Template

Customer experience journey map

Use this framework to better understand customer needs, motivations, and obstacles by illustrating a key scenario or process from start to finish. When possible, use this map to document and summarize interviews and observations with real people rather than relying on your hunches or assumptions.

Created in partnership with

Product School

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A NOVEL METHOD FOR HANDWRITTEN DIGIT RECOGNITION SYSTEMS

Document an existing experience

Narrow your focus to a specific scenario or process within an existing product or service. In the **Steps** row, document the step-by-step process someone typically experiences, then add detail to each of the other rows.

TIP

As you add steps to the experience, move each these "Five Es" the left or right depending on the scenario you are documenting.

SCENARIO

Browsing, booking, attending, and rating a local city tour

Entice

How does someone initially become aware of this process?

Enter

What do people experience as they begin the process?

Engage

In the core moments in the process, what happens?

Exit

What do people typically experience as the process finishes?

Extend

What happens after the experience is over?

Steps

What does the person (or group) typically experience?

- Predict the handwritten digits
- Use website or App
- Choose the image to recognise
- view the predicted digit and its accuracy value.
- User need to predict the digits that they are not fair to them
- Visit website or app to find the digits.
- Choose the image to predict its accuracy
- Finally, customer can get the correct value with percentage of accuracy
- Start to predict the value
- Complete image upload process
- Confirm the uploaded image
- Finalize the predicted value
- After deciding to predict the value click the recognize button.
- Add up the image that you want to recognize in the webpage.
- Select the necessary image that the user needs.
- Get the accuracy value of the uploaded image
- Processing of digital files is cheaper than processing the traditional paper files
- MNIST Dataset is used for getting the images.
- Convert the handwritten letters into machine readable format
- A CNN can extract affluent and interrelated features
- In the current age of digitalization paperwork is reduced.
- The CNN model has been extensively employed for digit recognition from the MNIST benchmark dataset.
- the uploaded images has been convert into machine understandable format
- It can extract the features automatically from the images
- Can view the guide to use the application in the home page
- Upload the desired image from our local system
- Maximum accuracy in the result
- portability, scalability
- Gain knowledge to use the application in a user-friendly manner
- Can choose the image to be forecasted
- View scanned images and crop imagery to find still more accurate result
- Remains scalable even in the complex situation
- Recommendation
- Providing awareness
- Recommendation to other business source to use this website or app
- Providing the awareness to others to use this app or website

Interactions

What interactions do they have at each step along the way?

- **People:** Who do they see or talk to?
- **Places:** Where are they?
- **Things:** What digital touchpoints or physical objects would they use?

- Hand written digits predicted section of the website or Android app
- Find the digits section of the website or Android app
- Recognise section of the website or Android app
- Recognise section of the website or Android app
- prediction section of the website or Android app
- Image uploading from the devices in the section of the website or Android app
- Conformation of the image section in the website or Android app
- Finally see the output value in the website or Android app
- Digitalization leads to customers interacts with the machines.
- the capability of CNN model for extracting the deep features for the MNIST digit recognition experiment.
- Converting of recognize digits section of the website or Android app
- Converting of recognize digits section of the website or Android app
- The guide to use the web-application is clearly stated in the home page itself
- Instructions gives clients to use the application in a user-friendly manner
- The button is been provided to choose & upload the image
- The prediction process is started by the prediction button
- Recommendations span across website or Android app
- Awareness to the peoples who nee the help in predicting the digi

Goals & motivations

At each step, what is a person's primary goal or motivation? ("Help me..." or "Help me avoid...")

- Convert handwritten digits into machine readable formats
- It ensure effective and reliable approaches
- It help in automatic extraction of distinct features
- It is to allowing the computer to turn handwriting into a format that the computer understands.
- Computer zooms in on each character and identifies it by comparing it to a database of known characters and words
- To ensure effective and reliable approaches for recognition of digits
- To help in automatic extraction of distinct features and make CNN the most suitable approach for solving handwriting recognition problems
- This system is to train itself or recognizing the digits from different sources and in different real-world scenarios for recognition
- It's goal is to give error free output in all the applications which uses this system
- handwritten input is scanned or photographed and given to the computer
- To reduce the time taken to guess the handwritten digit
- It is to have not only professional and commercial applications, but also has practical application in our daily life
- To be of great help to the visually impaired
- Also helps us to solve complex problems easily thus, making our lives easier
- To give still more accurate results by using of neural networks and convolutional neural network
- The whole world is shifting into the digital world, so to cope up with that this predicting method is done in a digital form

Positive moments

What steps does a typical person find enjoyable, productive, fun, motivating, delightful, or exciting?

- The handwritten input is scanned or photographed and given to the computer
- 'BLOCK CAPITALS' reduces the range of differences in the writing
- ANN allows machines to learn over time, and adapt their output using weights
- Hastily scribbled notes and formal, handwritten letters become readable by a computer
- Importance of being able to identify them despite differences due to different handwriting styles
- Provides higher than 99% accuracy with typed characters in high-quality images
- Neural network is more adaptable to handwriting changes
- Produces a classification of the digit
- Produces rich description of the instantiation parameters which can yield writing style
- In a world running on data, accurate handwriting recognition could become a powerful tool

Negative moments

What steps does a typical person find frustrating, confusing, angering, costly, or time-consuming?

- Tricky for programmers to provide enough examples of how every character might look
- It is suffering from accuracy issues from the beginning
- characters look very similar, making it hard for a computer to recognise accurately
- Joined-up handwriting is another challenge for computers
- Some awkward angles of photo also considered to cause drawbacks
- It requires much more computation than more standard techniques
- Characters look very similar, making it hard for a computer to recognise accurately
- Diversity in human writing types
- Spacing differences might cause concern
- Not appropriate for immediate text input
- Irregularities of handwriting causes less accurate character recognition
- Prediction time might get long based on the input given
- The angle the photo is taken could obscure the character, making it harder for the computer to identify
- Results might not satisfy the user with 100% accuracy

Areas of opportuni

How might we make each s better? What ideas do we h What have others suggeste

- Postal mail sorting
- Bank check processing
- Form data entry
- Detection of vehicle number
- Post offices for arranging letter
- Digital libraries
- Image restoration
- Recognize zip codes on mail
- Numeric entries in forms filled up by hand
- Tax forms

Need some inspiration?

See a finished version of this template to kickstart your work.

Open example