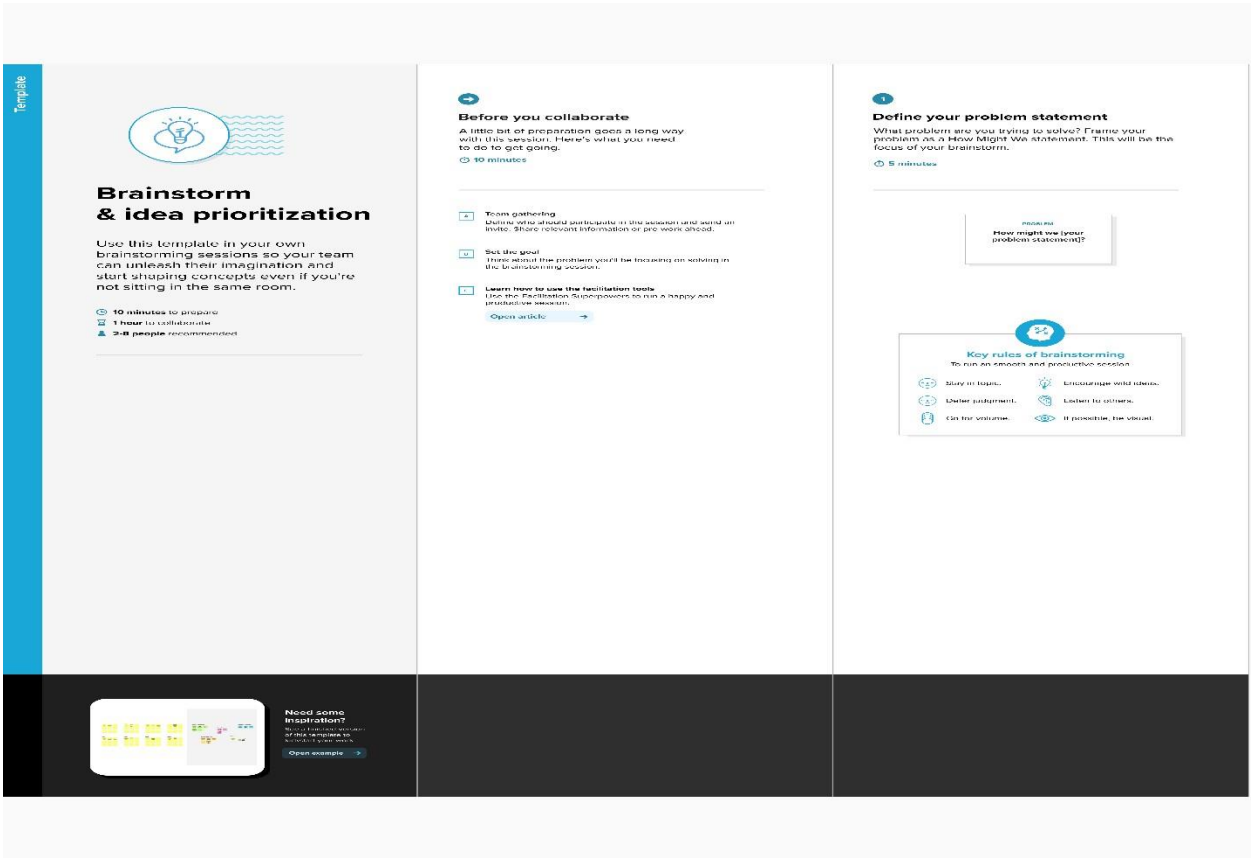
Ideation Phase

Brainstorm & Idea Prioritization Template

Date	25 September 2022
Team Id	Team -594379
Project-name	Green classify -deep learning based approach for vegetable image classification
maxmarks	4marks

Reference :-
https://app.mural.co/t/greenleafclassifier9448/m/greenleafclassifier9448/1698935396716/6a01c227738db104c112e3a4459ff0abe11f5ebd?sender=u3cf797c56fc50093290b2483

Step-1 : Team Gathering, Collaboration and Select the Problem Statement



Step-2: Brainstorm ,idea listing and groupimg

2

Brainstorm

Write down any ideas that come to mind that address your problem statement.

10 minutes

TIP

You can select a sticky note and hit the pencil [switch to sketch] icon to start drawing!

Person 1

- Establish image data collection centers
- providing awareness camps for farmers, businesses related vegetable industry
- creating different types of vegetable image report
- provide nutritional information for recognized

Person 2

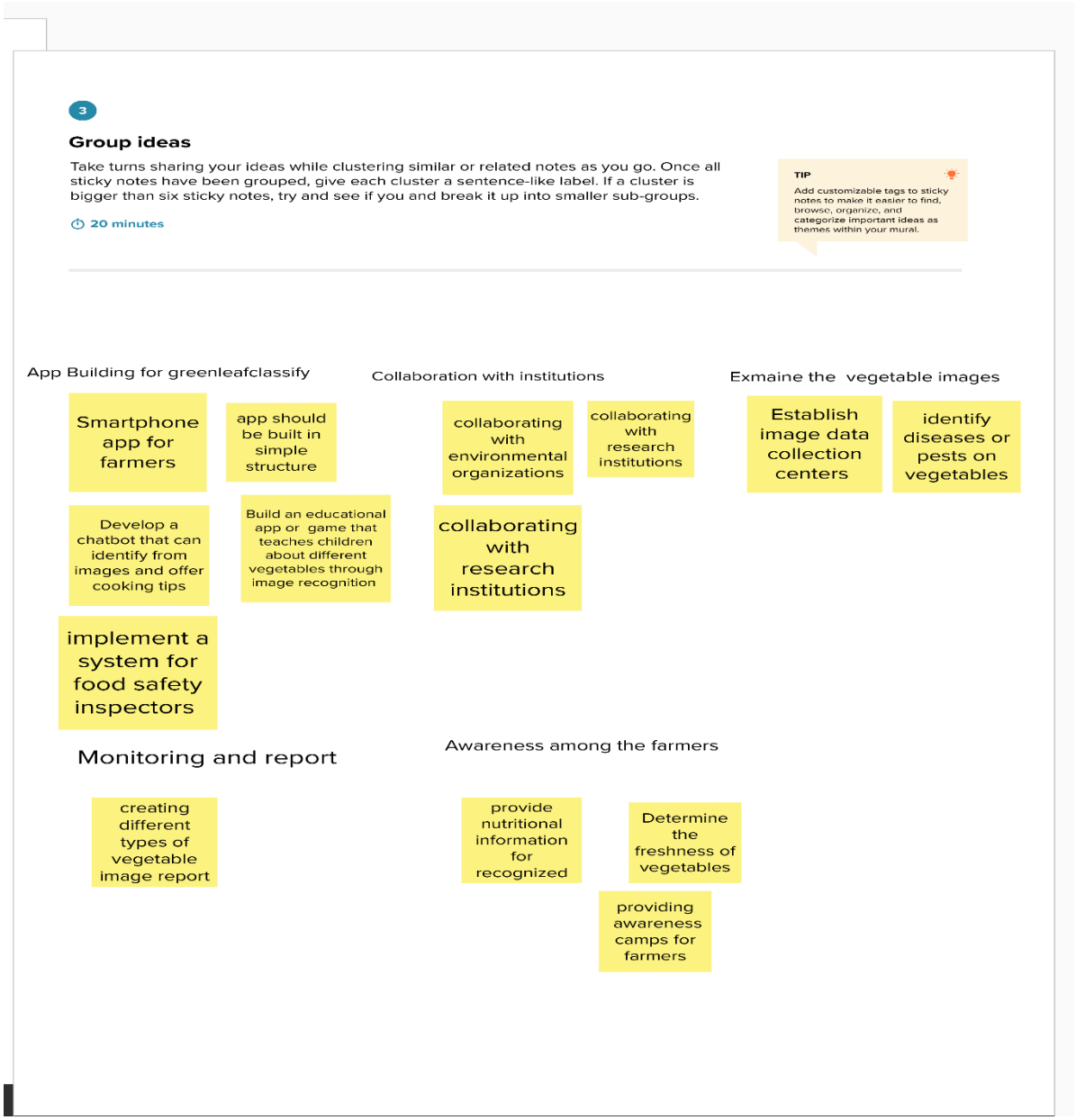
- Build an educational app or game that teaches children about different vegetables through image recognition
- implement a system for food safety inspectors
- Develop a chatbot that can identify from images and offer cooking tips
- Smartphone app for farmers

Person 3

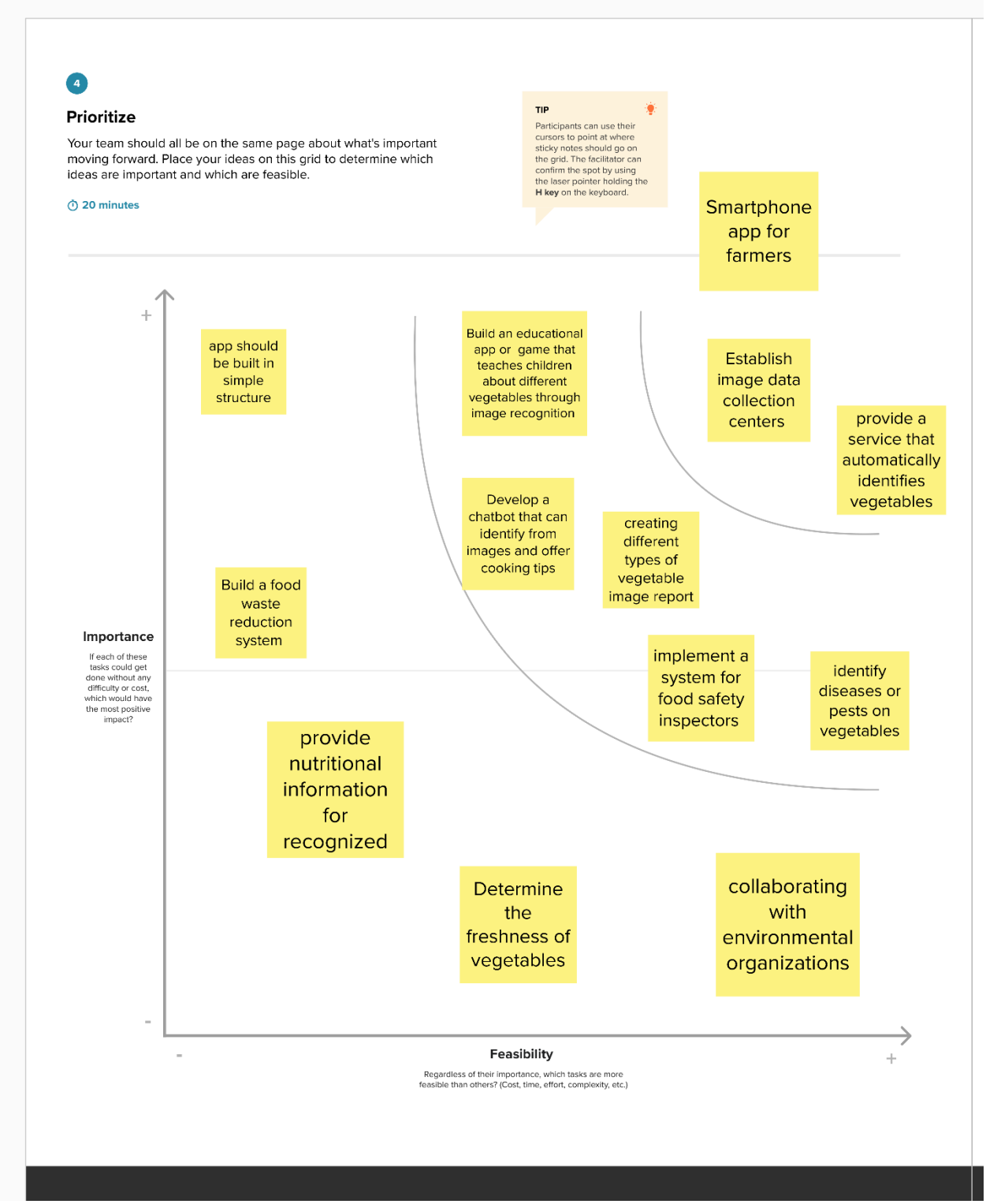
- Determine the freshness of vegetables
- collaborating with environmental organizations
- collaborating with research institutions
- app should be built in simple structure

Person 4

- collaborating with research institutions
- provide a service that automatically identifies vegetables
- manually recognition of images
- identify diseases or pests on vegetables



Step-3 : idea priporitization



High Priority: The primary focus should be on developing an effective image detection algorithm, the other most critical aspect is the selection and training of the deep learning model. This could involve

traditional image processing techniques using an appropriate model like Convolutional Neural Networks (CNN) for image recognition tasks, such as color analysis, texture analysis, and shape analysis. It's also crucial to consider the accuracy, precision, recall, and F1 score of the model during evaluation. The algorithm should be able to accurately identify vegetable image

Medium Priority: The next priority is implementing this algorithm into a user-friendly mobile application.

The app should allow users to easily upload or capture images that identify

and accurate diagnosis. It can become very user friendly when we have it in the offline mode so it can work in any environmental weather regardless of mobile signals which is very helpful for farmers when they are examining the pictures in any field/area along with the local languages identified by the gps treatments, it can also keep updating the reports ,if possible it will give the early warning messages as

Low Priority: Lastly, attention should be given to educating the users and marketing the app. Users need to understand how to use the app effectively and capture good quality images for analysis, to make it possible the mobile application will be made in a simple structure. The organizations will be built

and collaboration with the environmental organizations in the surroundings areas to bring awareness and helping the marketing strategy in reaching out to potential users, which are likely to be vegetables and agricultural scientists. This applications will share about the weather integration data and it keep up-

to- date about pest management to farmers and maintains the data and it secures the collected data.