

## Purpose

Develop a tool to aid in evaluating the hypothesis that someone is more likely to make a choice when presented with more options, as opposed to fewer

## Project Background/History

- Lack of research on the implication of providing choices to the suppliers and their behavior
- Dr. Pazour has received an NSF grant to fund this research, specifically for designing and evaluating the impact of giving choices to a set of decentralized supply owners

## Technical Results

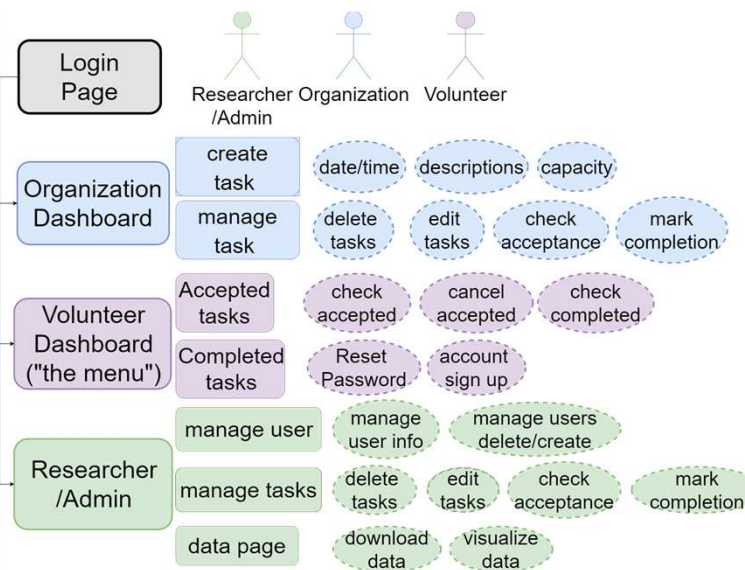
Frontend:

- Interactive, Bootstrap enabled page for all users to operate
- Volunteers pick tasks
- Volunteers' choice of tasks (experiment) recorded
- Organizations manage tasks
- Organizations create new tasks
- Administrator manage all users and all tasks
- Controller and Framework Support all frontend feature
- Route handling
- Handle API communications
- Database:
  - Structured, connected Databases
  - Record all tasks and experiments results

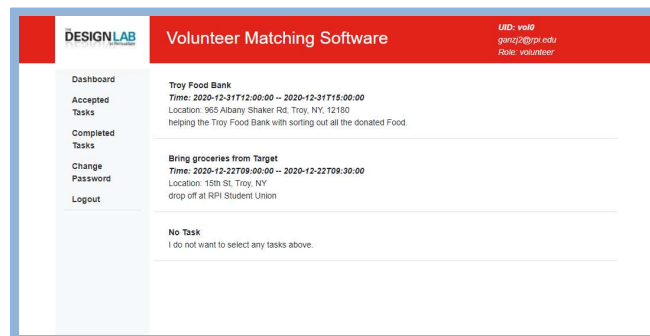
## Semester Objectives

- To create and develop a volunteer matching tool to aid Dr. Pazour's research
- Provide preliminary survey results regarding the appropriate number of options displayed to the volunteer (display algorithm)
- Extract and analyze the effect of giving volunteers the option of "none" using preliminary surveys
- Provide documentation for the direction of the website, display algorithm, and matching algorithms

## Menu Site Map



## Volunteer Dashboard



## Next Steps

- Utilize student surveys to gather preliminary data and provide suggestions for development
- Take initial matching algorithm to improve volunteer selection chance and incorporate basic supervised machine learning capabilities
- Further polish web application and port the application to smart phones

## Technical Approach

The Volunteer Matchmaking Software Team was split into three sub-teams to create a robustly designed and tested website



Front End

- Simple, responsive UI, and web scripts



Back End

- Database and API construction, matchmaking algorithm



Statistical Analysis

- Analyze preliminary data to optimize display algorithm and web development