Uno Morse Conversie

..- -. --- -- --- .-. ... . -.-. --- -. ...- . .-. ... .. .

PROBLEM STATEMENT

" Conversion of Morse signal into Audio signal using Kmeans Clustering "

OBJECTIVES

- Making job of Secret agents like RAW, CBI, SPYs easier
- Conversion of secretly transmitted Morse signal into Audio signal within seconds
- Transmission of secret signal with just one button
- Any alphabet, any symbol, any number can be transmitted by just one button

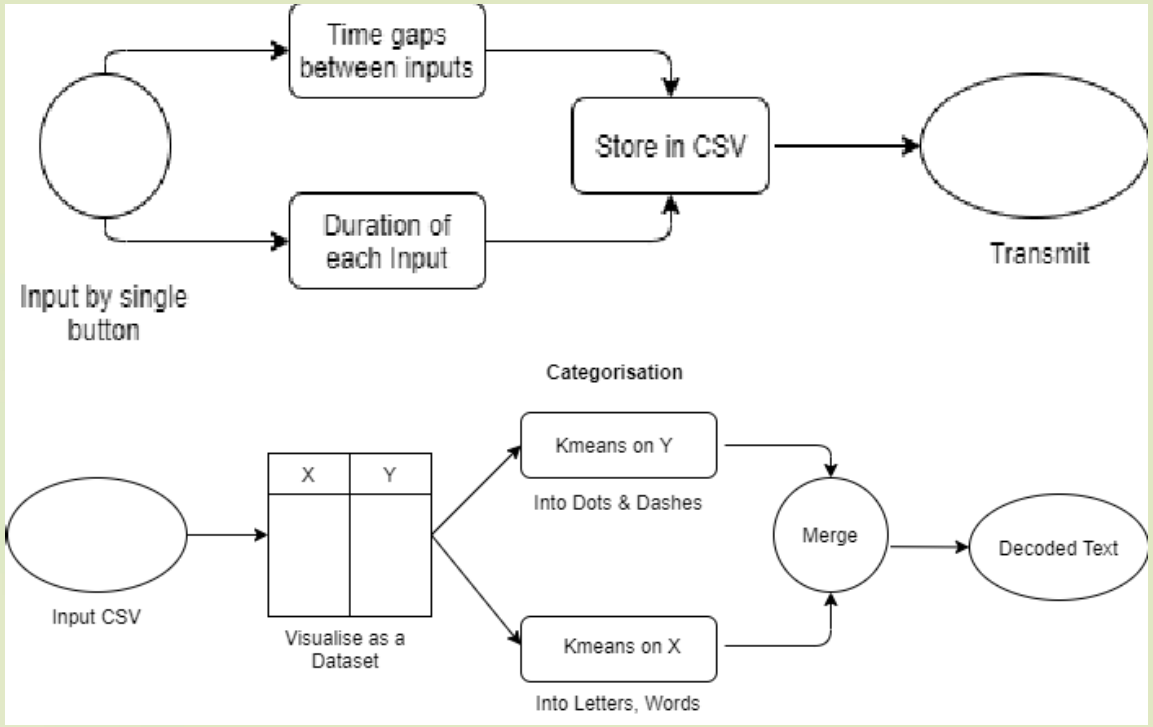
Proposed Methodology

Can be divided into 3 parts:

- Taking input from user, converting into csv
- Conversion of this csv into text using Machine Learning concept i.e., Kmeans clustering
- Converting this text into Audio using gTTs library

ARCHITECTURAL DIAGRAMS

- Input Mechanism:
- Conversion mechanism:



RESULTS

- Input is converted into csv, then categorised using ML in this way:

	X_labels	Y_labels
0	2	0
1	0	1
2	2	1
3	0	0
4	0	0
..	...	...
85	2	0
86	2	1
87	0	0
88	2	1
89	1	0

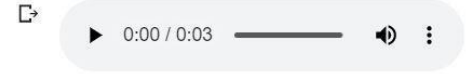
[90 rows x 2 columns]

- Categorised data is converted into text:

```
[20] #Decoded Text
     print(word)
```

- Text is converted into Audio:

```
audio=Audio('output.wav')
audio
```



- Time of Execution:

```
Time taken for converting Morse to Text: 0.8933380000000002 sec
Time taken for converting Text to Audio: 0.23341999999999974 sec
Total time of Execution (Morse to Audio): 1.126758 sec
```