Child Protection Using Salesforce Platform

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CHILD PROTECTION APP

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Abstract

Nowadays 80% of the world carry smartphones for different purposes. The significant issue of a youngster missing can be illuminated with the assistance of a child tracking framework. We have seen a lot of cases where children are kidnapped, humiliated and forced to beg at different signals or are forced to indulge in criminal activities like theft, drug dealing, loots, for terrorist activities. If children retaliate they are brutally punished and are even torched to the worst. The vast majority of children are arrested for selling crack, heroin, cocaine or chain-snatching, etc.

The picture says a thousand words than the text. Using this we have come up with uploading images, and the necessary details. The best part is not mandatory to insert each detail but the more you provide the more easily it is to get them. The database search for similar data of children’s missing shows up the details matching if found in the database Then a detail page having similar matching information opens up. If the new case is registered then the tracking number is generated which can be tracked. In meanwhile automatically the case is shared on various platforms of social media which include facebook, twitter, Instagram, etc.

The app is highly scalable, the database can be extended to any extent as it uses Salesforce cloud technology which makes it reliable, fast and without the headache of infrastructure. With half of missing kids remaining untraced, there should be more prominent coordination between youngster government assistance bodies and the police. for police change, limit constructing and prepared Human Resources to break these cases. “Tracking with the cell phones from which a youngster has been called, mapping powerless regions, this can help in examination and anticipation”

Keywords

Salesforce, Child Protection App, Child Missing, File a Complaint, Integration with social handles, Upload Picture.

1. Introduction

1.1 Introduction of Project:

Being the youth of our country felt like this is our duty that we as taking so much from our country, now its time to pay back by saving our coming generation from this vicious circle of child trafficking system because these children are future of our country. If provided with the right guidance and resources maybe they are the next APJ.kalam, Sachin Tendulkar, Sania Nehwal, PV. Sindhu. Market interest have made a prospering business for the dealers. Dealers decide to exchange individuals since they have low beginning up costs, high benefits and negligible dangers and obviously in huge interest. For an efficient wrongdoing gatherings, people has one included preferred position over medications; they can be sold over and over. Thus, any investigation of the size of kid dealing is definitely founded on gauges. It might accordingly be presumed that the gigantic
intrigue and worry for dealing in youngsters is running in front of the hypothetical understanding and true proof. The absence of solid and approved information on dealing essentially hampers the counter-dealing endeavors and may cause unintended symptoms.

1. The child tracking app will be a reporting application that will be used for automation
2. The manual process of registration for different cases in the police department, this system will manage
3. We will use automated tools for matching with the database whether the child is already been registered.

The old traditional ways of filing the complaint include waiting for days to get the status of your complaint. The complaint is restricted to you only! the more the number of people knows more easily is to find and locate the missing person. The old way was when a child gets missing you have to follow a pathway.

File a complaint in the nearest police station. Then you are provided with a copy of your complaint, a paper which you need to keep safe for any further action. Come after days to ask for the updates or progress made till now on the case If you are lucky enough then the case is solved at the earliest. But it can take longer, which can be frustrating for anyone. Data shows that the number of cases was not solved! When the cases were solved, they were either not alive or were exploited to the worst.

What is Trafficking, is an organized nexus where the youngster changes hands, goes between States,” says Soha Moitra, executive (northern district), Child Rights.

4. In spite of a 2013 Supreme Court request that it is commands that for the police to enlist a FIR of seizing, when they get a missing kid grievance, "there is as yet colossal dithering ! with respect to the police!,” says Moitra. ‘Missing youngsters' cases are all the more regularly excused, families are told they have ‘flee’ and ‘will return’. Valuable time is squandered; the kid could well be out of the State before the examination starts. "The more drawn out the police take to research, the more uncertain the youngster will ever be found.

Girls aged group between 12 and 18 account for 66% of the 54,328 kids detailed as captured in the year 2016.

In this era of the 4th Industrial Revolution, we need to implement a more cloud-based solution so that you need not have any issues of storage for installing any applications or any hardware requirement for large setup. Not to make it complex, we have kept the process with a minimal number of steps and less complexity. No Our project revolves around these simple steps:

- It will improve the quality of managing the system and we could more efficiently, track the details
- It is highly scalable
- The application will have some automated processes that will increase efficiency.

1.2 Previous Methodology Survey:

Present scenario:

After so many missing cases there was an urgent need to solve them and bring them down to zero. The government comes up with the idea of using Aadhar card for easy finding.

How does it work?

While making Aadhar a finger scan is done which includes a scan of both the hands. Sounds very easy to you, but it is not for this you need to be physically present at the office with the child, which does not sound possible in real life. So here again the method fails, only a few cases were able to get back to their family. The more drawn out the police take to research, the more uncertain the youngster will ever be found..
● When you see any child, you just need to click his picture
● Fill his name (which can be asked)
● Fill the location from where you have found child

The location from where the child says he is from (if you are able to get that info)

1.3 TECHNOLOGY AND SOFTWARE USED

   Running in the cloud. Put away in the cloud. Gotten to from the cloud: as of late is seems as though everything is happening “in the cloud”.
   2. But what exactly is this nebulous concept?

The short answer is that it’s some place at the opposite finish of your internet connection – an area where you are able to get to applications and administrations, and where your information could be put away safely. The cloud could be big deal for three reasons:
   ● It doesn’t require any exertion on your part to keep up or to manage it.
   ● It’s successfully endless in size!, so you need not to stress over it coming up short on limit.
   ● You can access cloud-based applications and administrations from anyplace around the globe— all you required is device which has an active Internet connection. As Internet associations got snappier and increasingly solid, another kind of company called an Application Service Provider (ASP) begun to show up. ASPs has taken existing business applications and ran them for their clients. The ASP would purchase the figuring equipment and keep the application running, and the client would pay just a month to month expense for get to it over the Internet.

2. Integration of various social media handles (facebook, twitter)

The idea of using social media handles for our project comes from observing that every second person staring at his phone screen whether he is eating, traveling, or walking, etc. Before the end of 2012, out of 7 billion individuals residing on the planet earth, more than a billion of them had an active Facebook account, more than half a billion had an twitter handle and by the end of 2015 it was estimated more than a billion had an active LinkedIn account.

Furthermore, Twitter and LinkedIn, on the whole, had around 700 million clients. So thought why not use this platform as something that could be beneficial for humans.

The social media handles play a major role in our project as when we receive any information or when any one register with the details of the child whether missing or exploited or even lost in short any child who needs help, then the information shared by the individual is shared to the database of the nearest Police Station as well and to all the social handles which are frequently used by the people so that could be accessible even to the remote areas over the Internet—as a support of the clients.

3. Salesforce (SaaS):

Software as a service is a method for conveying applications

Centralizing the facilitating of business
applications has been around in any event since the 1960s. In the year 1990s, it developed with ascent of the web into Application Service Providers with third-party applications oversaw and facilitated by an ASP seller, however some product despite everything required to be introduced on clients’ PCs.

SaaS is development of the ASP model, with sellers and providers dealing with their own product and no foundation required considering the way that the item is appropriated rapidly over the web - by methods for the cloud. Circulated processing grant associations to use figuring resources over the web as an utility – also, they do power or water.

The SaaS-based cloud model in power offers organizations huge efficiencies and cost investment funds method, yet various advances were essential before SaaS could turn into a feasible alternative:

- **Increased access to high-speed internet connections.**
  This has made standard web network speeds sufficient for utilizing SaaS applications. Increasingly across the board the broadband availability has likewise made it simpler for all clients to get to administrations in numerous areas.

- **Standardization of digital technologies.**
  Regular conventions make it simpler to share, incorporate and scale cloud-based projects and administrations just as give better client encounters in a multi-gadget condition.

- **Growing popularity and usage of web-like interfaces.**
  Increasingly more number of clients are glad to work right now due to the commonality, ease of use, and simple of web-like conditions.

- **Growth of remote working.**
  People wish to have the alternative to connect with anyone from, not simply the workplace.

- **SaaS plays important roles in this and work well to fulfil its requirement**

4. **Salesforce Data APIs**

determination of different API’s for joining assumes a vital job. The absolute frequently utilized API’s are depicted underneath alongside upheld conventions, correspondence worldview, information configurations and use cases.

In different API’s of Salesforce there exist key archipelago of regular API’s that a great many people center on. The API’s are –

1) REST API
2) SOAP API
3) BULK API
4) Streaming API

At the point when consolidated together make up Salesforce information API’s. The principle motivation behind these API’s is to control the Salesforce data, while different lets you modify page formats or fabricate custom development tools. Different Salesforce API’s manipulate subsets of information. For example, we can focus on the Analytics REST API within databases. But these four API’s are often used in the full spectrum of Salesforce information.
REST API

REST API is uncomplicated yet a powerful web based service of RESTful principles. It uncovers various Salesforce functionality with the use of REST resources and HTTP ways. For example, by performing various operations like create, read, update, delete the records, query your data, retrieve object metadata, and access information in your org. XML and JSON both are supported by REST API.

REST API’s are great for writing mobile and web apps as it features a lightweight request and response framework, also it is simple to use.

SOAP API

The SOAP API is robust and a powerful web based service supporting the industry-standard protocol of the same name. It has a Web Services Description Language (WSDL) file which defines the parameters for accessing information in the API. Only XML is supported by the SOAP API. Many of the functionalities of SOAP API’s are available in the REST API. It merely depends on what better standard meets our requirements.

SOAP API are great for server-to-server integrations as it uses the WSDL file as an accord between the API and consumer.

Bulk API

Bulk API is a specialistic version of RESTful API and is used for loading and finding numerous information immediately which means 50,000 records or even more. In Bulk API we can submit a request and can later find out the results so thus it is asynchronous in nature. This is preferred when you deal with a huge amount of data.

Bulk API comes in two versions (1.0 and 2.0). Bulk API 2.0 is mostly used as it is easier to use, also both versions manage large amounts of data. This API performs well on tasks involving records, like loading information into the org the first time.

Streaming API

Streaming API comes into action when changes are being made in the data, then the notifications are triggered. In this users can subscribe to various channels that transmit definite varieties of changed data, using a publish-subscribe or pub/sub model. This pub/sub model decreases the number of API requests thus getting rid of the requirement for polling. This API is good for writing apps that frequently needs changes.

API Access and Authentication


The authentication of all API calls is required, except for SOAP API login() calls. We can either use supported OAuth flows or can authenticate with a session ID that can be recovered from the SOAP API login() call.
<table>
<thead>
<tr>
<th>API Name</th>
<th>Protocol</th>
<th>Data Format</th>
<th>Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>REST API</td>
<td>REST</td>
<td>JSON, XML</td>
<td>Synchronous</td>
</tr>
<tr>
<td>SOAP API</td>
<td>SOAP (WSDL)</td>
<td>XML</td>
<td>Synchronous</td>
</tr>
<tr>
<td>Chatter REST API</td>
<td>REST</td>
<td>JSON, XML</td>
<td>Synchronous (photos are processed asynchronously)</td>
</tr>
<tr>
<td>User Interface API</td>
<td>REST</td>
<td>JSON</td>
<td>Synchronous</td>
</tr>
<tr>
<td>Analytics REST API</td>
<td>REST</td>
<td>JSON, XML</td>
<td>Synchronous</td>
</tr>
<tr>
<td>Bulk API</td>
<td>REST</td>
<td>CSV, JSON, XML</td>
<td>Asynchronous</td>
</tr>
<tr>
<td>Metadata API</td>
<td>SOAP (WSDL)</td>
<td>XML</td>
<td>Asynchronous</td>
</tr>
<tr>
<td>Streaming API</td>
<td>Bayeux</td>
<td>JSON</td>
<td>Asynchronous (stream of data)</td>
</tr>
<tr>
<td>Apex REST API</td>
<td>REST</td>
<td>JSON, XML, Custom</td>
<td>Asynchronous</td>
</tr>
<tr>
<td>Apex SOAP API</td>
<td>SOAP (WSDL)</td>
<td>XML</td>
<td>Synchronous</td>
</tr>
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2. DATA FLOW DIAGRAM

DATA FLOW DIAGRAM - LEVEL 0
3. FLOW DIAGRAM
4. LANGUAGE USED

- Automation Tools (like Process Builder, Flows, Workflows)

**Process Builder:**

Procedure Builder is a point-and-snap tool that causes you to just mechanize on the off chance that/at that point business techniques and see a graphical representation of your procedure as you build.

**Flows:**

Flow, an application of Salesforce that is used to automates a business process by collecting data and performing activities in your organization or an outer framework. Flow can be helpful in fetching, erase, making updation and make records on different objects

**Workflows:**

Flow is an application inside the Salesforce that robotizes a business strategies by amassing information and performing tasks in your organization or an outside framework. Flow will Fetch, erase, update and make records on different objects.

- **Apex:**

Apex is an exclusive language created by Salesforce.com. It is a specifically, object-oriented programming language that licenses designers to
execute flow and transaction control statements on the Force.com platform server in conjunction with the calls to Force.com API.

**Visual force**

Visualforce is a platform which allows developer to have the access to build sophisticated, custom UIs that might be hosted on the fast and reliable lighting fast Platform. You can use Visualforce to create application that align with the styling of Lightning Experience, not only this as your own fully custom interface.
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