Abstract
For my innovation proposal, I wanted to solve a communication problem that would be helpful and add convenience to my and others’ everyday lives. During the time of brainstorming ideas, I was trying to plan for groceries and make sure I was not adding food to the list that I already had in my cabinets, which gave me inspiration for the idea of solving the communication issue common in households of remembering what you already have in your cabinets and/or pantry. In response, I want to design an app for smartphones and tablets for the purpose of informing the user of the consumable goods in their household.

Intro/Mission
Pantry Pal is an application designed to give households a shared organized digital cabinet of all their groceries to prevent them from buying duplicates of products and prevent food waste because the users will have access to the contents of their cabinets at all times.

Inspirations
The primary functions of this application that I am considering are inventorying what you buy at the grocery store to keep track of household goods by scanning items’ barcodes, deleting items after use, and sharing inventory access among the user’s members of their household. Possible special features of the app would be using information collected from the barcode scans to give information on your purchased products, so users can know the price, the weight, and the expiration date of their goods and give suggestions for recipes or similar items. The app’s functions and features were inspired by the features on smart fridges that allow the owners to view what food they have in their fridge through their phone, such as Samsung Family Hub Smart Fridge, and apps that allow users to scan food products’ barcodes in store to know what they are possibly consuming, such as Yuka.

Materials/Methods
My method for developing and designing this app was to start with deciding on a name and research my target audience and similar apps function-wise. My target audience are multi-person household units, such as families and roommates, because parents may find this helpful to keep family food and meal planning organized, save money, & reduce food waste, and similarly roommates may find this helpful to keep shared purchases organized & save money by avoiding duplicate purchases. Based app and audience research, I decided on the name Pantry Pal because its alliteration, pantry’s inclusivity of all household goods, and pal’s implication that this app is friendly and helpful. Also, I created the logo to be P shaped cabinet opening because the logo illustrates this app is a more organized, searchable, informative digital cabinet. To create the app screens and its elements, I used Adobe Illustrator and Adobe XD that allows me to wire my screens and test its functions. The functions are scanning or manually adding items, creating categorized lists that can be shared among household members, alerting users of expiration dates and restock needs, suggesting recipes and items based on purchases, and having a search function to locate what items are in the cabinets.

Results
In conclusion, I am designing an app called Pantry Pal that is a friendly, bright digital cabinet that encourages organization of groceries among household members to prevent household inventory confusion or tracking issues that leads to waste of money from buying duplicates of products and waste of food because the users will be able to know what they have and when they are going to expire.