

CUE ASAP: SOCIETY'S HELPING HAND

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ABSTRACT

CUE ASAP is a solution that can help us to survive in this world without worrying about any kind of threats and accidents. The emergency happens without our unpredictable knowledge, so we tend to aid in that scenario by using this application. The issue of violence is one of the major real-world problems that every human face. To solve all kinds of threats to mankind, CUE ASAP might come in handy. All the required information to protect a person is at hand which is a smartphone. At Least if, we can predict 3 minutes of the future it can really save many precious lives. As per the degree of emergency, the help will be provided by using an AI chatbot CUE Assist. Each color represents an emergency, which can be shown in front of a surveillance camera or click the respective situation. This is programmed to report the selected situation to nearby authority as soon as possible. Thanks to any smart device with a camera and CUE ASAP. It can help with people who need of an assist. From this project, we hope to build an application that aids people in emergencies.

Keywords: Emergency Awareness, AI-Chatbot, Data Visualization, Open-source

I. INTRODUCTION

There are seven major real-world problems. They are: Climate Change, Health Care, Food Insecurity, Violence, Homelessness, Sustainability, and Education. The main focus to solve this real-world problems or issues. In this, we would be solving almost three problems mainly targeting on violence, Health care and education with AI chatbot. The primary objective of this CUE ASAP [1] is to make the person's life easier. Anyone suffering from any type of emergency, CUE ASAP would be an assist. There are many applications in the market either in Google Play or in Apple's App Store. In this Web-App all the integration with minimal line of code which will be open-sourced after the deployment and within the stages of modules. Another feature is that it can track the location even without the internet by using the phones built-in sensors and advance mathematical formula to get the accurate location of the triggering event.

To provide a better understanding of the term CUE ASAP. Let us begin with CUE, it's a stick that is used to hit the ball in snooker billiards, which is usually white color. This also refers to as intimation, indication, or trigger. Now think in this perspective, the long stick which is an app (CUE ASAP) that a player in this case person holds in their hand. There is a different level of force which can be applied to hit the white ball and that pockets the targeted ball. This means that the person can activate at any level of emergency. Next the ball is a way finder for the respective emergency that has been activated. Which then hits the other ball in the pocket represents in the action or response that has been taken from the authority to resolve the problem. The last word is ASAP abbreviation is, as soon as possible this action tells how fast the problems sorted out and solved quickly.

II. LITERATURE SURVEY

Emergency awareness is the method that CUE ASAP is focused on with Artificial intelligence chatbot and some of the extra features are being used to manipulate. Beginning with Data visualization which provides a better understanding on what is the information that is being collected either from the users or from the data set itself. Which is represented mostly in graph format and dots or the user can choose from various option.

In India most of them face a common issue that is the language problem. More than hundreds of languages. India is the world's fourth highest number of languages (447). People across various states and cities when they travel to places, either they must know how to communicate in English which is the world's well-known language or in India national language Hindi. But some have difficulties in understanding and to speak other language except their mother tongue. To reduce the bridge gap between service authorities and people who are in emergency, the communication barrier we can use visuals. However, most of the authority persons get trained to understand different languages. But some person who is in a very critical situation, they cannot respond or answer to the questions asked by the authorities.



The frameworks and design that is being used to solve this application. The First major focus is into Web-Application the most common and best solution library is MERN Stack. To be more responsive and working with REST APIs. So, this method that is fast, secure and easy to implement. For the AI chatbot Machine Learning with a powerful self-learning plugin is kommunicate.io. The best part is that CUE ASAP [2] is, open-sourced on GitHub there all the updates regarding the project are available.

III. PROPOSED SYSTEM

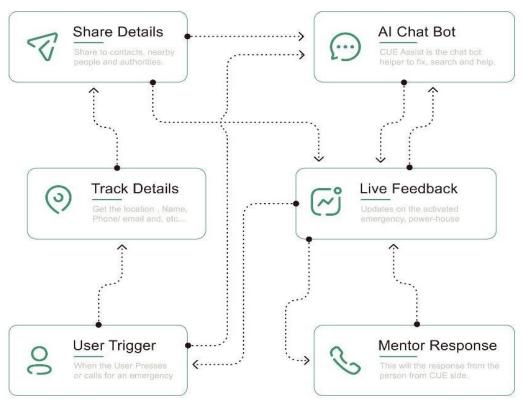


Figure 1: Overview of CUE ASAP.

User Trigger

Whenever a user calls for an emergency or clicks the button regarding the situation. By this time all the function in the code will run asynchronously, it's in alerting mode to halt all other work and focus on the user's request. The User can directly interact with the AI chatbot (CUE Assist). If the user wants to know any kind of information for their situation it can provide within a reasonable time period. Any other question is about the anything it will try to solve the query or else it will forward to Mentors through live feedback.

Track Details

All the tracking information are retrieved with the permission of the user. So, it consists of Current location: Latitude and Longitude, location before five minutes, name, email or phone number for contacting, current date and time. All these details are stored in encrypted format, only with the unique private key this information can be decrypted. This module forwards the unique private key with an ID number, Tracking Details is synchronous process, so they can accept multiple user trigger at the same time.

Share Details

Track Details module forwards the unique private key with an ID number, then it validated the received key and maps the key with users contact information and all the nearby subscribers. Then it shares the required information only. This allows the other modules to access the user details with the key, it has another smart feature that it can send the user details to the AI chatbot and it can also intimate all other subscribed members to spread the emergency awareness. With the data visualization concept, it will generate some visual diagrams and predicting the outcome via graph.

AI chatbot

Artificial intelligence chatbot is named as CUE Assist which is trained on NLP (Natural Language Processing), it can respond to any type of question, and it acquires the details from live feedback that also holds knowledge base.



NLP is in English, so it can translate from any language to the respective language to respond. And it also accepts the voice input that is converted into text or text into speech everything based on their native language, which is the first language that the user interacted or responded.

Live Feedback

It is the main data center for all other modules so, whenever something is asked it goes and fetches the information along with the unique key, the entire user data, session management and all the tasks are performed by the Live feedback it is many to one connection. This has connection from all side and collection details from every module it only replies to the particular module or to the exact query asked. Here not every query needs to be authenticated with the unique key. Some are retrieved from the knowledge base.

Mentor Response

Every time any user accesses the AI Chat bot it automatically books a ticket with the mentor, so when the chatbot does not understand or unable to solve the question it redirects to these mentors. they are the people who have good experience with psychology behaviors or retired employee in any of the service authority can become a mentor [3] of part-time to help others in need.

IV. METHODOLOGY

System Architecture

CUE ASAP allows the users to register or login as guest for a stipulated time period. Then it gets all your information then shares the contact details to the nearest authority and subscribed member. The AI chatbot can respond to the user based on the interaction that it acquires either through text or voice, that process the information and studied the pattern in the quire then give a proper reply. Next the mentor comes to solve a problem that by booking a personal 1-to-1 chat room with a ticket.

Workflow of proposed system

Step 1: Start

Step 2: Open website [1]

Step 3: Register or Login as Guest

Step 4: Click on the respective emergency

Step 5: Get a live feedback

Step 6: Talk with AI chatbot or Mentor

Step 7: Close the session when the problem is solved

Step 8: Stop

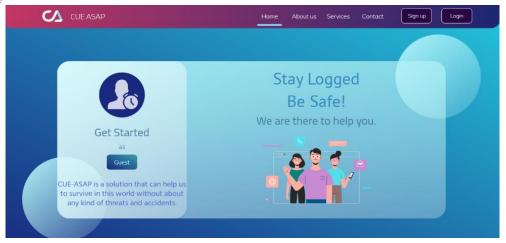


Figure 2: CUE ASAP website.

V. RESULT

The main purpose of this application is to bridge gap between service authorities and people who are in emergency. So, that the response time would be less, and it can save souls out of danger, easily and rapidly. This application is a prototype and a concept on how it works in real-time. Everything is possible by the new and advance sensors, advancing technology, thanks to the best frameworks and library we can implement and deploy as a real application. To get a better perspective of the application which is being planned. Some screenshots we would like the share and how it can change the world.





Figure 3: CUE ASAP AI chatbot. Which is in CUE (Tamil)

VI. CONCULSION

As of now, the main concept of the project is illustrated. As, we move on we are going to add many features that we discussed in our prototype, we are going to proceed this project as a native app that works on any other platform, and it's going to be a trustworthy app as we promised. Upcoming app is going to be a better solution, as we are nearing the future of automation, AR, etc. We are going to build the best UI experience that has the new aspects for the user. All changes are going to be an iterative approach as these changes will be optimized as we proceed. New security policies will be published as the new technology are beginning to fabricate.

VII. REFERENCES

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