SENG 321	Request for Proposals (RFP)	Spring 2016
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Version	When	Who	What
1.0			Initial Drafting

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#### 1.0 Problem description / expression of need

Often when a customer is shopping at a large department store, they will fill their cart before they are finished shopping, possibly causing them to leave early, and possibly not spending as much as they might have spent had their cart not been filled.

#### 2.0 Project Objectives

A mobile app that will:

- Allow a user to indicate that his/her cart is full.
  - The app will note the user's location within the store.
  - A dispatching machine that the dogs are trained to understand will tell the dog where to find the cart.
  - This will dispatch a trained dog to them, pulling an empty cart.
  - The dog will give the empty cart to the customer and will pull the full cart to a cashier, who can begin checking out the cart for when the customer is finished shopping.

#### 3.0 Current System(s)

Users must either manage multiple carts or finish shopping.

#### 4.0 Intended users and their interaction with the system

Store customers will download the app and use it to call a new cart when their cart is full.

Customers can press a button that indicates that their cart is full, and sends the location of the cart to the dog dispatcher, which then dispatches a dog to the cart's indicated location.

#### 5.0 Known interaction with other systems within or outside the client organization

Cashiers will need to know how to check in carts that dogs bring to them.

Carts will need to be fitted with devices to allow a dog to pull them.

#### 6.0 Known constraints to development

Dog training to the specifications required might not be possible.

#### 7.0 Project Schedule

- 8 Jan RFP submitted
- 21 Jan Informal requirements definition
- 15 Jan Set up website
- 26 Jan Obtain customer feedback on on website
- 30 Jan Begin Formal Requirements Specification
- 16 Feb Formal Requirements Specification
- 18 Feb- Obtain customer feedback on formal requirements specification
- 20 Feb Begin Detailed Requirements Specification
- 1 March Detailed Requirements Specification
- 2 March Prepare Prototype demo

#### **SENG 321**

### Request for Proposals (RFP)

3 March – Prototype demo

- 8 March Obtain customer feedback on Detailed Requirements Specification and Prototype Demo
- 9 March Begin preparing Final Requirements Specification

15 March - Final Requirements Specification

21 March – Begin User manual

22 March – User manual

24 March - Obtain customer feedback on Final Requirements Specification and User manual

2 March – Begin final project

29 March - Demo final project, obtain customer feedback on final project

#### 8.0 Project team

#### 9.0 Glossary of terms

## Project Proposal Summary (1 page) Chris Kelly V00729307

Often when a customer is shopping at a large department store, they will fill their cart before they are finished shopping, possibly causing them to leave early, and possibly not spending as much as they might have spent had their cart not been filled. To solve this problem, we propose a mechanism called "SERVEitude" to deliver a new empty cart to a customer with a full cart, while retrieving the full cart for later pickup and possibly early checkout.

The mechanism consists of a mobile application and base station, along with a team of trained dogs. Users can use the app on their phones to indicate that their cart is full. The app will note the user's location within the store, and send a signal to the dispatching machine, which is located in a central location within the store. The dispatching machine emits a signal to a dog, which indicates the area of the store to move to. The dog is trained to understand the signal. The dog will then fetch a cart, and bring it to the customer's location. Once the dog reaches the customer's location, it will give the empty cart to the customer and bring the full cart back to a cashier. Bringing the full cart back to a cashier will allow the cashier to pre-check-out items in order to speed up check-out time once the customer is finished shopping. In addition, a customer may be less likely to decide not to buy an item if the item has already been checked out. "SERVEitude" will allow department stores to make more sales by keeping customers in the store for longer.

### My Résumé

# Chris Kelly V00729307

#### **Project management experience**

Leading and managing school projects, such as a web application project for SENG 299.

#### Writing experience

Co-op presentations ENGR 110 presentations ENGR 120 presentations ENGL 147 ENGL 135

#### Webmaster experience

Ruby on Rails web development at an e-commerce web development consultancy Personal website Deploying applications

#### **Programming skills**

Python Ruby Shell C Elixir

#### **Design experience**

Designing email templates Designing websites

#### **Requirements engineering experience**

Working with clients while working at a web consultancy