Brainstorm &ideaprioritization

Team ID: PNT2022TMID26953

Project: A Gesture-based Tool for
Sterile Browsing of Radiology Images

🕐 **15 minutes** to
prepare1
👤 hour to collaborate 4 peo
ple

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eam Member: HarishV
Team Member: HariharanP

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1 Define your problem statement

What problem are you trying to solve? Frame
your problem as a HowMightWestatement. This will be the fo
cus of your brainstorm.

🕐 5 minutes

PROBLEM

The doctors' hands should be sterile inside
the Operation Theatre. They would often need
to pick some objects or would try to ask for
some objects. They should be able to
communicate without touching any objects which
may lead
to some infections. We try to avoid direct contact by rec
ognizing the hand gestures of the doctors using
an UI that is associated with an AI model.

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2 Brainstorm

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

🕐 10 minutes

Jasper

Contactless	Fast and efficient	Glove should not affect the gesture smearing
Use of high resolution camera enhance the recognition of gesture	It should be a generalized model	There is noneed for verbal communication

Manikandan

There is less possibility for misunderstanding of Hand Gestures	The model should be accurat	It is the future of medic
The model should adapt to new gestures in	The model might be biased	The model could be used in industries too

Narayanan

It avoids infections	It should be able to capture the gesture refa	There is noneed for frequent sterility
The model should work at any kind of loci	The model could also be integrat ed with a robot	The model does not get dist

Anish bell

Less possibilities of new infections	DoctorComputer interaction based in nonverbal communication	A better UI
The model should be stable at any kind of situatio	The future gesture should not impact model	Large training data for generalization

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3 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.

🕐 20 minutes

Gloves and Infections

It avoids infections	Contactless	Glove should not affect the gesture smearing	Less possibilities of new infections

Communication:

The future gesture should not impact model	The models should work at any kind of loci

Model Complexities:

The model might be biased	The model should adapt to new gestures in future	It should be a generalized model

Sensors and cameras:

DoctorComputer interaction based in nonverbal communication	There is less possibility for misunderstanding of Hand Gestures	It should be able to capture the gesture refa	Use of high resolution camera enhance the recognition of gesture

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4 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

Importance

Feasibility

The future gesture should not impact model

Glove should not affect the gesture smearing

It avoids infections

Less possibilities of new infections

Contactless

Use of high resolution camera enhance the recognition of ge

The model should adapt to new gestures infuture

The model should work at any kind of loci ons

It should be able to capture the gesture refa

It should be a generalized model

DoctorComputer interaction based in nonverbal communication

The model might be biased

There is less possibility for misunderstanding of Hand Gesture s