Ideation Phase
Brainstorm & Idea Prioritization

Date	19 September 2022
Team ID	PNT2022TMID09332
Project Name	Real-Time Communication System Powered by AI for Specially Abled
Maximum Marks	4 Marks

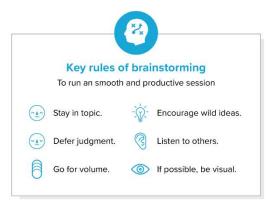**Brainstorm & Idea Prioritization:**

Problem Statement:

1

Define your problem statement

What problem are you trying to solve? Frame your problem as a How Might We statement. This will be the focus of your brainstorm.

⏱ 5 minutes

PROBLEM

People with hearing and speech disabilities need a system or a device that replaces their disability through hand gesture recognition and translating sign language to speech and vice versa so that their difficulty in communication with normal people reduces even during emergencies.

Key rules of brainstorming
To run an smooth and productive session

Stay in topic.	Encourage wild ideas.
Defer judgment.	Listen to others.
Go for volume.	If possible, be visual.

Brainstorm:

2

Brainstorm

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

🕐 **10 minutes**

Renooh S

Human computer
interface with high
performance that
provides a simple
setup have also
been developed

Collar that could
help deaf people
hear music. The
collar converts
auditory input into
vibrations

Personalization in
smart homes for
disabled people is an
approach adopted to
personalize a smart
home to people with
special needs

For Visually
challenged, Reading
Braille aloud for future
playback and it syncs
with a Bluetooth
without disturbing
others

Prahlad N

Lorm glove that
translates
handtouched
alphabet to
a common form of
communication

Avaz is a picture
based software
application for
children and adult
with communication
challenges. It is
available in seven
languages

French instant
transcription app
is used for group
conversations. It
is available in 90
languages

To convert the
images that are
captured into
Braille dots, Eye
ring is used which
is a Braille scanner

Ram Sundar

Robotic helping
hand, a new
mechanism for
helping disabled
people in various
circumstances

Real-Time
Communication
System Powered
by AI for Specially
Abled. This helps
to understand the
sign language.

Written sound for
the hearing
impaired
broadcasts the
sound and
responds with a
brief verse

System and method
for smart public
transportation that
offer service to help
and improve the
overall travelling
experience for
specially abled

Mohana Prasad P

The Dragon
Dictation mobile
app which is
accurate and simple
to use. Also time is
saved by using this
this app

The blind reader
is a device and
functions like a
text-to-Braille
converter

Machine learning
based intelligent
system for safe
guarding specially
abled people from
strangers

GPS for blind is
accessible through
NotNav and NowNav
GPS. It is simple to use
and it announces the
nearest street,
crosswalks, turn-by
directions, etc

Group Ideas:

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**

Group 1

Human computer interface with high performance that provides a simple setup have also been developed

Collar that could help deaf people hear music. The collar converts auditory input into vibrations

For Visually challenged, Reading Braille aloud for future playback and it syncs with a Bluetooth without disturbing others

Personalization in smart homes for disabled people is an approach adopted to personalize a smart home to people with special needs

Robotic helping hand, a new mechanism for helping disabled people in various circumstances

Group 2

Lorm glove that translates handtouched alphabet to a common form of communication

Avaz is a picture based software application for children and adult with communication challenges. It is available in seven languages

To convert the images that are captured into Braille dots, Eye ring is used which is a Braille scanner

French instant transcription app is used for group conversations. It is available in 90 languages

GPS for blind is accessible through NotNav and NowNav GPS. It is simple to use and it announces the nearest street, crosswalks, turn-by directions, etc

TIP 💡

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

Prioritize:

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

If each of these tasks could get done without any difficulty or cost, which would have the most positive impact?

> The blind reader is a device and functions like a text-to-Braille converter

> Robotic helping hand, a new mechanism for helping disabled people in various circumstances

> Real-Time Communication System Powered by AI for Specially Abled. This helps to understand the sign language.

> For Visually challenged, Reading Braille aloud for future playback and it syncs with a Bluetooth without disturbing others

> Lorm glove that translates handtouched alphabet to a common form of communication

> Personalization in smart homes for disabled people is an approach adopted to personalize a smart home to people with special needs

> To convert the images that are captured into Braille dots, Eye ring is used which is a Braille scanner

> Human computer interface with high performance that provides a simple setup have also been developed

> Machine learning based intelligent system for safe guarding specially abled people from strangers

> Avaz is a picture based software application for children and adult with communication challenges. It is available in seven languages

> GPS for blind is accessible through NotNav and NowNav GPS. It is simple to use and it announces the nearest street, crosswalks, turn-by directions, etc

> French instant transcription app is used for group conversations. It is available in 90 languages

> Collar that could help deaf people hear music. The collar converts auditory input into vibrations

TIP 💡

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.

🏳 **Feasibility**

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