Technology Stack (Architecture &Stack)

Date	03 October 2022
Team ID	PNT2022TMID34007
Project Name	Real-Time Communication System Powered by AI for Specially Abled

Components and Technologies:

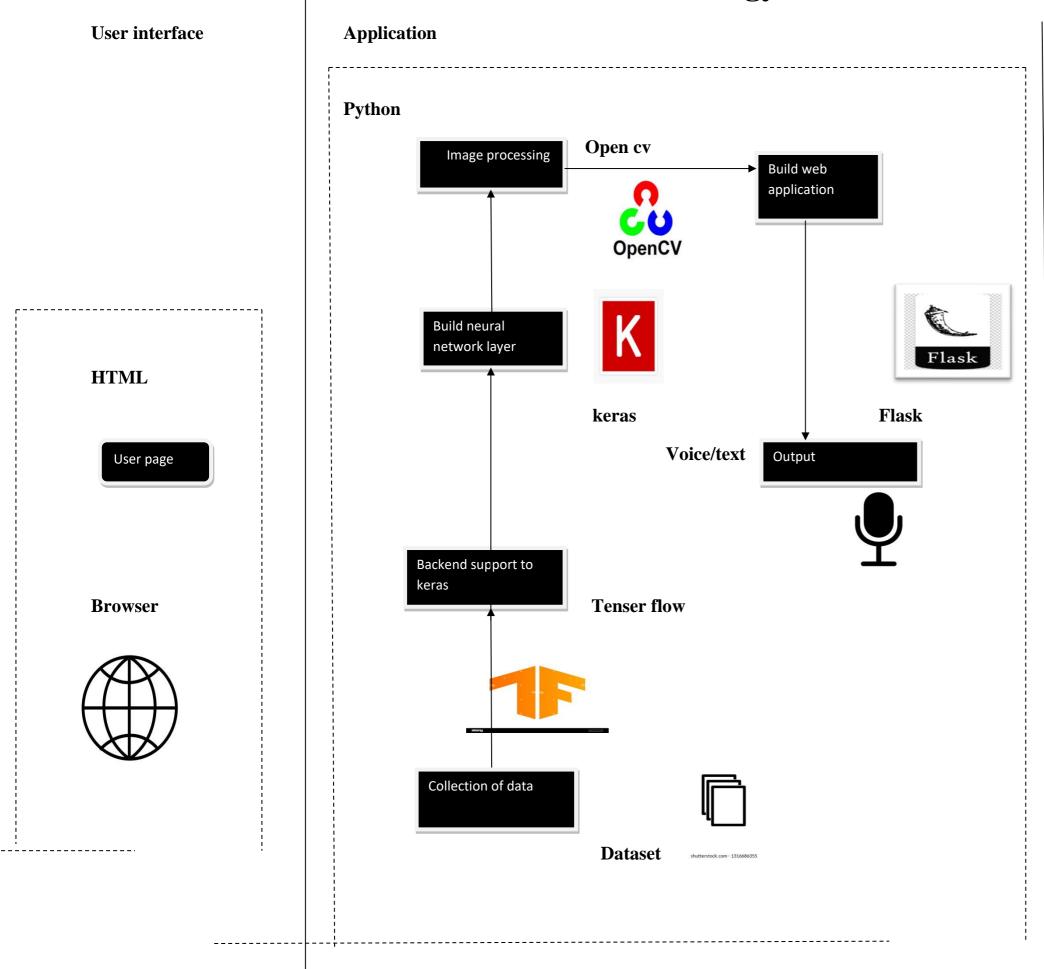
SI.NO	Component	Description	Technology
1	User interface	user interacts with local host 5000	HTML,Bootstrap
2	CNN	It is used for build a the neural network layer	keras
3	Automated image-captioning	Backend support to the keras	Tensor Flow
4	Image Preprocessing	It is used for image processing and computer vision(sign detection)	Open Cv
5	Application Building	It is used for developing web application	Flask

6	Cloud database	It is used to store and retrive data set	IBM DB2

Application Characteristics:

SI.NO	Characteristics	Description	Technology
1	Open-Source Framework	It provides libraries to build light weight application	Flask
2	Security Implementation	NumpPy and Pandas is used for data analysis and visualization	Python(libraries)
3	Scalable Architecture	Generators provide the that provide isolate the internal code dependencies	Python (generators)
4	Availability	Runs everywhere and user friendly	Anaconda (Idle)
5	Performance	It has incredible perform boost	Python(function)

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Database

