# Grocery Shopping with Sloppy

Kaden Castaneda, Avery Orns, Ava Moes, MK Tasket, Christian Pack, Sarah von Hollen EF230: F-4

### Shopping Made Easier with Sloppy

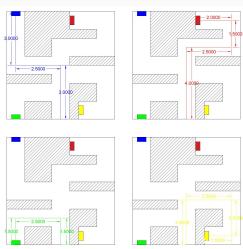
- New and improved shopping assistant!
- Creates entirely autonomous shopping experience
- No more wandering the aisles and buying things you don't need
- Sloppy makes shopping faster, cheaper, and easier!
- Could also be used by InstaCart, Clicklist, etc.





#### How it Works

- Show Sloppy colored card that matches color a designated food item
- Sloppy follows designated path to item and searches the shelves
- Once found, Sloppy searches weather data to determine if item is in season
- If not, shopper has option to not purchase item
- If yes, shopper can confirm purchase and Sloppy emails receipt to shopper
  - Includes coupons for next shopping trip!

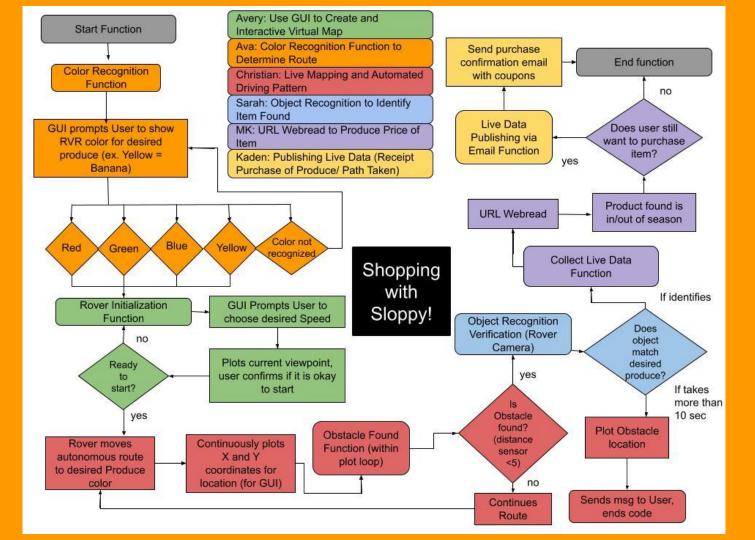




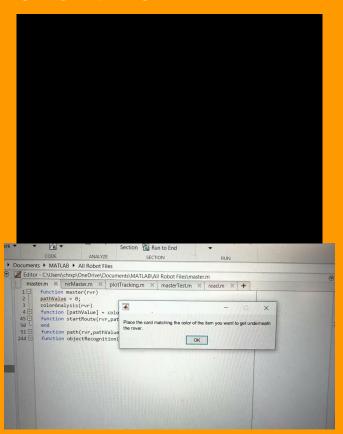
#### [Features]

- Live Plotting
  - Live plot of where Sloppy is in the store
- Color Sensor
  - User will present a color corresponding to desired item that Sloppy will read and go find
- Object Recognition
  - Once Sloppy arrives at desired location, it will utilize the camera to search for the desired produce item
- URL Webread
  - Reading live weather data to determine what type of produce is in season and what is good to buy
- Publishing Live Data
  - Once item is picked, Sloppy will send an email to users phone to confirm purchase of the item





#### Demonstration





Banana Apple

## Limitations and Future Improvements

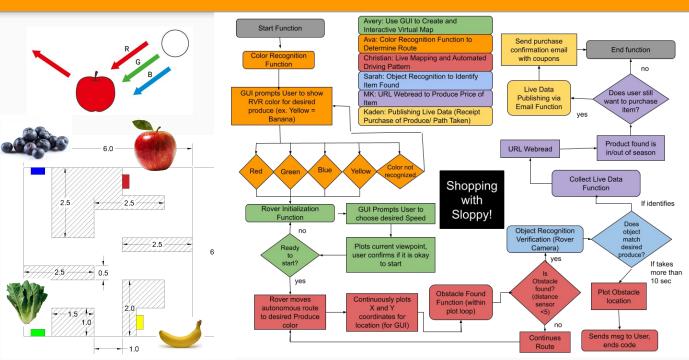
- Expand code to search for more groceries
- Use object identification or text input instead of color sensor for desired item
- Limited object and color ID abilities
- Use Web Read or store datafile to find grocery prices
- Send compiled list of prices and items to users phone
- Option to pay with credit card via rover

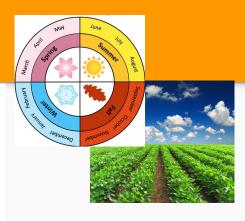






### **Summary Slide**







kcastan1@vols.utk.edu

Hello, this message is confirming your purchase at Vols Grocery. Go Vols!

One attachment • Scanned by Gmail (i)



# Questions and Comments?

