PROFESSIONAL READINESS FOR INNOVATION, EMPLOYABILITY AND ENTREPRENEURSHIP

PROJECT REPORT FOR WEEK 3

Mentor Name: Mrs. SELVI S

Team Leader Name: Praveen Keerthi N

Team Members Name:

1. Sanjay R
2. Praveen S
3. Praveen Keerthi N
4. Saravanan S

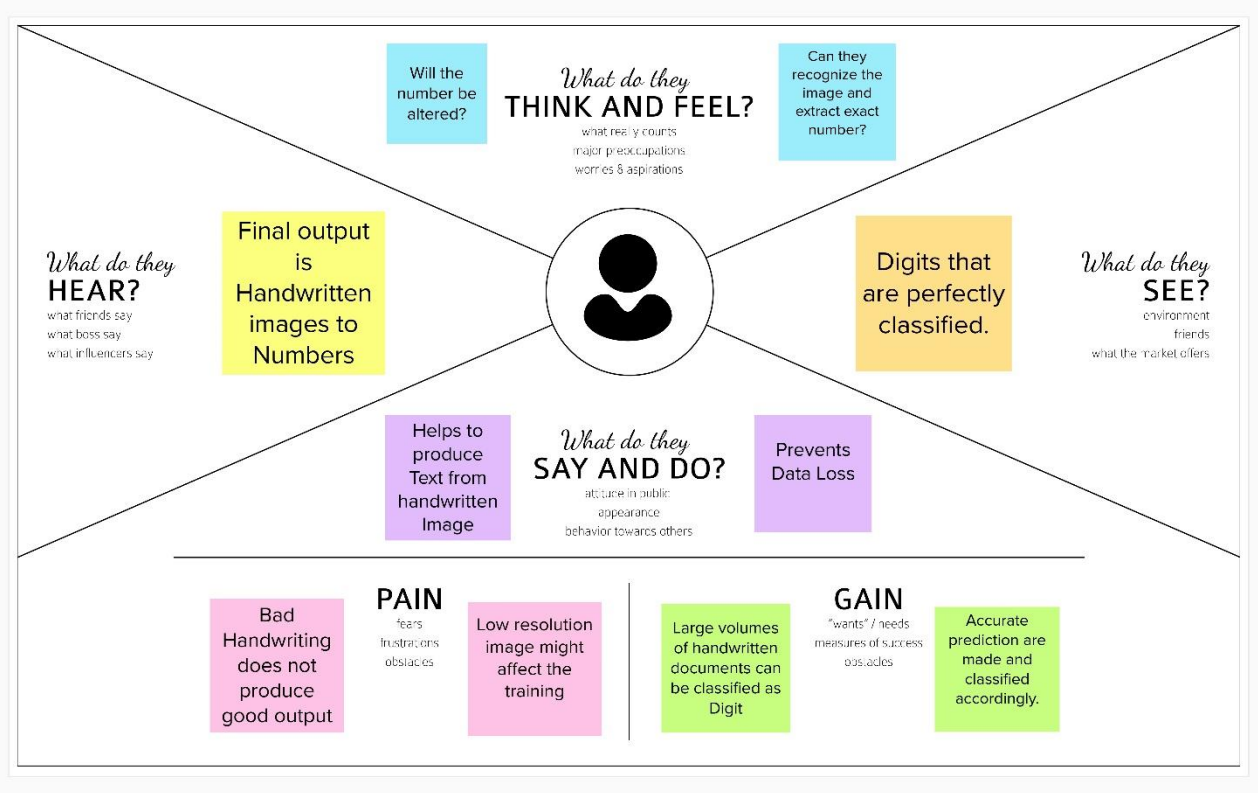
Domain: Artificial Intelligence (AI)

Project: A Novel Method for Handwritten Digit Recognition System

Phase 2 Description: Ideation Phase (Literature Survey, Empathize, Defining Problem Statement, Ideation)

ACTIVITY - WEEK 3(5 - 10TH SEPT):

2.3 PREPARE EMPATHY MAP CANVAS TO CAPTURE THE USER PAINS & GAINS, PREPARE LIST OF PROBLEM STATEMENTS.



PROBLEM STATEMENTS:

- The handwritten digit recognition is the capability of computer applications to recognize the human handwritten digits.
- It is a hard task for the machine because handwritten digits are not perfect and can be made with many different shapes and sizes.
- The handwritten digit recognition system is a way to tackle this problem which uses the image of a digit and recognizes the digit present in the image.
- Convolutional Neural Network model created using tensor flow library over the MNIST dataset to recognize handwritten digits.
- Handwritten Digit Recognition is the capability of a computer to fete the mortal handwritten integers from different sources like images, papers, touch defenses etc and classify.
- them into 10 predefined classes (0-9). This has been a Content of bottomless- exploration in the field of deep literacy.

- Number recognition has numerous operations like number plate recognition, postal correspondence sorting, bank check processing, etc.
- In Handwritten number recognition, we face numerous challenges because of different styles of jotting of different peoples as it is not an Optic character recognition.
- This exploration provides a comprehensive comparison between different machine literacy and deep literacy algorithms for the purpose of handwritten number recognition.
- For this, we've used Support - Vector Machine, Multilayer Perceptron, and Convolutional.
- Neural Network. The comparison between these algorithms is carried out on the base of their delicacy, crimes and testing- training time corroborated by plots and maps that have been constructed using matplotlib for visualization.

2.4 ATTENDED THE TECHNOLOGY TRAININGS AS PER THE TRAINING CALENDAR.

AI - B2 - 2M4E (Evening Session) – Day 3: