



Child Tracker : Web Port on Human Trafficking

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Abstract – To reach out to any missing person or his family from any corner of the world, nothing can be better than the Social Media. It can give a reference or a clue that can help in identifying the person who has been exploiting. That reference can be used by the police to find out that person. This paper throws a light on a crucial topic “Human Trafficking”. It is the worst crime ever and this act cannot be done by a single or two persons. There is a gang or the chain of people including a minimum of 6 to 7 persons and this chain needs to be broken. So, the goal is to stop this disgusting crime, we have come up with the idea of designing such a cloud based web portal that can help in reaching the sufferer in the minimum time with the use of social media integrating with our database. Dealers utilize an assortment of intentions to publicize the illegal sexual administrations of the youngsters and ladies they offer, including Internet arranged promotions, announcement sheets, and web-based media related with escort and massage services(EMS).[4] A picture gets viral on social media in a few seconds. So, we have used this idea to come up with the web portal for the protection of the trafficked persons.

Keywords – Human trafficking, UNICEF, cloud based web portal, EMS.

Introduction– Human Trafficking means the transferring, migrating or harbouring of people by compelling or forcing them, or using any coercive means is what exactly meant by “Trafficking “. According to the Unicef human trafficking Statistics, near about 10 lakh people are being trafficked each year. Also, it is a shameful crime. Human Trafficking exploits a person’s identity, his dignity, his character, his freedom, behavior and sometimes it completely changes the life of the trafficked person.

Of course, in present’s scenario, social media is something which is used by children, adults and even by old people. So, what can be better than using it for a noble cause like Human Trafficking. Johnson et al [7] says that when people are involved in a caring network like Facebook community which is resolution in the search of finding the lost persons, they get most of the social holdings such as benefaction and emotional support, to subsist with the daily exertion or incertitude. This is stretched out by Wang and Nayir [8] that expressed casual interpersonal organizations, for example, Facebook people group offer admittance to assets, to passionate help and to rehearse help for duplicating with individual and monetary issues. Millions of people use platforms like social media that can work as a bridge between the police and the victim. This will not only help the police in detecting the accused person or his gangs but also will save their time.

II : Background

Human Trafficking is a shameful act among all crimes, which affects a person physically, mentally and socially, also snatches his/her dignity. Children are often the most trafficked victim. In the midst of human trafficking victims, children and women are more likely to become a quarry in the conditions where to get the employment is the most difficult task, which enforces them to work as the bonded or the slaved labourers.[5] The number of children being trafficked is twice the number of adults because the demand of younger ones is more in the market. The main problems that has raised giving up like a alarm are: Number of kidnapping cases of children has been increased, increasing sexual violence, trafficking of ograms has increased with alarming numbers, increasing number of child beggar trafficking, because a strong network is working behind it. During the COVID-19 pandemic, there has been a significant increment in the count of online exploitations. Lamentably, it is seen that the buyers and the sex traffickers are not slowing down during this universal epidemic and are continuing to embrangle the more unguarded youth with fake promises.[3]

III : Available Systems

In 2015, Child Rescue Alert linked forces with Facebook to weigh down the interpersonal organization's realm. At present, when a missing child case follows the definite set of standards with intentness, then the law authorization offices can draw geo-focused on posts, which contains the depiction and description to expose in the news sources of Facebook clients in the region where the youth is accepted to be.[2]

(Un)trafficked [9] game was designed for the Children's Investment Fund Foundation and the Nobel Laureate Kailash Satyarthi's Children's Foundation.

"TrackChild" [6], a web based interface used by The Ministry of Women and Child Development (WCD) to find out the missing youngsters. There are several partners like the Ministry of Home Affairs (MHA), Juvenile Justice Boards and National Legal Services Authority, Ministry of Railways, State Governments/UT Administrations, Child Welfare Committees which are in relationship with the TrackChild Portal.

Domestic Human Trafficking Detection using Indicators and Movement of Trends through content available on Open Online Sources. [1]

Implementation of a proposed System – The idea is focussed on how to reduce the number of children being trafficked each year. Human Trafficking can occur within a country, does not need in crossing of borders. On the Internet, it is within the reach to find several websites which are illegitimate. Therefore, the usage of net for different kind of infringements, such as Human Trafficking is expanding with more remarkable exploitation of advanced media.[4] Our tracking portal seeks to answer three primary questions: How to find the victims? How to spot them out from the crowd? How to help the trafficked person's family in finding them? So in our web portal, where the information of the found/lost person will be saved in our database on cloud and that data will be processed in such a way that the details of the sufferer will be posted on social media dais like Facebook and Twitter, also an email will be sent to the contacted person informing that the data of the victim has been saved successfully. Whenever, a new record of the trafficked person will come, it will be matched to all the records in our database and if the details of the later record match with any of the earlier records then the family/relative of the person will be contacted via email. Along with this, a report is made storing the number of counts of the persons lost/found which will help in evaluating the efficiency of our system.

The web portal is made using the most popular cloud technology, Salesforce. As the system is designed on cloud, we can access the data from anywhere, from any device (desktop, tablet, phone). It employs information retrieval from the contacted person, and then information is processed and integrated with the digital media. There is nothing to worry about the database and how to manage it. That is the real power of clouds. Data cannot be lost from the database, also every information is secured. No other user can access the crucial details except the owner and the user to whom the owner has given the access of the portal. Salesforce feature of two-factor authentication (2 FA) is enabled, which allows the user to login with safety.

- **Cloud Computing & Salesforce :**

Moving to the cloud. Running in the cloud. Storing in the cloud. Accessing from the cloud: recently is looks like everything is occurring in “the cloud”.

- **Integration of various social media handles (Facebook, Twitter) :**

Using online media handles for our undertaking comes from seeing that consistently individual gazing at his telephone screen whether he is eating, voyaging ,or strolling, and so forth Before the finish of 2012, out of 7 billion people living on the planet earth, in excess of a billion of them had a functioning Facebook account, the greater part a billion had a twitter handle and before the finish of 2015 it was assessed in excess of a billion had a functioning LinkedIn account.

- **Software as a Service (SaaS) :**

It is a method by which applications are conveyed over the Internet—as a support of the clients. Centralizing the facilitating of business applications has been around in any event since the 1960s. In the year 1990s, it advanced with the ascent of the web into Application Service Providers with outsider applications oversaw and facilitated.

- **Salesforce Data API :**

□ REST API SOAP API Bulk API Streaming API

API Name	Protocol	Data Format	Communication
REST API	REST	JSON , XML	Synchronous
SOAP API	SOAP (WSDL)	XML	Synchronous
Chatter REST API	REST	JSON , XML	Synchronous (photos are processed asynchronously)
User Interface API	REST	JSON	Synchronous
Analytics REST API	REST	JSON , XML	Synchronous
Bulk API	REST	CSV , JSON , XML	Asynchronous
Metadata API	SOAP (WSDL)	XML	Asynchronous
StreamingAPI	Bayeux	JSON	Asynchronous (stream of data)
Apex REST API	REST	JSON , XML , Custom	Synchronous

Fig. 1.

- **Process Builder :**

It is a point and click tool that is designed for the business methods automation and to see the graphical illustration of the process that is built.

- **Flows:**

An application of Salesforce which is used to automate a business process by collecting data and performing operations in our org or an external system is called Flow. On multiple objects, it can create, fetch, update and delete records.

- **Workflow:**

A business logic engine which automates certain activities dependent on specific standards is called Workflow. If the standards are met, the activities get executed. At the point when they are not met, records will be saved yet no activity will be executed.

- **Apex:**

It is a language used by developers for the execution of various control statements or flows on the platform of Force.com. Like any other languages, it is strongly typed, based on Object Oriented behavior. Also, working with the Database is so easy with apex which is owned by Salesforce.com.

- **Triggers:**

Triggers are the automation coding technique that is used by Salesforce which brings automation in the context. These are used depending upon the DML operations, can be used before or after, insert, update and delete operations.

- **Aura Component:**

JavaScript, markup and CSS together makes a unit called Aura components.

1. General Architecture :

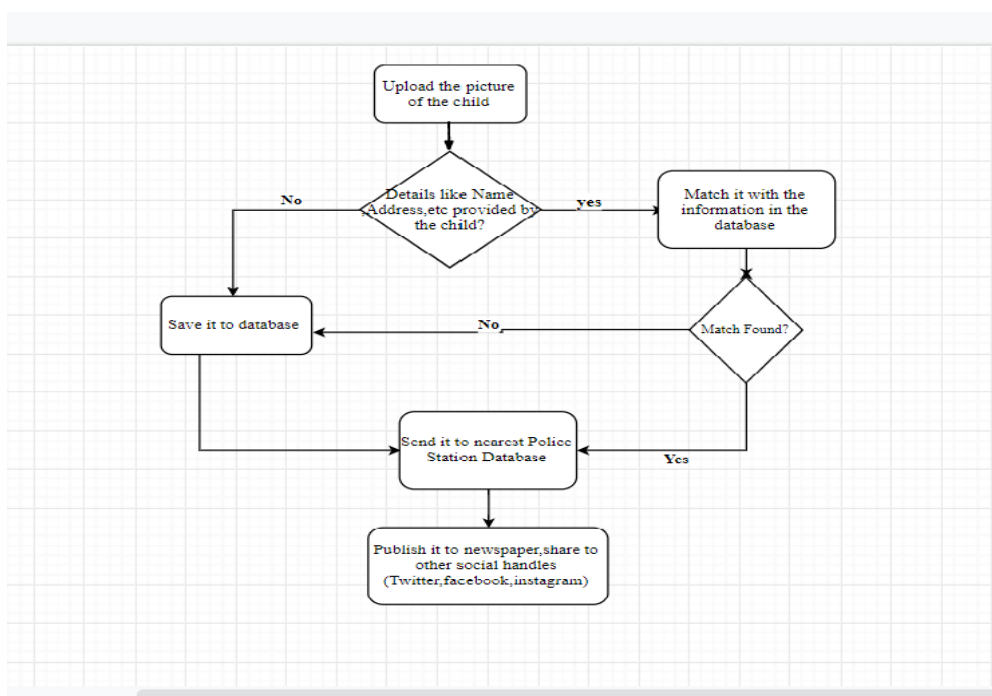


Fig. 2.

Output Screens :

Application On AppExchange :

The App Exchange is a platform which is available in cloud. This is the platform on which you can publish your applications that can be accessed by other users by downloading from here. AppExchange is somehow similar to playstore. Here the App comprises the following menu: Home, Childs, Reports, Dashboards, Files, Contacts. Some of them are displayed here .

Reports :

Reports represent the data in the tabular form, i.e., rows and columns, based on criteria defined in it. Several types of groupings, filters and the charts can be used to display the information in the required graphical form.

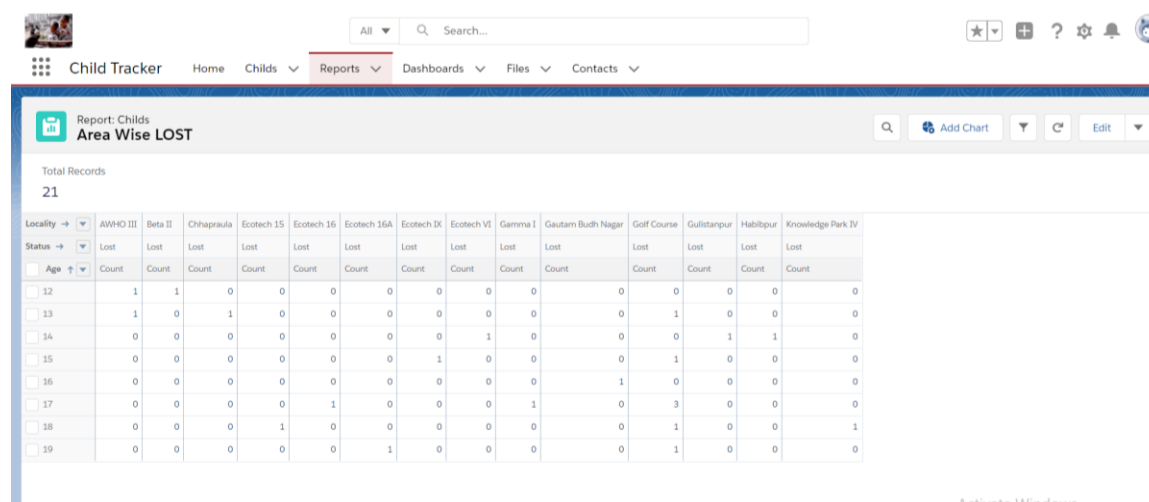


Fig. 3.

Dashboards :

Dashboard is a component use to display our data after working on the project in analytical form via graphs and charts. It uses reports that have been made by the user in the system by performing different experimental analysis of their application.

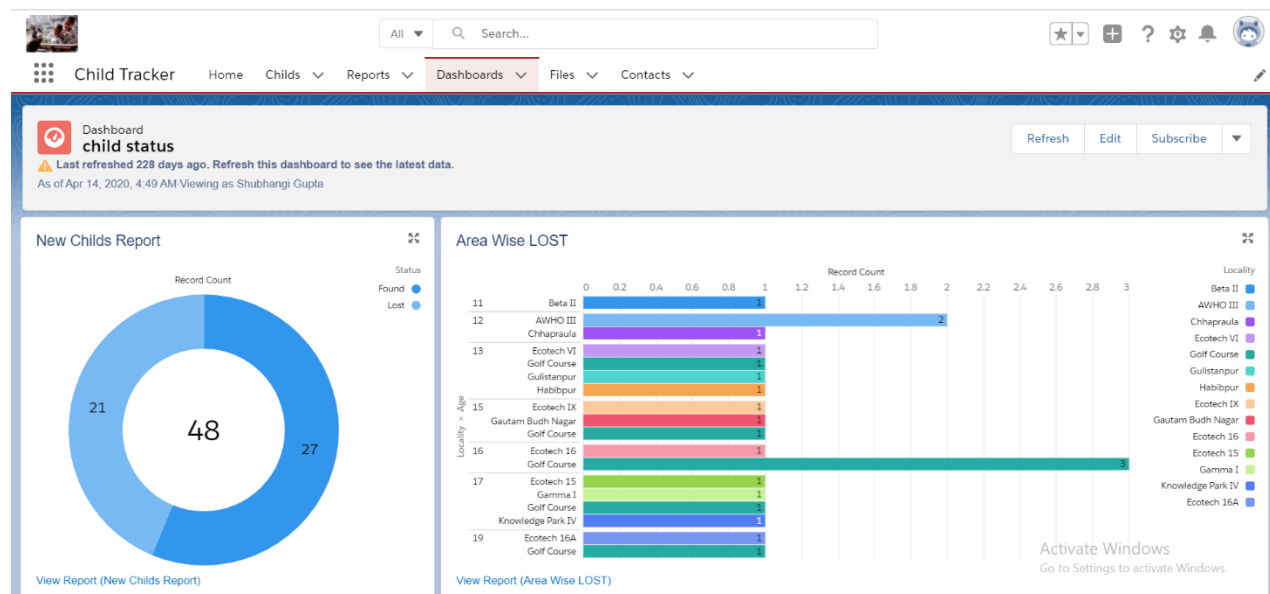


Fig. 4.

Web Portal :

The web portal in Salesforce can be built on communities, a cloud of Salesforce services. The community is a feature which allows to combine all of the components that the user done in the organization. The communities get published easily as permanent on cloud have domain without any hustle and extra payment.

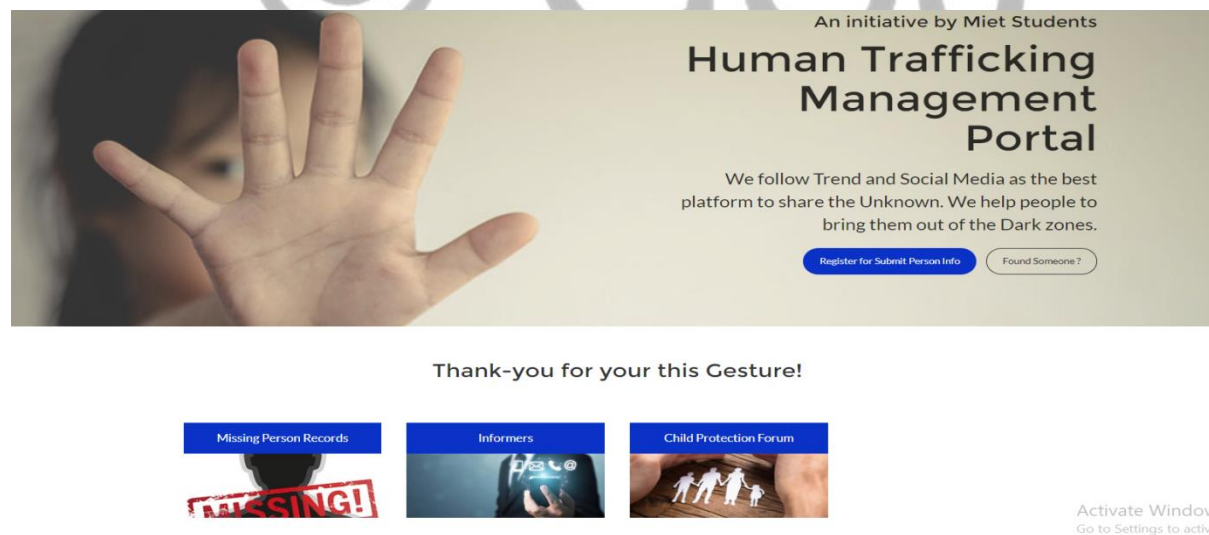


Fig. 5.

Conclusion and Future Work – Though this paper, we have represented a unique web portal operated on Salesforce that can help in stopping a shameful crime, Human Trafficking. We have used the power of social media with the cloud technology that can incorporate the people with the portal enabling

a transformative idea. We have demonstrated our paradigm of unique thoughts with this website that will help in bringing a change in society and to some extent, it can help the police to reach out to traffickers in very less time. Web portals like this, are necessary to bring a change in the perception and perspective of people.

For the future works, the web portal will be enhanced by using the face- detection method to check the picture of the child with those children whose details and also the pictures would be stored in the database of Salesforce. So that, the time required to find the missing children would be reduced. Also, multiple social media platforms would be used to post the pictures of the trafficked person which would help the police and the family members of that child to reach out to that child as soon as possible. Also, the portal can be used for various crimes rather than Human Trafficking.

The online portal “Track Child” is not based on cloud so it cannot be accessible from anywhere and anytime, also it is a website only, not an app. So, our system is totally cloud based and can be used as an app. It also supports multi-factor authentication (MFA) which ensures its security and reliability.

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