Date	19 September 2022
Team ID	PNT2022TMID45340
Project Name	Real-Time Communication System Powered by AI for Specially Abled
Maximum Marks	4 marks

Brainstorm & Idea Prioritization Template:

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

Template

Brainstorm & idea prioritization

Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.

10 minutes to prepare
1 hour to collaborate
2-8 people recommended

Share template feedback

Before you collaborate

A little bit of preparation goes a long way with this session. Here's what you need to do to get going.

10 minutes

A **Team gathering**
Define who should participate in the session and send an invite. Share relevant information or pre-work ahead.

B **Set the goal**
Think about the problem you'll be focusing on solving in the brainstorming session.

C **Learn how to use the facilitation tools**
Use the Facilitation Superpowers to run a happy and productive session.

Open article →

Step-2: Brainstorm, Idea Listing and Grouping

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!

Preethi

- Real time face voice detection
- Detect emotion , Recognize needs, Identified speech, sound expression
- Real time- 2D Frontal face detection
- Facial features extraction
- Transformation and classification of emotions
- Current real time 2D face detection solution employ techiniques

Harshana

- The software is based on a deep learning model and can work both online and offline
- While in the offline mode the deaf and mute person and communicate with you on the same device in real time
- Visually impaired uses can set it up to work with voice over and top back screen readers so that they can how audio instruction
- Hearing impaired user can use text description and icon
- Wheel chair user and people with reduced mobility benefit from optimized routes
- People with a cognitive impairment have simplified interfaces

Nivetha

- The Centers of the two eyes on each gray scale image are used as a centers for rotation, translation, scaling and cropping
- Tex to Speech: This module converts the text into speech and plays the speech
- Speech to sign Gestures: This module converts speech into image representing sign language
- Speech Recognition: API is used to convert the speech into textual format
- Voice Synthesizer is used to convert the passed text into an audible speech which can listened
- To enable the deaf and dumb to communicate and contributo to the growth of an organization through synthezied voice

Meena

- Image recognition- For people with a visual impairment
- Facial recognition- For people with a visual impairment
- Lip Reading recognition- For people with a hearing impairment
- Text Summarization
- Real time captioning are translations for people with a hearing impairmengt
- Captions and translations of online videos for people with a hearing impairment

3

Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go. In the last 10 minutes, 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

TIP

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

- It scans the image to compare the region with the patterns saved in the data base and decide whether the region contains the face
- A real time detected 2D frontal image of dissabled person is transformed into a gray scale image
- Image recognition for people with a visual impairment
- Facial recoginition for people with a visual impairment
- Each processed image has a size of 256*256 pixels
- Lip reading recognition for people with a hearing impairment
- To implement an isolated whole word speech synthesizer that is capable to converting text and responding with speech and the sign gestures
- A communication aid applications is an attempt to create an intuitive mobile application to make work easy, simple and digital
- Voice over: A screen Reader Directly integrated on iphones
- Roger voice: A French Instant transcription app for group cnversations
- Feature extraction
- A Keyboard navigation optimization via the "Tab" button for people with physically disabled

Step-3: Idea Prioritization

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