



# PROJECT PROPOSAL

CPSC 481 T03 TEAM J – STAGE 1

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## Idea 1

- What is the problem/service?
  - To allow users to find people to swap/cover their work shift if the company is big enough and users don't know enough people around them to swap/cover their shift.
- Why it is important?
  - Most of the time, if one person would want to swap their shift or find someone to cover their shift, he would want to deal with the manager and submit a shift change request. This process is typically long and insufficient as the manager has to take the time to ask everyone and see if anyone could cover or swap the shift with the person. In another case, manager would ask that you have found someone to take cover of your shift so the manager can process the request directly, but the problem is there is no way you know everyone in the company, the people you know will most likely have the similar shift and they are going to work at the same time as you do, therefore, almost impossible to find someone to swap shift.
- How you are going to solve it/ introduce it?
  - The solution we proposed is that we create an app with the ability to put everyone's schedule on the calendar. You will have you own account, and the manager will have administrator access just in case the schedule needs to be changed manually. If you need to swap shift, then you can click on someone else's shift and send a swap request. In the worst case, you can ask everyone else that is not working of the shift you want to swap and see if anyone would take the request. In case of covering the shift, you can flag your shift and when other people see the flag, they would consider helping you so that they can get more hours. Obviously, if these kinds of swapping/covering are solely managed by the app, the manager could have gone crazy if the manager doesn't know who is working at the time assigned. Thus, we have come up with a solution to that as well. The only people that can make the process going is the manager. If you see someone takes your shift, then you can go and talk to the manager to give you the approval. Now the manager knows who is working at assigned time and you can easily find someone to cover your shift without calling/talking to anyone.
- What kind of a system it will be (mobile app, website, computer software, VR application, voice commends interface, digital music instrument interface, car systemUI, etc.)?
  - Mobile app

## Idea 2

- What is the problem/service?
  - To allow users to order and pay for their food from their phones in restaurants and are able to reserve tables as well
- Why it is important?
  - This will improve the food service by making it faster and simpler. In addition, in times like these while we deal with COVID-19 and hygiene is very important, this will reduce the amount of times we touch things many other people have touched before us, such as menus.
- How you are going to solve it/ introduce it?
  - This method of ordering happens to already exist in China, where the user scans a QR code that represents a table in the restaurant and that table will be charged. Similarly, some restaurants in Canada have a QR code on the tables as well that takes the user to the restaurant page to look at the menu, but the user cannot order from there. This service will be similar to a Skip-The-Dishes but inside the restaurant. The user will be able to request to reserve a table without the need to call that restaurants, and a waiter will admit the user. Once inside, the waiter will use the user's app ID to confirm the user is in the restaurant and then user can start to ordering. At the end of the meal, the user will notify the waiter that they are done and then the waiter will charge the user for the meal.
- What kind of a system it will be (mobile app, website, computer software, VR application, voice commands interface, digital music instrument interface, car systemUI, etc.)?
  - Mobile app

## Idea 3

- What is the problem/service?
  - People have different allergies, and it is hard for them to memorize and decide which products they are allergic with. It is troublesome to read small letters of ingredients on the cover. The app allows users to identify if there is any potential allergies if users use the product by scanning bar/QR code.
- why it is important?
  - Usually, people who have allergy need remember to specific types of food. If they want to try something new, they will have to read ingredient tags and see if there is any potential allergies behind that. It is important to help this process as this will directly affect user health. It can be hard to read from ingredients tags with small letters and users might not understand everything.

- How you are going to solve it/ introduce it?
  - The app will help the process of choosing products simpler by allowing users to scan the code and identify if it is safe for users or not. Each user can create their profile and choose their allergies. Each item has a bar code that has information about products. When users is choosing the products, they will just need to scan the item. The app will scan this code and find ingredients information to identify if any ingredients can cause potential allergy for user. Instead of reading the labels and research ingredients, users now can just scan the code and get results right away.
- What kind of a system it will be (mobile app, website, computer software, VR application, voice commends interface, digital music instrument interface, car systemUI, etc.)?
  - Mobile App

### **Online Repository**

- <https://github.com/CloudyYoung/cpsc-481-team-j>

### **Portfolio**

- <https://cloudyyoung.github.io/cpsc-481-team-j/>