

Promoting Environmental and Social Responsibility with Smartphones

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ABSTRACT

Every day, various events are held at the Technical University of Denmark where food and drinks are served for the attendees. Due to difficulties in estimating how much food will be consumed at such events, secretaries, or other staff responsible for ordering the food, usually err on the side of caution and order a little too much, rather than a little too less. Due to regulatory constraints as well as issues of practicality and convenience, excess food from such event is often thrown out, ultimately resulting in significant amounts of food wasted.

This project proposes a potential solution to the issue of food wasted from such events, by simply inviting students, who are already in the immediate vicinity of events where leftovers would otherwise be thrown out, to come and consume those leftovers.

The main challenge of the solution proposed, and what makes the problem technologically applicable, will be to conveniently, effectively and instantaneously invite the students to come and consume leftovers, the moment they are made available. The key to fulfilling these ambitions will be to develop a smartphone app with which hosts, or other staff at events, will announce the leftover meal opportunities. The students that are to be invited, must also have the app installed and will then receive notifications for such leftover meal opportunities that are relevant to their location and possibly other filters.

The need for instantaneousness comes mainly from the fact that such leftover meals are only available for a particular window of time. This time constraint comes not only from events usually having a fixed time at which they conclude, but also from regulatory constraints that specify for how long food will be safe to eat before spoiling. Such considerations also attest to the promise of a smartphone app being a well-suited starting point for the solution proposed, seeing as features for tracking time and managing who are invited are easily implemented – just to name a few benefits.

With regards to the app itself, the features for a minimum viable product have been identified in cooperation with a series of relevant stakeholders. At this time of writing, several of the aforementioned features are implemented and once the last few things fall into place, testing will commence.

Other, non-technology, issues such as involving staff and convincing them of the benefits on their behalf, such as the potential of students helping clearing the tables, or simply that of being socially and environmentally responsible, are also being looked into.

While the scope of this project is contained to food wasted from events held at the Technical University of Denmark, the problem is, at its core, possibly also relevant in other similar contexts globally. Not only at other teaching institutions, but practically anywhere where attendees are provided food at various events. But again, this is not within the immediate scope of this project.