Executive Summary - Jonathan Danzig
CutThru: The Personal Pedestrian Assistant.

The Problem

Pedestrians face three essential impediments in choosing to utilize their feet as their preferred mode of transportation: walking leaves you slower, limited to sidewalks, and, most importantly, exposed to the elements.

Uber, but for Buildings

The concept of ridesharing emerged out of two simple observations: first, a typical car has the capacity for four to five people but is usually occupied by one person—the owner; second, some owners are willing to rent out those unused seats for money in their free time. Ridesharing solved a knowledge problem: it connected the people who want to be driven with the people who want to and can drive.

For example, take a typical pedestrian walking in downtown Chicago in the middle of winter. She is vaguely aware that many of the buildings around her are centrally heated, publicly accessible, and internally connected. But she has no idea which ones, and no interest in spending the time to investigate personally. CutThru solves this pedestrian's knowledge problem: it connects her with the open buildings around her.

The Solution

CutThru is a simple app that provides a straightforward service. It provides the location of publicly accessible buildings with two or more entrances, along with a simple "Info" tab. On the map, it presents every entrance of buildings, but only if they are open. In the list tab, the app presents all surrounding buildings, coloring them red if closed, and green if open. It gives the distance of each building's closest entrance to the user's current location, in miles or kilometers according to user preference.

In future releases, CutThru hopes to provide support for feedback, favorited routes, integration with Mapkit's built-in direction capability, and support for locations outside of Chicago. More ambitious long-term plans include modified direction capability to reroute Apple directions through buildings, as well as commercial support for retail businesses that would welcome the chance to bring more customers through their doors.

Source Data

Currently, there is no open source database of publicly accessible buildings with two or more entrances. Therefore, in its current iteration, CutThru's source data is stored in its entirety on a local JSON file as part of the App bundle. In a future iteration, the source data will be provided through a simple server request—the app will send the system location to the server, which will return a localized JSON file to overlay on the map and display on the list. CutThru also uses Mapkit, Corelocation, and NSDate.

App Store Landscape

CutThru is in the navigation category. It will be ranked among map apps but provides a unique service not provided by the functionality of top navigation apps.