बैंक ऑफ़ बड़ौदा
Bank of Baroda

<u>Bank of Baroda Hackathon - 2022</u>

Your Team Name : Knowledge Temple

Your team bio :Sudarshan k, Harshita V Moger, A M Shreenidhi, Likith G

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Problem Statement?

- ❑ Why did you decide to solve this Problem statement?

- ❑ The use of paper checks has been on the decline, but still the large portion of the population relies on the   physical check transactions.

- ❑ In the current situation we can see that the consumers want to clear their checks within no time, which is why most of them prefer digital transactions because they are more convenient and fast-paced.

- ❑ This problem provides the great opportunity to improve the check clearing process and make the compilation time reduce.

- ❑ Also the technical version of check processing can be introduced

- ❑ Automatic Data Entry & Technical verification can be done by introducing the AIML concepts to implement the technical version for reducing human effort and detecting frauds.

User Segment & Pain Points

Which user /advertiser segment would be early adopter of your product & why?

User segment of Cheque Processing:

❑ Bank will be the early adopter of our product through their influence on customer .Cheque will be processed faster without human effort .

❑ Authentication and Compilation of the cheque process will be more accurate.

Pain Points of Cheque Processing :

❑ Lot of manual work which lead to decrease in productivity.

❑ Unnecessary Long Processes.

❑ Accuracy of manual verification is not up to mark.

Pre-Requisite

What are the alternatives/competitive products for the problem you are solving?

❑ Magnetic Ink Character Recognition Scanner-

❑ It is used for scanning the MICR code which is an 9 digit code printed on the bottom of the cheque and aids in identifying the cheque.

❑ It consist of cheque number, routing number, account number

Azure tools or resources

Azure tools or resources which are likely to be used by you for the prototype, if your idea gets selected

1.Kaggle Dataset

2.Jupiter Notebook

3.Tkinter

4.Python libraries
        1.Numpy
        2.Keras
        3.Tensorflow
        4.pandas

Any Supporting Functional Documents

Present your solution, talk about methodology, architecture & scalability

❑ Capturing the Cheque

❑ Automatic Identification of the Bank

❑ Capturing the image through mobile or scanner

❑ Automatic exaction of the details within the cheque

❑ Automatic Validation of the cheque though the accounts database.

Key Differentiators & Adoption Plan

How is your solution better than alternatives and how do you plan to build adoption?

❑ Compared to MICR scanner our product can scan the cheque and automate the process of identification of the details within cheque,validates the account details.

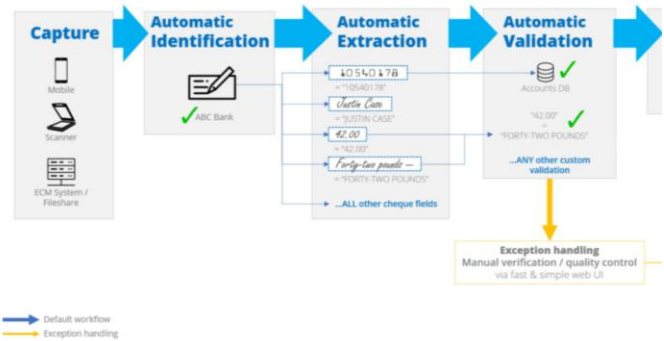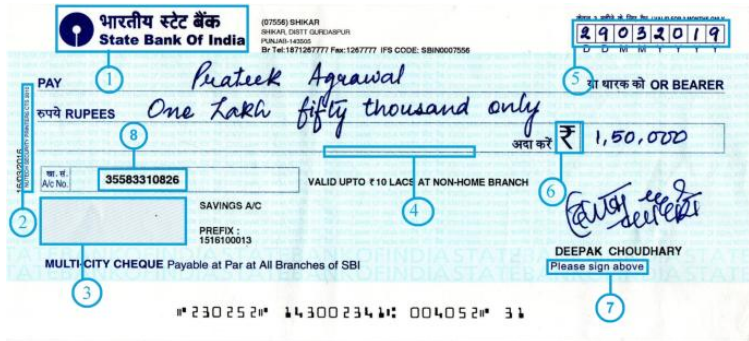❑ Where as MICR scanner can only detect the MICR code.

Building plan and adoptation:

❑ Using Artificial Inteligence Machine Learning, Optical Charater recognition, CNN Image segmentation ,Image processing, Support Vector Machine.

GitHub Repository Link & supporting diagrams, screenshots, if any

How far it can go?
1. Multiple cost savings
2. Turned for speed(Large scale Cheque processing)
3. Improved Confidentiality

Kaggle for dataset : https://www.kaggle.com/datasets?search=Cheque+

Thank You

Sudarshan k

Harshita V Moger

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