Automated check Processing

Submitted by

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The Objective

Our understaing of requirements are:

To create an automated check processing which helps to

1. Verify signature
2. Using optical character recognization, converts amount, receiver and automates data entry in journal
3. Using Machine learning and artifical intelligence, OCR automate clearing process
4. Automatic Data Entry
5. Fraud detection to identify fradulent cheques

Process Flow

Archiecture diagram depicted in right side takes care of below process flow

1) Customer submits check

2) For offline check, scanner scans check and uploads check image to Azure blob

3) Azure function triggers once new image is uploaded to Azure Blob

4) Azure function calls OCR along with form recongonizer to extract signature,date, Pay or Bearer name,Account number, IFSC code,Amount

5) Extracted data is stored in Process folder a temporary blob folder or a storage document db

6) Same Azure function after getting signature compares with speciment signature of customer and gives score to verify signature

7) This result will be send to Fraud detection Azure function which analyse based on historic data for fraud

8) Fraud detection alogirthm will be both rule based such as blocked account, money laundering, hawala fraud as well as AI based to check bogus cheque

9) Once signature verification and fraud detection checks are passed , processed data will be stored in Staging Datastore for further processing along with verification results

The solution

Automated Check Processing Flow and Archieture