

## **WasteLess - My Custom-Made Mobile App**

Think Kind Competition Entry 2020

### **Introduction/Need**

Over the past few months before the development of my invention, I noticed how households all around my community (including my own) were throwing away food just because it passed the expiration date. After some further research regarding this subject, I found that the food thrown away ends up in landfills and releases Methane into the atmosphere, which causes climate change and global warming. Not only that, but climate change and global warming has a dire effect on animals in every habitat and environment. About 11% of all the greenhouse gas emissions that come from the food system could be reduced if we stop wasting food! I realized something had to be done about this dilemma - and that's how I began to develop my mobile app, WasteLess...

### **Development of Product**

At first, I considered using app templates that you would just have to design the layout because I had no prior knowledge about coding. Unfortunately, I found that none of them really suited what I wanted to achieve - so I decided to try out creating my own. The app maker I used to develop my product is Android Studio. The reason I chose to use Android Studio was that I personally had an android mobile, so I would be able to run the app using my device and because the app developer itself was relatively easy to navigate and use.

Before I started, I watched lots of youtube tutorials on how to code in java (which was the coding language I was using) and how to use Android Studio. When I began my project, it was hard for me to find where to start so I created a detailed step-by-step plan of the main things I needed to complete and worked from there. After a while, it got easier to work on as I was aware of the tasks I needed to complete. Finally, after more than 3 months, I finished my project successfully!

### **Functionality**

The app has three working pages in total: the first one used for the homepage and to select and add multiple food items to the list by a single click. Once an item is added, the app takes the user to the second page where they can review their list to see which item/items are expiring and delete foods when desired. Third page contains recipe ideas so the user can utilize their nearly expired food to make into a recipe or use the recipe inspiration for a different meal. (The functionality of the app is explained in further depth in the video and in the last page of this PDF).

## How can Wasting Less Food save the Animals?

The Climate Change and Global Warming effects on the animals on the planet are detrimental in our world today. Wasting Less Food may have a less direct impact than climate change or deforestation on the animals, but still as important to hinder and prevent before it gets worse. Wasting Food releases methane in landfills, which promotes greenhouse gases that speed up Climate Change and global warming. This can lead the animals to having to adapt to the hotter climate. Many animals on land, air, or sea have trouble doing this and the hotter temperatures impact their migration, behaviour, and an unbalanced food chain which therefore more challenging to find prey.

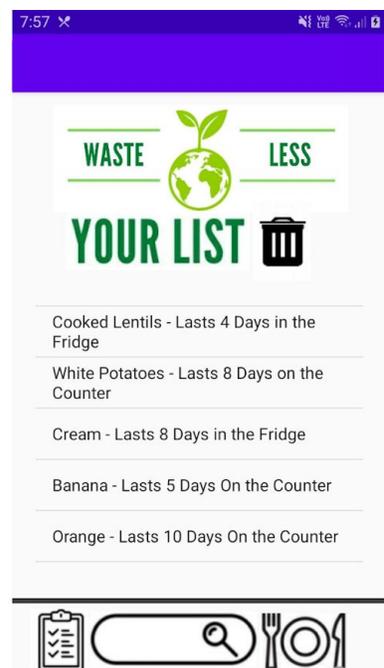
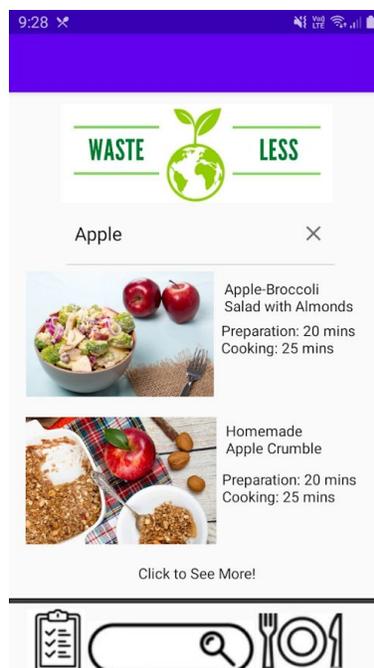
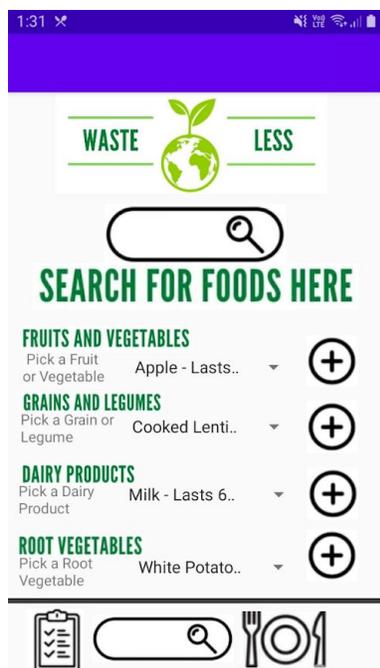
Take seahorses, for example. Ocean Acidification is caused by the absorption of  $\text{CO}_2$  (A Greenhouse Gas causing Global Warming) in our sea, causing the water to turn more acidic and therefore lower the pH levels. When pH levels are reduced, seahorses' feeding rates decrease dramatically, and activity rates are limited. Although adult seahorses may have a higher tolerance to Ocean Acidification, they are not very strong swimmers and are restricted to finding a habitat somewhere cooler which makes them prone to global warming and climate change as explained in the previous paragraph. This is just one example of an animal that is suffering as an effect of human behaviour. By adopting a vegetarian lifestyle and changing eating habits, wasting less food, and demoting climate change and global warming, the animal kingdom will thrive once again.

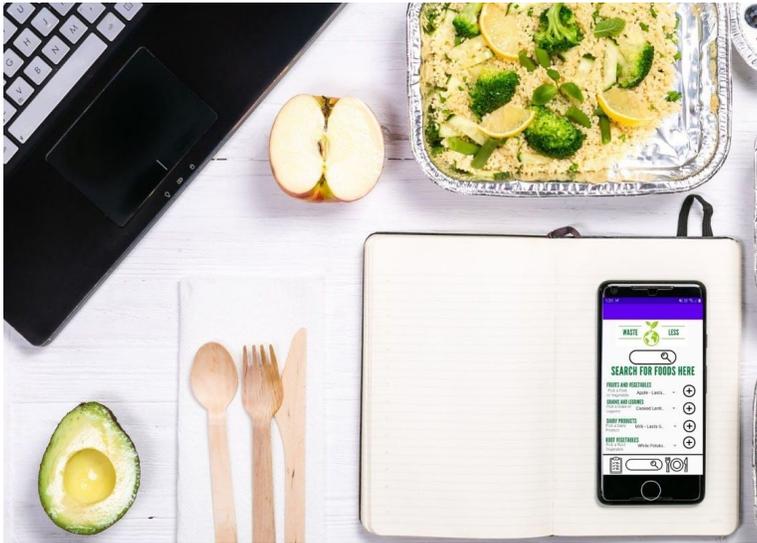
## Conclusion

WasteLess was my mobile app prototype that I entered for my school's science fair, which I adapted and modified for the Think Kind competition by basing the concept about food waste and being kind to animals. My mobile app now educates kids on how to waste less food by fun facts and quotes to adopt a healthier vegetarian lifestyle. (Below are screenshots of each page of the app, along with explanations and photos on the next page).

**Name** - Libby Sheleg

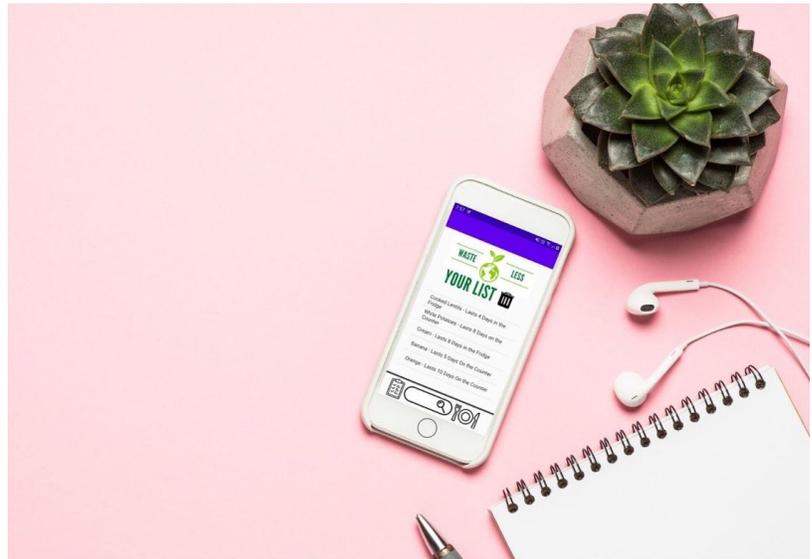
**Age** - 12 Years Old





The homepage is mainly used to add items to the user's list. The consumer can go to the relevant category (e.g fruits and vegetables) and click on the dropdown, which shows all the food options that they can add on their list. The user can click on it and press the 'add' button which automatically takes them to the list page with their new item added on it.

The 'Your List' page shows all the food items in the list that are in the user's kitchen, including how much time the food items have left before they expire. The user can easily add more items on the list when desired from the first page, and can delete food items once used. (The example shown are some foods that were added to the list over the past few days.)



The recipe inspiration page contains a search bar where the user can search up the specific item name of the food that is going off and find recipe ideas. In the example shown, the item searched up is 'Apple' and the search bar shows the results of all the recipes, including prep and cooking time.