



Ensuring Access to Food for Homeless Populations

CHI 2017 Student Design Competition

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1. The Problem

Homeless populations are constantly on the move, and they don't know where to find free, hot meals without accurate information from formal sources.

2. The Research

Literature discussed information & technology needs and use among homeless populations.

We conducted interviews with 13 homeless individuals and 2 social workers, and identified their needs, and the informational resources available to them.

3. Initial Design & Evaluation

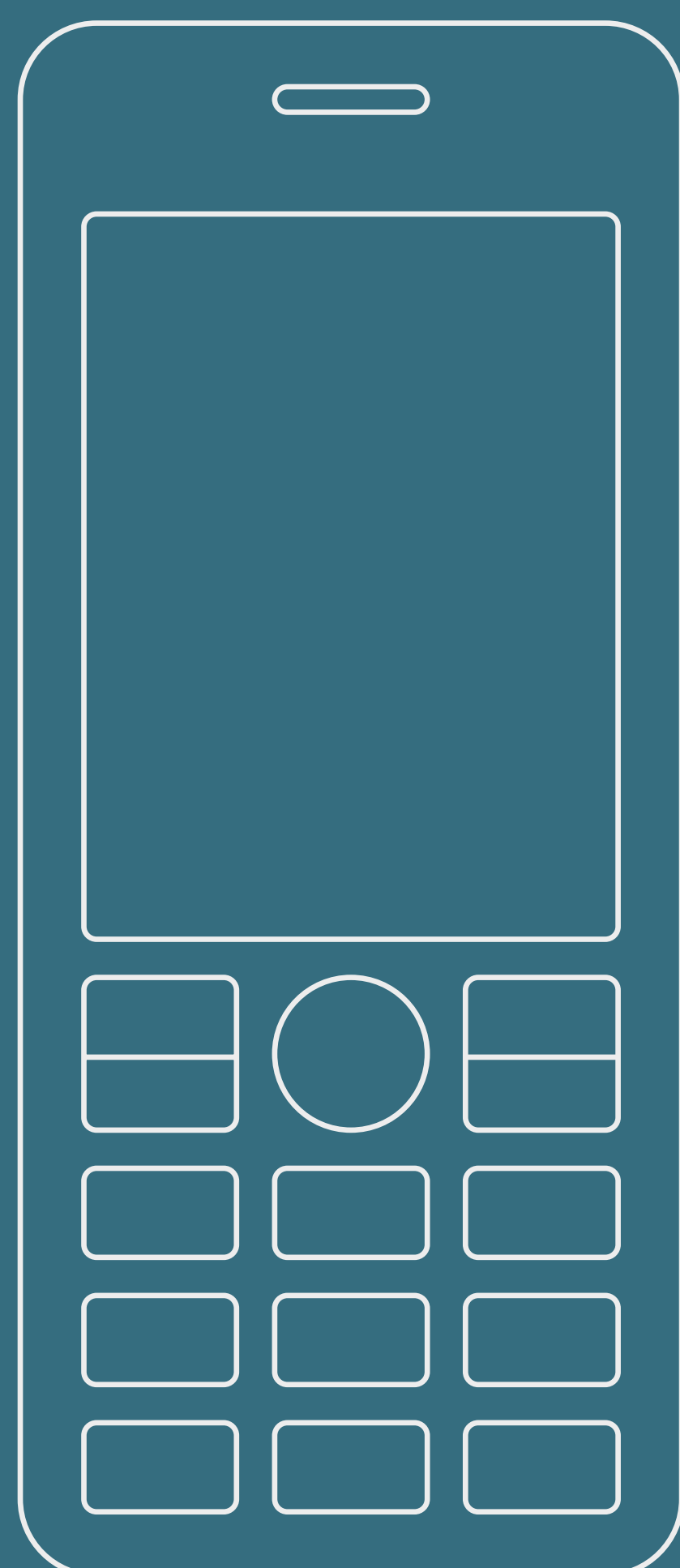
We conceptualized a smartphone app and created paper prototypes. We tested these with users and received feedback and some key insights.

4. Further Research

Based on user feedback, we performed further literature review & interviews. The findings made us pivot our design to the final solution.

5. The Solution

Our final design is a text message based system that is simple, easy, familiar, and universally accessible to anyone with a mobile phone. The solution helps the user to:



Find Hot Meals

Users send their zip code, to receive a list of all locations serving free hot meals for that week in their immediate vicinity, along with other necessary information such as ID required.

Crowdsourced Updates

Users can update the database with new information they discover through their interactions with other people and this will be shared with other people in the area.

Notifications

Users can control the frequency of notifications for all the zipcodes they are subscribed to.

System Assistance

Users can request assistance with the system and receive instructions on how to access the information that they are looking for.

Key Findings



Homeless people are frequently on the move



They have options for free, hot meals



Most information is shared through word-of-mouth & they have a strong tendency to exchange information



Homeless people typically know what zip code they are



Most homeless people have access to mobile



Smartphones are rare, and data plans even rarer

6. Evaluation

Final solution was tested on users with extremely positive feedback. One challenge could be that users may be low-literate, but they can rely on friends to read.



7. Going Forward

The solution can be expanded to serve all food insecure populations, address other information needs for homeless populations.