolocation capabilities. The backend will consist of endpoints set by a nodeJS server to allow the app to request data, while shoutout data will be stored in a postgresSQL server.

#### Challenges:

Technical challenges include how to effectively query and filter the shoutouts within an acceptable local distance of the user. Scalability is a prevalent issue, particularly as the number of shoutouts and users increase. By extension we need to consider how we can render a large number of shoutouts on the UI (say if they overlap, or there are too many to be effectively discernable on screen), or possibly merging related shoutouts about the same topic. We would also need a way to identify spam to prevent people from advertising indefinitely or overloading the service. Geolocation and precision of locations are technical hurdles that may have to be considered even though we have access to a large consumer API.

Product challenges associated with how users use/abuse the app and how best to present the app and features also exist. Categories need to be scoped well to allow users to filter through to the content they want to find, but not so strict as to force users into niches or confuse content producers. We need to also effectively filter out profanity or irrelevant content that people may post (perhaps done through an aggressive post limit or report feature). Visually, we need to make sure the app is designed in a way that gets users quickly to the information that they want, but also keep it simple.