

RAPIDAI VISION MOSAIC

Problem Statement for Round 1

Task :

In today's ever-evolving & fast-paced world, we at Udyam believe it is essential for us to stay in touch with our roots. Your task is to implement a **Handwritten Hindi Word Recognizer**. The maximum character set for the dialect is as given below :

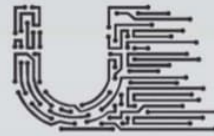
vowels

अ आ इ ई उ ऊ ऋ
ए ऐ ओ औ अं अः

Consonant

क ख ग घ ङ
च छ ज झ ञ
ट ठ ड ढ ण
त थ द ध न
प फ ब भ म
य र ल व श ष
स ह क्ष त्र ज्ञ





Marking Scheme :

All teams will be required to provide us their character set before evaluation. After which, we will test the model on increasing word lengths & complexity.

For a word of length 'x' , the team will be given the following points if word is **correctly** recognized -

- a) Character Set size > 10 then $2 \times x$
- b) Character Set size > 15, then $3 \times x$
- c) Character Set size > 20, then $4 \times x$
- d) Character Set size > 25, then $5 \times x$

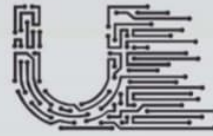
(**Note:** A letter is also a word of length = 1)

+5 to +20 **Bonus points** will be awarded for each innovative feature implemented in the Solution. Points to be given will be strictly decided by co-ordinators.

Submission Instructions :

1. The deadline for PS Submission is 12th April 23:59.
2. Each team has to mail the following files in a folder to mosaic.udyam@gmail.com
 - ❖ **character.txt** file for the character set chosen
 - ❖ **main.py** file which would take **captcha.jpg** as input and give the corresponding output.
 - ❖ **model.h5** file for the trained model.
3. The subject of the mail should be in the format '**TeamName_Round1**'.
4. Only one submission per team will be accepted.
5. Any additional feature if made needs to be clearly mentioned in the mail.





THE ANNUAL TECHNICAL FEST OF ELECTRONICS ENGINEERING DEPARTMENT OF IIT (BHU)

UDYAM'21

Rules/Guidelines for submission :

1. The organizers reserve the right to change the rules as they deem fit. Change in any rules, if any will be notified on the Website and the Whatsapp group.
2. Each team's code will be verified by coordinators and should not be a complete match to others. In case of suspected cheating, the team will be immediately disqualified.
3. The participation certificate will be awarded to teams scoring a total of at least 5 points.

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