Project Topic Selection

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~~Topic 1: Simple Voice Assistant~~

~~Project Area: Natural Language Processing and Web Scrapping.~~

~~Speech recognition is the process of converting audio into text. This is commonly used in voice assistants like Alexa, Siri, etc. Python provides an API called SpeechRecognition to allow us to convert audio into text for further processing. We can use this text to query the results from the internet using web scrapping which is a method used to extract data from different websites. This automation will allow the user to just give voice commands and the program will return the best results from the internet. The program can be tailored to do many tasks from a simple Google search to more complex tasks like playing videos on YouTube. The program can convert the text results that it gets to audio and play it back to the user.~~

~~Topic 2: Handwriting recognizer~~

~~Project Area: Artificial Intelligence and Machine Learning.~~

~~In this digital age it is very important to have everything documented digitally. This project aims to read handwritten documents and convert it to digital text that can be used in any way. With artificial intelligence and machine learning we can achieve this with relative ease. Feed images of handwritten material and the program will use ML to recognize the text and generate digital version the text in the images. We hope to achieve this with TensorFlow and the Google Vision API using the Python programming language.~~

Topic 4: Text Summarizer

Project Area: Natural Language Processing and Machine Learning.

Text summarization is the technique for generating a concise and precise summary of voluminous texts while focusing on the sections that convey useful information, and without losing the overall meaning.Automatic text summarization aims to transform lengthy documents into shortened versions, something which could be difficult and costly to undertake if done manually.Machine learning algorithms can be trained to comprehend documents and identify the sections that convey important facts and information before producing the required summarized texts. For example, large news articles can be brought down to a few lines, text books explanations can be narrowed down to just a few sentences.