

Ideation Phase

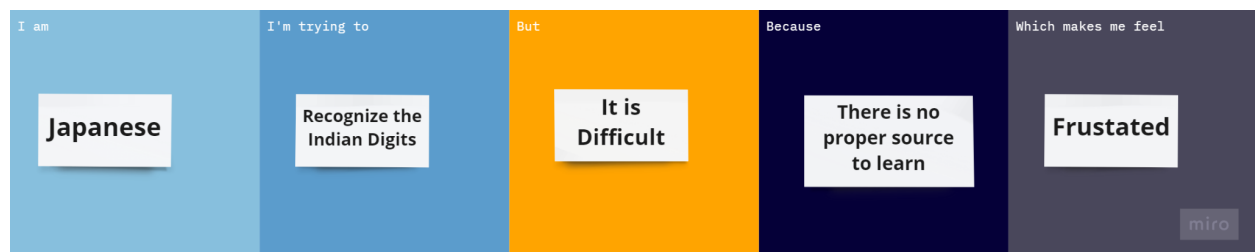
Define the Problem Statements

Date	15 October 2022
Team ID	PNT2022TMID27135
Project Name	A Novel Method For Handwritten Digit Recognition System
Maximum Marks	2 Marks

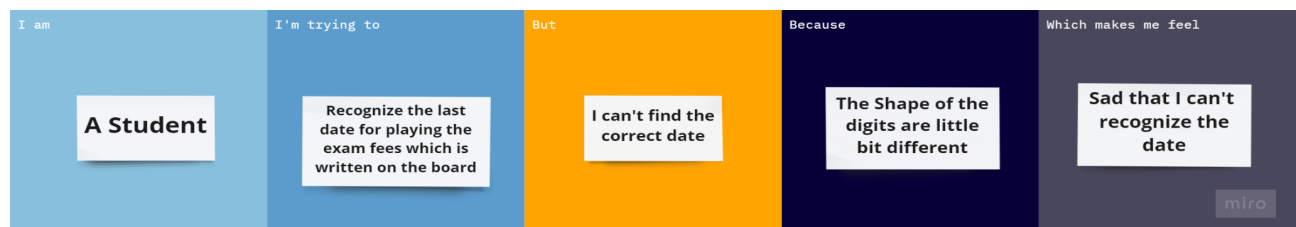
Problem Statement

Handwriting recognition is one of the compelling research works going on because every individual in this world has their own style of writing. It is the capability of the computer to identify and understand handwritten digits or characters automatically. Because of the progress in the field of science and technology, everything is being digitized to reduce human effort. Hence, there comes a need for handwritten digit recognition in many real-time applications. MNIST data set is widely used for this recognition process and it has 70000 handwritten digits. We use Artificial neural networks to train these images and build a deep learning model. Web application is created where the user can upload an image of a handwritten digit. this image is analyzed by the model and the detected result is returned on to UI

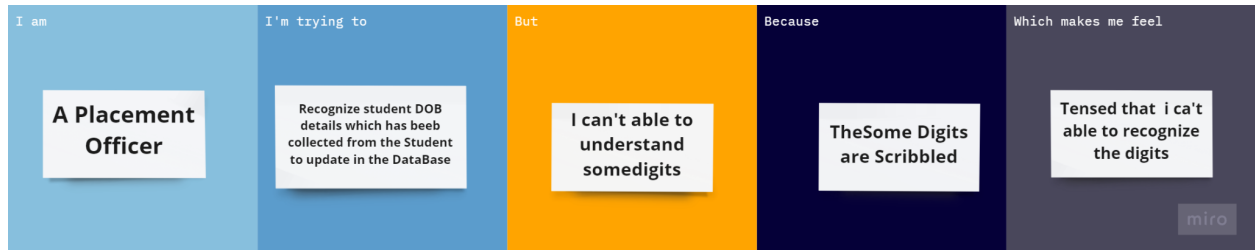
Problem Statement 1



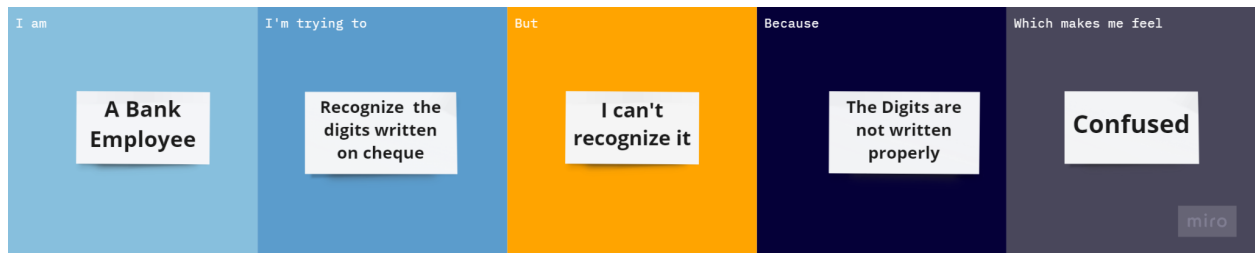
Problem Statement 2



Problem Statement 3



Problem Statement 4



Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	Japanese	Recognize the Indian digits	It is difficult	There is no proper source to learn	Frustrated
PS-2	A student	Recognizes the last date for paying the exam fees which is written on the board	I can't find the correct date	The shapes of the digits are a little bit different.	Sad that I can't recognize the date
PS-3	A Placement officer	Recognize students' DOB details which have been collected from the students to update the database	I can't able to understand some digits	Some digits are scribbled	Tensed that I can't able to recognize the digit
PS-4	A student	Recognize the last date for paying the exam fees which is written on the board	I can't find the correct date	The shapes of the digits are a little bit different.	Sad that I can't recognize the date