Animated Captchas And Games For Advertising

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• APIs to generate Single Image based Advertisements Captchas
• How Captchas can solve the problem of Analytics/Reviews, for Advertisements, Art, Places. How they can be used to conduct Polls Situation Analysis.
• How they can provide entertainment and Knowledge
• How they can be used to conduct survey in context of collecting data of users for making health recommendation by collecting their dietary routines, sleeping patterns.
Animation Captcha Puzzles For Advertisement
• Three Puzzles are there which comes randomly per refresh.
• One puzzle is to extract shortest unit of sequence from a random length repeating sequence.
• Puzzles include typing an alphabet of particular color splashed on advertisement image at random interval.
• Other puzzle is to solve a Math Puzzle.
• Puzzles are Embedded on multiple or Single Advertisement Images as shown in Figures.

• Benefits of the System
  - One can show multiple images per Advertisement. For example – Story of Advertisement through multiple pictures and is thus, more appealing than single Image based Captcha.
- In Sequence puzzle, challenge can be to extract Brand Keyword, Entered by the Advertiser.
- In multiple color puzzle, challenge can be to enter a Brand word of particular color out of complete Brand Message.
- System is more Secure and User Friendly and is Dynamic and helps in better brand recall.
Visual Effects Captcha
• Visual Effects make Advertisements more Engrossing and Appealing and aid in better Brand recall.

• **Cube Captcha**- Advertisement are rendered on a Cube which rotates making advertisement very interesting and engrossing

• **Globe Captcha** – Figure shows the example of Environment Awareness Campaign. A special object such as Globe is rendered on the image around which Text rotates. This embeds a global and priority feeling in the Campaign and also helps in recall.

• A principle, benefit of the system is, it can be dynamic, is very user friendly and highly secure.
Interactive Game Captcha
• Advertisement is rendered on a **3D scene**, making Advertisement Captcha **interactive** and thus more fun and Appealing.

• In Figures, a **Shooting Game simulation** is generated.

• An **Advertisement road** is displayed at the bottom to showcase advertisement. An object related to the advertisement, for example- here a **coke balloon** is modeled as a target, rotating in the sky. Environment can be customized according to the advertisement. For example if advertisement is of telecom company showcasing a new mobile phone, road can be modeled as image based advertisement for mobile phone and object rotating in the sky can be a mobile phone. Thus, it uses shooting gaming mechanism.
Challenge is to shoot three targets. Target can be shot by clicking on it. After one target is clicked, it starts glowing to indicate, it has been clicked and score increases by one.

As one move ahead on the road, more targets start appearing in the sky. For example in, figure two coke balloons appear, after moving ahead on the road.

After, Clicking on two coke balloons above, game Captcha will be considered as solved.
APIs to generate Single Image based Captcha

• **Quoted Message, Colored Text, Underlined Text, Italicized Text, TYPE-IN Captcha, Custom Question, Detailed Advertisement Captcha** APIs are discussed in paper.

• Various **Templates** and how they can be used to Generate Advertisement Captcha Images via Java 2D are shown.
Some examples has been shown

"Zovi"
SMART CASUALS AT SMART PRICES
starting @ Rs.399

"Smart Casuals"
SMART CASUALS AT SMART PRICES
starting @ Rs.399

Please Enter the "Quoted" Text
Please Enter the "Quoted" Text in the Left

Please Enter the Underlined Text
Please Enter the Blue Text

Up to 50% OFF on Adidas
Grab Stylish Adidas shoes @ up to 50% Off. Hurry offer limited!

Please Enter Green Text
• APIs place Stylized Brand Message at appropriate places in the Image say for example, Top right where AdImage occupies Left Segment of Image and Ad message is in second half of right segment, Bottom left where Image occupies Right Segment of the Image and Ad message is in First half of left segment. Also, API is to pick certain Ad keywords from Brand Message, write them in particular color on template with Brand Message, thus generate, Multiple Captcha codes.
• **Detailed Captcha API** is very powerful media for effective Advertising.

• Image depicting brand or product is kept in the left and Advertisement message is in the right. Thus, Advertisement can be detailed and can convey more information, also Captcha is more clear and easy to solve. Main advertisement information/*Caption* starts from top left to increase visibility.

• **Template** can be very useful to generate other forms Captchas and make them appealing, for examples questions, survey which will be discussed in later section.
Sharing and Analytics via Captchas

Kollam, Kerala
Please Choose from below emotions for above Place -
Nice, Magnificent, Okay

Serbian authorities banned the Pride parade in Belgrade 2012 due to threats from extremist right-wing-groups. How does that make you feel?

Please Choose from below emotions - Magnificent, Sad, Excited

Up to 50% OFF on Adidas
Grab Stylish Adidas shoes @ up to 50% Off. Hurry offer limited!

Please Choose from below emotions for the above ad - Cool, Amazing, Boring
• **Emotion Based Captcha** can be used to conduct Analytics/Generate reviews in different domain such as Art, Advertisements/Products, Places, Situation Analysis.

• This is very useful in solving problems such as **preserving art and traditions, increase of tourism, Advertisement Analytics.**

• Users are given an Analysis Domain, for example Advertisement and they have to type in the Emotion they feel for the Advertisement. As Reaction can be positive and Negative, **three random words depicting positive and negative emotions** are picked from the database and displayed. Various words depicting emotions in three different category, extremely positive, positive and negative are kept in database and are picked randomly. For example - Cool, Magnificent, Boring. **Distortion effect** is applied to Emotion Words to make them difficult to read by a program. Emotion words at the bottom of the image are **blurred** and in some cases twisted to decrease reading ability of program. Another distortion can be adding, **minor spelling mistake** to emotions given, which makes generating database of emotions highly difficult. All the answers entered by the users are accepted from among the three, to ensure freedom to the user.
Sharing via Captchas
Advertisements can also be shared via social networks like Facebook. If a user likes the Ad and want to share, he/she can simply press Facebook ‘Like’ button to share the Advertisement and it will also solve Captcha. It is very useful in context of online shopping as discounts and other offers can reach large number of people easily. Also, advertisement can be about any event. Feature can also aid in sentiment analysis of the advertisement by counting likes corresponding to the advertisement. As can be observed in the figure above, likes corresponding to Zovi Advertisement is displayed. This, gives a impression of ad to users as well and increase their interest in the advertisement.
Survey Captchas

How many hours did you sleep today? Please enter Integer between (1-12)

*This is survey for your health benefit.

What did you eat today? Please enter food item.

*This is survey for your health benefit.
• Survey Captcha can be used to collect data regarding dietary habits, sleeping patterns of users and this data can be analyzed and can be used to make health recommendations to users, and thus, serve the purpose of health assistant.
A Game with a Purpose Named ‘Pick Brands’ used to promote Advertisements
User and his/her partner are given an image based advertisement. They have to identify the brands, shown in the advertisement, if they agree they get points and move on to the next advertisement. Game can also be used to get feedback by obtaining responses/reactions such as cool, okay, excellent corresponding to Products/Advertisements. It can also be used to collect suggestions/questions regarding the product and other information such as features they like in the product and things they would like to be improved and thus, can act as comprehensive feedback system. It is difficult to obtain such feature by banner and Captcha advertising on the websites. Moreover, game can be used to obtain keywords corresponding to advertisement images. Keywords obtained are very useful as they can be used to map webpages such as from news portals, telecom providers, car portals. Thus, game can be utilized for ranking/rating products/advertisements and can be used to calculate popularity score, comparison of same genre products belonging to different brands. Also, medium of advertising can be a stronger media such as a video making the game more interesting and advertising more powerful.
Conclusion

• For seeing details of Captcha Service and to see demo, please visit –

https://sites.google.com/site/koolcaptcha/