There’s a fire in your hostel. You need to get out. At the same time, you need to make sure that you don’t get caught in a crowd and stuck in the corridor.

What do you do?

Disaster Management Leader Kit

Fire Chapter

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About the Application

- The Disaster Management Leader Kit, Fire Chapter, is designed to help you and your friends escape burning buildings in a calm, collected fashion.
- Calculates your optimal path based on the position of the fire and your friends.
- Regularly updates your recommended path based on the movements of your friends.
- Gets you out of the burning building safe and soot-free


DEMO

Current Status

- The version just demoed is a proof of concept. It simulates a fire and 5 users, and shows the path they take to get out
- Each user, in parallel, follows the path recommended to them, which is updated at every step they take
- The hostel itself is modeled as a fully connected graph with weighted edges

Future Work

- Our app is currently a command line application written in Haskell. Ideally, it should be an Android application so that the user can access it from their phone.
- We currently model a greedy shortest path algorithm to get to the exit safely. Using machine learning techniques, given data about how fire spreads at different temperatures, we may be able to mark places which are at risk of catching fire, and thus help our users avoid them.


Stay safe!
Thank you.