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CAPTCHA IDENTIFICATION USING HUMAN INTERFACES

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ABSTRACT

CAPTCHAs are short for Completely Automated Public Turing test to tell Computerand Humans Apart. The purpose of a CAPTCHA is to block form submissions from spam bots automated script posting addresses from publicly available web forms. The term "CAPTCHA" was coined in 2000 by Luis Von Ahn ,ManuelBlum, Nicholas J .Hopper(all of Carnegie Mellon University, and John Langford (then of IBM).CAPTCHA reused because of The fact is difficult for the computers to extract the text from such a distorted image ,where as it relatively easy for a human to understand the text hidden behind the distortions.Therefore, the correct response to a CAPTCHA challenge is assumed to come from a human and the user is permitted into the website .The CAPTCHA test help side which users are real human beings and which ones are computer programs.

Keywords: **HIP(Human Interaction Proof),**

I. INTRODUCTION

You're trying to sign up for a free email service offered by Gmail or Yahoo. Before you can submit your application, you first have to pass a test .It isnota hard test-in fact, that's the point. For you, the test shouldbe simpleand straightforward .But fora computer, thetest should be almost impossible to solve. This sortof test isaCAPTCHA .They are alsoknownasa typeofHuman Inter action Proof (HIP). You've probablyseenCAPTCHA testson lotsof Websites.Themostcommon formof CAPTCHA isan imageof several distorted letters. It's your job to type the correct series of letters intoa form .If your letters matchtheones in the distorted image, youpass the test.

CAPTCHAs are short for Completely Automated Public Turing test to tell Computersand Humans Apart .The term" CAPTCHA" was coined in2000by LuisVonAhn, Manuel Blum, NicholasJ. Hopper(all of Carnegie Mellon University, andJohnLangford (thenof IBM) .They are challenge responsetests to ensure that the users are indeedhuman.The purposeofa CAPTCHA is to block form submissions fromspambots– automated scripts that harvest email addresses from publicly availableweb forms. A common kindofCAPTCHAusedon most websites requires the users to enter the string of characters that appear in a distorted form on the websites requires the users to enter the stringof characters thatappear ina distorted form on thescreen.

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II. TYPES OF CAPTCHA:

- Text CAPTCHAs

Text CAPTCHAs are randomly generated. These text CAPTCHAs are displayed to the user during the signing up process. These text CAPTCHAs distinguishes humans from bots.

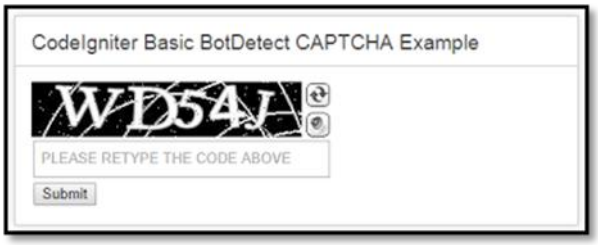

Fig. Text CAPCHA

- Audio CAPTCHAs

Audio CAPTCHAs are second technique implemented in the system. During the user sign in process, user is provided with audio CAPCTHAs which are also generated randomly. User has to listen to it and type it as it is to sign in. This again distinguishes humans from bots.

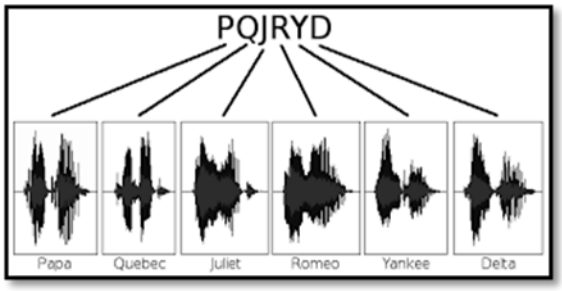

Fig. Voice frequency

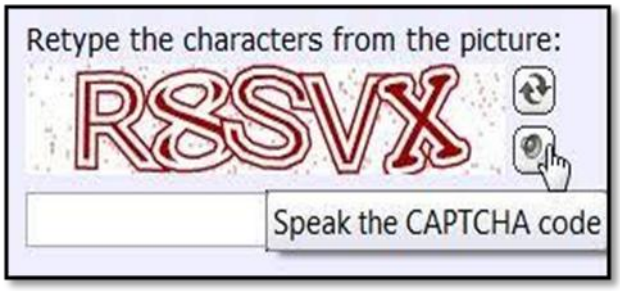

Fig. Audio CAPCHA

- Image CAPTCHAs

A method called Cued Clicked Points (CCP) is implemented under the image recognition based CAPTCHAs. Here the user will be provided with images, amongst which he has to select one and make five clicks anywhere on the image. These clicks are saved as password.

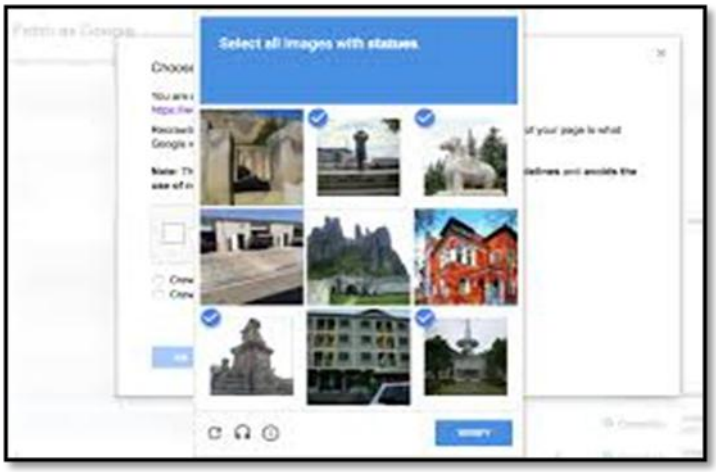

Fig. Image CAPCHA

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- Video CAPTCHAs

Video CAPTCHAs are yet another technique in the CAPTCHA system. Here in this method a video is provided to the user during signing up process. There will be few questions displayed for user to answer based on the video. If the answers matches to the answers stored in the database user signs up successfully.

Fig. Video CAPCHA

III. LITERATURE SURVEY

The need for CAPTCHAs rose to keep out the website/ search engineabuseby bots .In1997, Alta Vista sought ways to blockand discourage the automatic submissionsofURLs into theirsearch engines. Andrei Broder, Chief Scientistof Alta Vista, andhis colleagues developeda filter .Their methodwas to generatea printed text randomly that onlyhumans could readandnot machine readers. Their approach wasso effective that ina year, ―spamadd-ons‘‖ were reducedby95%anda patentwas issued in2001. In2000, Yahoo‘s popularMessengerchat servicewas hit by bots which pointed advertising links to annoyinghumanuser sochat rooms .Yahoo, along with Carnegie Mellon University, developeda CAPTCHA calledEZ-GIMPY, which chosea dictionary word randomlyand distorted it witha wide varietyof image occlusionsand asked theuser to input the distorted word. In November 1999, Slashdot .com releaseda poll to vote for thebestCS College in theUS .Students from the CarnegieMellon Universityand the Massachusetts Instituteof Technologycreated bots that repeatedly voted for their respective colleges .This incident created the urge touseCAPTCHAs forsuch online polls to ensure that onlyhuman users areable to take part in the polls.

IV. EXISTING SYSTEM

The Our project CAPTCHA Identification using Human Interfaces (Audio) & Images. In that system the interface of the human by the human audio. This system work for the CAPTCHA. This new innovation in the CAPTCHA . The CAPTCHA recognition primarily based graphical password were additionally utilized in ,whenever text CAPTCHA is displayed below every images .The every image pass the specific secret throughout authentication for every pass image those specific locations were designated throughout secret creation as a part of the secret . An improvisation on CbPA-protocols propose ring states that only if the amount off ailed login tries for the account exceeds a threshold a CAPTCHA are applied and storing cookies solely on

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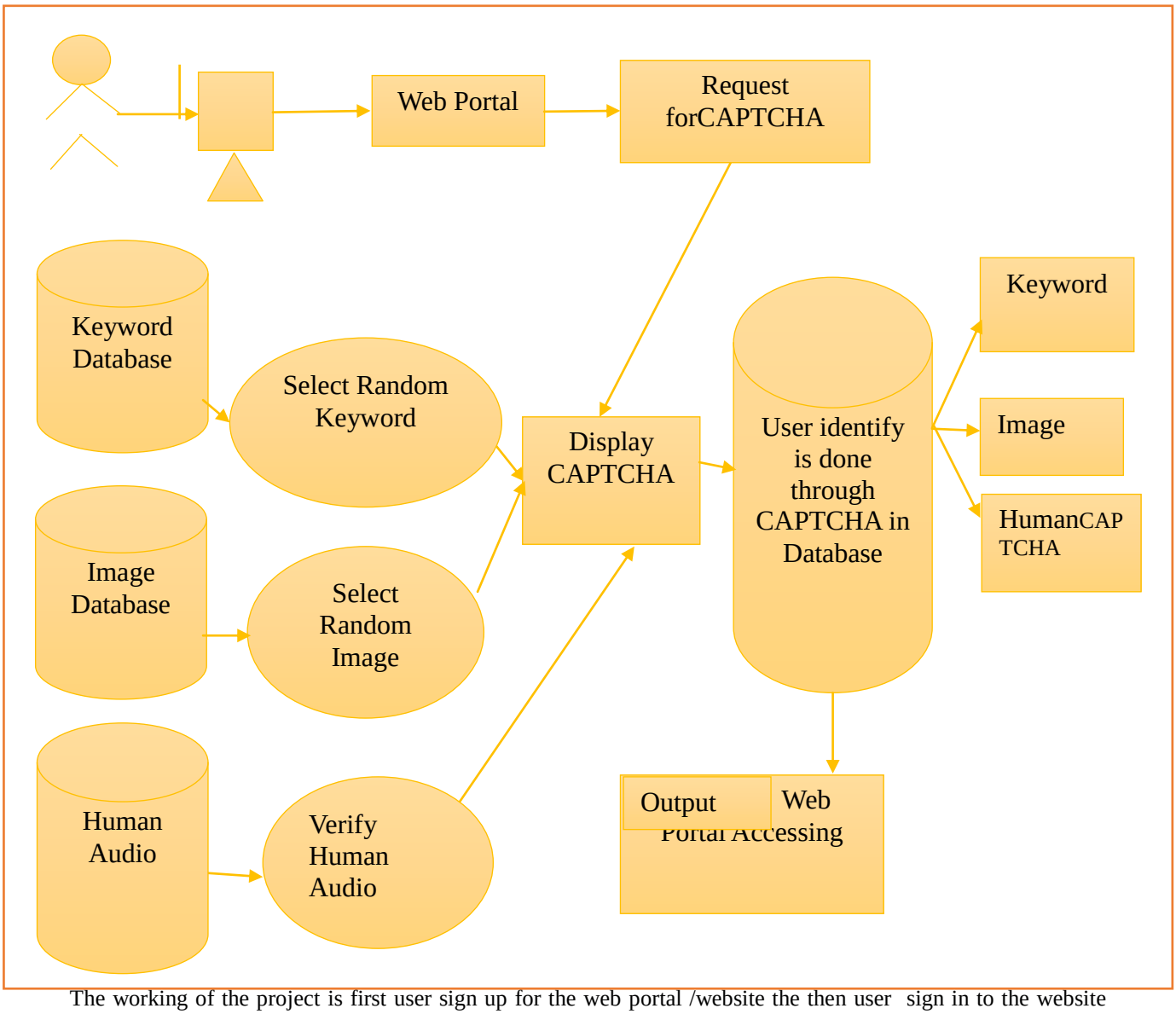
user- sure machines. The image CAPCHA is already existed so we developed the CAPCHA identify by the human interface the working of our system is below.

V. PROPOSED SYSTEM



The working of the project is first user sign up for the web portal /website the then user sign in to the website then request for the CAPTCHA then the three options are generated 1.keyword 2.Image 3.Human audio (human interface). The user request for the first option that work like a the keyword stored in the data base and the select random keyword from the database. CAPTCHA identify the that human or not then give the CAPTCHAto the user and user can access the web portal easily.

The second option work like a user select the any image that stored in the database the some click event are the stored in the database the user click on the right click event an dthe user give the grant permission to go for next and the search the anything on the website.

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The third option is the CAPTCHA identify by the human interface that means the text CAPTCHA verify the human audio. The human give own voice for the security of the website.

VI. ADVANTAGES:

- Unbreakable CAPTCHA by machine attacks.
- Click points introduces external object moving
- Avoid the spam
- CAPTCHA is easy to implementation.

VII. DISADVANTAGES

- This has raised the chances of attacks on such services by interrupting them sending multiple requests to the servers providing these services programmatically, so taking more time delay process.
- CAPTCHA only limit spam and Unable prevent the spam completely .

VIII. CONCLUSION

CAPTCHAs are aneffective way to counter bots and reduce spam .They serve dual purpose –help advance AI knowledge .Applications are varied from stopping botsto character recognition& pattern matching.Some issues with current implementations representchallenges for future improvements.

IX. FUTURE SCOPE

- Video CAPTCHA can be generated.
- The CAPTCHA can be based on Handwriting Sentences reading and understanding.
- The CAPTCHA can be Verify by Human Face Detection.

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