CAPTCHA's

* Completely automated public Turing test to tell Computers + human Apart

① GIMPY → reading / interpreting disordered text, text displayed in different Orientations
* 7 words in " " / duplicated and is expected to identify re three

② ReCaptcha — Google Books— Control word / Unknown Word — way to digitize scanned words that are non readable; employed by Google

③ Question Captchas —
There are 1 ▽, 3 ▭, 4 ⬡ in a box. Hoco Many stationeries ▭

④ Collage Captchas — click a specific object/(s) from a Collage of images.

⑤ video and Aural Captchas
enter words from video ⤷ da uttered distorted words to be entered.

Good CAPTCHA:— * Avoids exploitable Variants
* Segmentation resistant *
" IMPACTS USABILITY "

Proposal:—(i) Background — High Contrast better readability
black text on white B/g — optimal legibility
"positive text" — v/v → negative text

(ii) # of Confusing characters :— 0 − O; 2 − Z; b − 6
5 − S; 1 − l, vv − w, m − m;

(iii) curved stray lines — affects readability; but increases security

(iv) g and j ; b − p 3 aural Confusing pairs

ⓐ Count of NO of Confusing chars $\propto \dfrac{1}{usability}$ (c)

ⓑ Distortion level (d) $\propto \dfrac{1}{usability}$ (d)

ⓒ Noise line Count (e) $\propto \dfrac{1}{u}$ (e)