# **Ideation Phase**

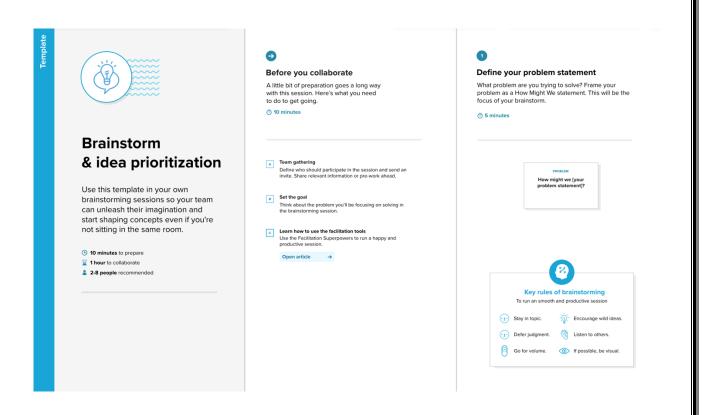
# **Brainstorm & Idea Prioritization**

# Detecting COVID-19 From Chest X-Rays Using Deep Learning Techniques

Date: 17th October 2023

**Team ID**: Team-592660

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



## Step-2: Brainstorm, Idea Listing and Grouping



#### **Brainstorm**

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

10 minutes

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

#### **S HRUTHIK**

Combine various deep learning models, including image recognition, natural language processing, and data analytics, to create a comprehensive diagnostic tool.

Integrate Al-based X-ray analysis with PCR test results for comprehensive diagnosis and validation. Design a user-friendly mobile application that allows individuals to take photos of their chest X-rays for Al analysis, providing early indications of COVID-19.

#### **R V MONAALIKA**

Not only by using chest X ray, Use Patients Backgroud health records and advise them what is coming next and its severeness

Model should show the percentage of COVID-19 rate and as well as recovery rate in Results

Supervised Learning Approach

## **PHANEENDRA**

Incorporate a feedback loop that allows healthcare professionals to provide input on Al diagnoses, finetuning the models.

Implement an Al system that continuously learns from new X-ray data, adapting to changes in the virus's presentation and diagnosis guidelines. Combine
Different
Models for
high Acciracy
rate



## **Group ideas**

Take turns sharing your ideas while clustering similar or related notes as you go. Once all sticky notes have been grouped, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you and break it up into smaller sub-groups.

0 20 minutes

Add customizable tags to sticky notes to make it easier to find, browse, organize, and categorize important ideas as themes within your mural.

#### Improve Accuracy rate - Detection

Multi-model fusion for enhanced accuracy Al system with continuous learning and adaptation Feedback mechanism for healthcare professionals to fine-tune Al models

#### Al Integration and Platform Development

Integrated platform for chest X-ray analysis Deploy the model that can be accesable and affordable for health care providers Al for detecting new COVID-19 variants

Regular model evaluation and performance monitoring

Data-sharing networks for Al model improvement

Training programs for interdisciplinary collaboration

# **Step-3: Idea Prioritization**

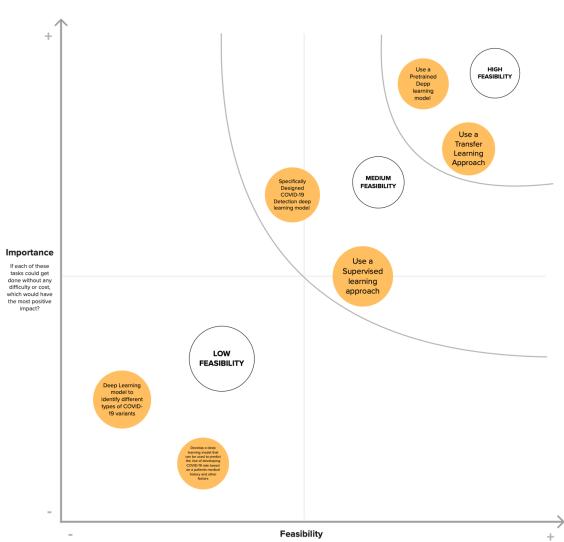


## Prioritize

Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

↑ 20 minutes

Participants can use their cursors to point at where sticky notes should go on the grid. The facilitator can confirm the spot by using the laser pointer holding the H key on the keyboard.



Regardless of their importance, which tasks are more feasible than others? (Cost, time, effort, complexity, etc.)

