Ideation Phase
LITERATURE SURVEY

Team ID	PNT2022TMID36394
Project Name	Real-Time Communication System Powered by AI for Specially Abled
Team Leader	Mithoon N S
Team Members	Shyam.M.V, Siddharth.V, Tanmoy Das

Survey-1: Artificial intelligence is like artificial god for specially abled

Author: Prem Mohan

Project Description: Artificial intelligence is not designed to replace humans but rather to enhance our lives by helping us do things we are unable to do on our own. Many companies are working on this type of research, including Google Deepmind, IBM Watson, Apple Siri, Microsoft Cortana, etc., which means there will likely be many new developments soon. These innovations could positively impact everyone's life – even those without disabilities – because they make everyday tasks easier and less time-consuming.

Drawbacks: AI for Accessibility program uses the potential of Artificial Intelligence to develop solutions to many physical and cognitive challenges disabled individuals face at work and in daily life to promote social inclusion for them.

Survey-2: Communication skills in the disabled

Authors: Liubov Ben-Noun

Project Description: Communication is an important human characteristic. In order to maintain relationships effectively humans must communicate with each other. In everyday life, there are a variety of communications including with work colleagues, family, neighbours, and friends, some efficient and some inefficient.

Drawbacks: Ethics and morality are important human features that can be difficult to incorporate into an AI. The rapid progress of AI has raised a number of concerns that one day, AI will grow uncontrollably, and eventually wipe out humanity.

Survey-3: Sign Language Recognition System for People with Disability using Machine Learning and Image Processing

Authors: Bayan Mohammed Saleh, Muhammad Usman Tariq

Project Description: Communication creates bonding and relations among the people, whether persons, social, or political views.Most people communicate efficiently without any issues, but many cannot due to disability. They cannot hear or speak, which makes Earth a problematic place to live for them. Even simple basic tasks become difficult for them. Disability is an emotive human condition. It limits the individual to a certain level of performance. Being deaf and dumb pushes the subject to oblivion, highly introverted. The application of technology should create a platform or a world of equality despite the natural state of humans. Communication, D-talk is a system that allows people who are unable to talk and hear be fully understood and for them to learn their language easier and also for the people that would interact and communicate with them.

Drawbacks: Sign language allows deaf and hard of hearing people to communicate quickly and effectively with others who use sign language.

Survey-4: Real-Time Communications in the Web: Issues, Achievements, and Ongoing Standardization Efforts

Authors: Salvatore Loreto, Simon Pietro Romano

Project Description: Web Real-Time Communication (WebRTC) is an upcoming standard that aims to enable real-time communication among Web browsers in a peer-to-peer fashion. The IETF RTCWeb and W3C WebRTC working groups are jointly defining both the APIs and the underlying communication protocols for setting up and managing a reliable communication channel between any pair of next-generation Web browsers.

Drawbacks: Asynchronous communication takes place when there is a delay or lag between sharing information and receiving a response.

Survey-5: AI Improving the Lives of Physically Disabled.

Authors: Hemshree Madaan, Shubham Gupta

Project Description: Physical disability is one of the significant concerns that hamper individuals to access the web easily. Most of the physically disabled people cannot use technology because of the limitation of accessibility tools and techniques. It is required that the websites should be made compliant with the requirements of every citizen in a country; that's why they should cater to the needs of the differently-abled citizens as well. Features have to be introduced in the websites so that they are easy to use, readily accessible, understandable, and convenient to everyone including best practices/standards and global innovation techniques. At times, accessibility is confused with providing solutions to disabled people, but the fact is accessibility is not only for differently-abled people, but it's also there for everyone. The matter is every person needs accessibility and uses it when in need.

Drawbacks: Features have to be introduced in the websites so that they are easy to use, readily accessible, understandable, and convenient to everyone including best practices/standards and global innovation techniques.