

# **AMBULANCE CONNECTOR**

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## **BACHELOR OF TECHNOLOGY IN COMPUTER SCIENCE & ENGINEERING**



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# ABSTRACT

AMBULANCE CONNECTOR allows user to instruct their parent or family member in panic situation by using SOS emergency feature this application store the updated location of the user every single minute and update the location in a database. wherever there may be any panic situation happen person just have to press the emergency button after that this app will send some emergency message automatically to their family member and also send the current location to the nearby ambulance. And also this app store the information of the all the ambulance in the particular area just like ola,uber connect the car we connect ambulance in a particular area.

## Project Modules:

- **Login:** Admin will need to login first before performing any operation
- **Password Management:** This module will enable user to add, delete, update or list passwords securely.
- **Location tracking:** we use google api to track the location the user every minute and update it.
- **Messege management:** it will work when the user press panic button then an emergency message sent to their family member.
- **SOS Feature enabling:** here the user have to enable sos feature in this application.
- **Ambulance connector:** we use the feature of ola to connect all the ambulance in a particular region.

## Software to be used:

- Java
- IDE such as android studio for project development (Optional)
- MySQL for storing information
- Google api

## Technical Stack:

- **Front End**
  - **Java development**
- **Back End**
  - java as business layer
  - MySQL as database
  - Google api for location tracking

**Requirement of the Software:** A **AMBULANCE CONNECTOR** is essentially an Application for every device as we know it have the special feature of SOS security which allows user to inform their family member in any emergency situation and also call the ambulance in panic situation.

All this operation done only by pressing single panic button.

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# **INTRODUCTION**

AMBULANCE CONNECTOR allows user to instruct their parent or family member in panic situation by using SOS emergency feature this application store the upadated location of the user every single minute and udate the location in a database. wherever there may be any panic situation happen person just have to press the emergency button after that this app will send some emergency message automatically to their family member and and also send the current location to the nearby ambulace.

AMBULANCE CONNECTOR include:

- locally installed software applications
- location tracking and updating in database.
- locally accessed hardware devices that serve as keys
- SOS features to enable panic button.

Depending on the type of AMBULANCE CONNECTOR used and on the functionality offered by its developers, theencrypted database is either stored locally on the user's device or stored remotely through an online file-hosting service. AMBULANCE CONNECTORs typically require a user to generate and remember one"master" password to unlock and access any information stored in their databases..

## **AMBULANCE CONNECTOR**

AMBULANCE CONNECTOR allows user to instruct their parent or family member in panic situation by using SOS emergency feature this application store the upadated location of the user every single minute and udate the location in a database. wherever there may be any panic situation happen person just have to press the emergency button after that this app will send some emergency message automatically to their family member and and also send the current location to the nearby ambulace.

## **Requirement of this Software**

- A AMBULANCE CONNECTOR is essentially an Application for every device as we know it

have the special feature of SOS security which allows user to inform their family member in any emergency situation and also call the ambulance in panic situation.

- All this operation done only by pressing single panic button.

- This software protects our passwords and keeps it safe so that people can't access to our private data.
- This software is easy to use.

## Project Modules:

Ambulance connector connects all the ambulances in a particular area for that we use Google API to track the location of all the ambulances in a particular area.

- **Login:** Admin will need to login first before performing any operation
- **Password Management:** This module will enable user to add, delete, update or list passwords securely.
- **Location tracking:** we use Google API to track the location the user every minute and update it.
- **Message management:** it will work when the user presses panic button then an emergency message sent to their family member.
- **SOS Feature enabling:** here the user has to enable SOS feature in this application.
- **Ambulance connector: we use the feature of Ola to connect all the ambulances in a particular region.**

## Software to be used:-

Android Studio installation- We are using Java language in AMBULANCE CONNECTOR because of its versatility, which allows it to behave as a script or an application very easily and is also cross-platform.

Common tasks can be effortlessly automated and a very clean and strict syntax makes it simple to read, collaborate, and pick up from very little experience. It can be argued that its very restrictiveness is what makes Java so versatile.

Flexibility - Java is a highly structured language with very strict syntactical rules that must be followed. That being said, that actually makes it easier to use to its greatest effect.

Unlike other languages, Java is much cleaner in execution. Rather than a number of different approaches that lead to inelegant code, the waste of system resources, and exploitable mistakes that hackers and nefarious actors can take advantage of, Java has a defined method of task execution.

By not allowing as many exploits to manifest themselves and making it simple to learn, Java has developed a creative environment where people can more easily play within the defined rules. Because it's so simple, many more possibilities are open that wouldn't be there if users are just trying to figure out how to make it work at all.

The ease with which Java can be used also makes it possible to rapidly develop new applications as needed and easily integrate previously used scripts and executables into the new code seamlessly.

## **IDE such as Android Studio for project**

### **development (Optional)**

Android Studio is one of the most competitive IDEs (Integrated Development Environments) for Java programming. To clarify, an IDE is a software program that provides tools to facilitate the programming process. Java is an object-oriented programming language that programmers use in data science, engineering, artificial intelligence, and much more.

Android Studio are advanced text editing programs. IDE have many helpful features, such as code completion, helping users automatically complete familiar lines of code. Also, each program features syntax highlighting and style analysis. Both programs also feature 'go to definition' or 'go to declaration', which helps users find component definitions.

### **MySQL for storing information-**

MySQL stores data in files in your hard disk. It stores the files in a specific directory that has the system variable "datadir". Opening a mysql console and running the following command will tell you exactly where the folder is located.

The location of the "datadir" may vary in different systems. The directory contains folders and some configuration files. Each folder represents a mysql database and contains files with data for that specific database.

This framework provides Java users with a simple way to create GUI elements using the widgets found in the android studio. Android studio drag and drop option can be used to construct buttons, menus, data fields, etc. in a Java application. Once created, these graphical elements can be associated with or interact with features, functionality, methods, data or even other widgets.

For example, a button widget can accept mouse clicks, and can also be programmed to perform some kind of action, such as exiting the application.



## **Google API map**

This map allow user to map their current location. Thi API indicate user current location by a blue dot. The user will click on any tag to indicate the address and time they were in that particular location.

This API is used to detect the current location of the user and store that location in the database. This is very helpful API to track the exact location the user it allows the application to detect the location of the user where is currently standing.

## **Locally installed software**

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AMBULANCE CONNECTORs commonly reside on the user's personal computer or mobile device, such as smartphones, in the form of a locally installed software application. These applications can be online, wherein the location database is stored independently and locally on the same device as the AMBULANCE CONNECTOR software. Alternatively, AMBULANCE CONNECTORs may offer or require a cloud-based approach, wherein the location database is dependent on an online file hosting service and stored remotely, but handled by ambulance connector software installed on the user's device. Some offline AMBULANCE CONNECTOR do not require Internet permission but this app require internet permission just to update location of the user and the ambulance both.

## **Web-based services**

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An online AMBULANCE CONNECTOR is a website that securely stores login details. They are a web-based version of more conventional desktop-based AMBULANCE CONNECTOR.

The advantages of online AMBULANCE CONNECTORs over desktop-based versions are portability (they can generally be used on any computer with a web browser and a network connection, without having to install software), and a reduced risk of losing passwords through theft from or damage to a single PC –although the same risk is present for the server that is used to store the users location on. In both cases this risk can be prevented by ensuring secure backups are taken.

The major disadvantages of online AMBULANCE CONNECTOR are the requirements that the user trusts the hosting site and a keylogger is not on the computer they are using. With servers and the cloud being a focus of cyber attacks, how one authenticates into the online service and that the passwords stored there are encrypted with a user defined key are just as important. Again, users tend to circumvent security for convenience. Another important factor is whether one or two way encryption is used.

There are mixed solutions. Some online password management systems distribute their source code. It can be checked and installed separately.

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Security tokens are a form of token-based AUTHENTICATION, wherein a locally-accessible hardware device, such as smart cards or secure USB flash devices, is used to authenticate a user in lieu of or in addition to a traditional text-based password. The data stored in the token is usually encrypted to prevent probing and unauthorized reading of the data. Some token systems still require software loaded on the PC along with hardware (smart card reader) and drivers to properly read and decode the data.

- Credentials are protected using a security token, thus typically offering multi-factor authentication by combining
- *something the user has* such as a mobile application that generates rolling a Token similar to virtual smart card, smart card and USB stick,
- *something the user knows* (PIN or password), and/or
- *something the user is* like biometrics such as a fingerprint, hand, retina, or face scanner.

## **Advantages**

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The advantage of SOS based access controls is that they are easily incorporated in most software using APIs available in many software products, they require no extensive computer/server modifications, and that users are already familiar with the use of SOS feature. While SOS code can be fairly secure, the weakness is how users choose and manage them, by using:

- simple SOS panic button – short in length, that use words found in dictionaries, or do not mix in different character types (numbers, punctuation, upper/lower case), or are otherwise easily guessable
- SOS code use –this code is only accessible between user and out application it allow user to just initiate our application.
- administrative account logins where limited logins would suffice, that would be ambulance driver and the user.
- administrators who allow users with the same role to use the same location.

It is typical to make at least one of these mistakes. This makes it very easy for hackers, crackers, malware and cyber thieves to break into individual accounts, corporations of all

sizes, government agencies, institutions, etc. It is protecting against these vulnerabilities that makes AMBULANCE CONNECTOR so important.

AMBULANCE CONNECTOR can also be used as emergency application. Unlike human beings, a look-alike websites. With this built-in advantage, the use of a AMBULANCE CONNECTOR is beneficial even if the user only has a few passwords to remember. While not all AMBULANCE CONNECTORS can automatically handle the more complex login procedures imposed by many banking websites, many of the newer AMBULANCE CONNECTORS handle complex passwords, multi-page fill-ins, and multi-factor authentication prior.

AMBULANCE CONNECTORS can protect against any unexpected accident. When using a SOS feature in ambulance connector it will make it very easy to use any user that it will start working just by pressing panic button and that button has been control by SOS emergency feature just by pressing power button 3 times in a row.

## Issues

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### Vulnerabilities

This main disadvantage of this application is that it can run by only when the user press panic button. So when the user may be in critical stage then this app may not work because it may not get any input from the user to work.

As we know the SOS emergency enable only when the user press the power button 3 times continuously. so we have to modify this app to remove this feature and to add some other feature which will work perfectly in any critical stage.

# Literature survey—

- There are many proposed systems that use sos emergency to let their relative know that someone is in trouble. But add some special features one can call an ambulance directly by tproposed systeming one button
- There are many programs that use this technology including ola, uber and rapido.
- As the ola finds the user's location and detects the vehicle closest to the user we use the same technology to locate and locate the nearest ambulance to the user. But all is used to book a car or bike for the purpose of travel and not any proposed systemication for an ambulance service
- But we are using a new feature known as SOS Emergency with this feature the user can use the proposed system with one button.

## **Conclusion--**

The proposed system is the most important proposed system you have on the Smartphone. It is a personal security proposed system which allows user to call ambulance just by pressing the power button 3 times and this proposed system also have feature to send message to specific people via text messages and emails in the an emergency situation . Also, call ambulances at that user's current location And it gives you the ability to call 911 by tproposed systeming a single button. The proposed system also calculates your current location so you can always know your address. This can be very helpful if you need to call 911. the notifications sent contain the current location. Which help the family member to tract yourself.and they can come on time. This proposed system have also a special feature that it tract your location periodically and these all location will save and you can see your location history any time any where. This proposed systemlication is my first attempt in android developement and it gave me the best exprience to work on google map api and also give me the lot of knowledge about android studio.

