

# PROJECT TITLE LIFELINE



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**Sem : 5th**

**Subject code : 3350706**

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# What is LIFELINE ?

- The application purpose is to give assistance to children at the time of need and also the parents can be relived from worrying for their children. As many cases of child kidnapping and abduction cases occur at different places everyday all around the world. To use this application children only need to have a device having network access. It works on gesture performed by the child on his/her device in case of need. The application will use GPS (Global Positioning System) to locate the location. It will create an OTP (One Time Password) which will be generated by the admin to the parents through the SMS. The SMS will include the OTP and a link which will take the parent to the application. And then when parent clicks on the link, parents will be asked for the OTP to be entered. After entering the OTP parents will be able to access the children camera and audio. The children phone should be working in order to use the application. Children can perform the gesture on mobile screen in any situation of mobile they do not need to open the application in order to perform gesture. This application provide this advanced method to perform the gesture. Sometimes they do not get enough time for performing the gesture. This will also save time for children for performing the gesture as they do not need to enter the application .They can perform the gesture unsuspected and can call for help without even letting the culprits get alert. This application also allows the live tracking of the mobile phone which will help to get location of the children time to time and an eye can be kept on him/her. This will also help us in calculating the distance considering the location and help can be sent accordingly. So overall this application will help in children safety by providing location and other features

# Big concept

To save valuable life of Women and  
Children.



# Abstract

- ⬡ The main concern of any parents are their children safety. Every parent considers their children safety first. In large cities parents are worried about sending their children to school alone by themselves. This project will relive the parents about working for their children. The application will help children to get help at times of need. The child just need to activate the system using the gesture which will trigger events. The system will provide the parents with the live or current location of their children in their phone. The system will also provide the camera access of their children mobile and will help in capturing the image of the current scene the children is in. It will alarm the parents about the possible harmful condition of their children by receiving a SMS on their phone.

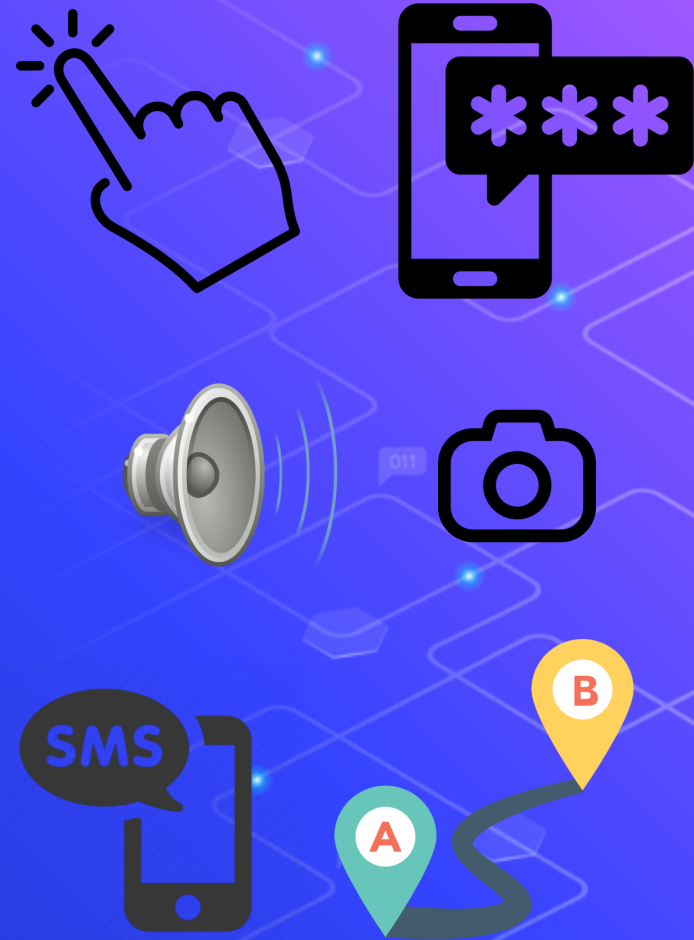
# FrontEnd & BackEnd

⬡ FrontEnd : Flutter

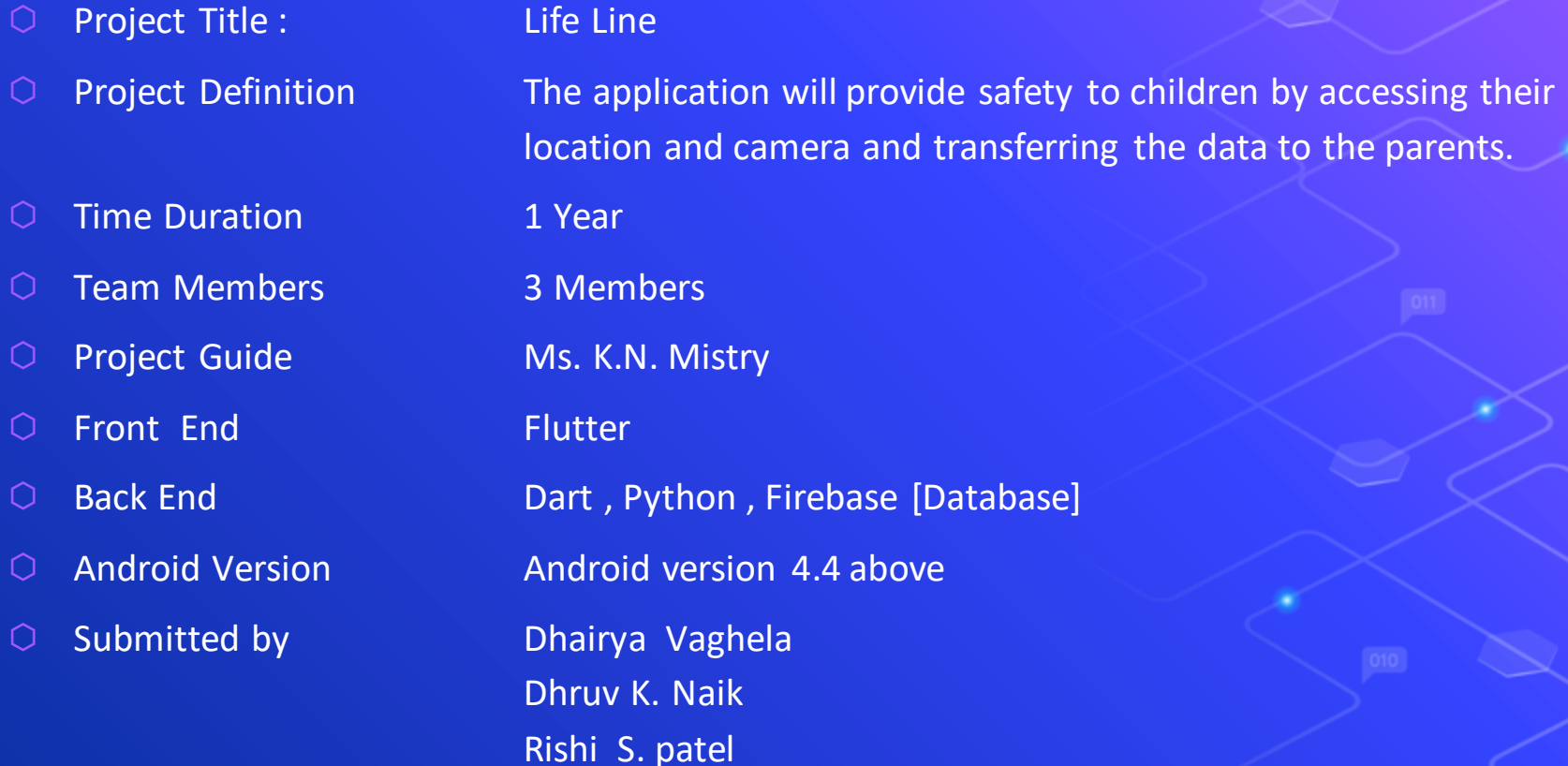
⬡ BackEnd : dart , Python , FireBase (As database)

# Modules for LIFELINE

- ⬡ Login module.
- ⬡ OTP generator module.
- ⬡ SMS module.
- ⬡ Gesture module.
- ⬡ Camera and Audio module.
- ⬡ Live Location module.



# Project Profile



Project Title :	Life Line
Project Definition	The application will provide safety to children by accessing their location and camera and transferring the data to the parents.
Time Duration	1 Year
Team Members	3 Members
Project Guide	Ms. K.N. Mistry
Front End	Flutter
Back End	Dart , Python , Firebase [Database]
Android Version	Android version 4.4 above
Submitted by	Dhairya Vaghela Dhruv K. Naik Rishi S. patel

# SYSTEM ANALYSIS

## System Overview :

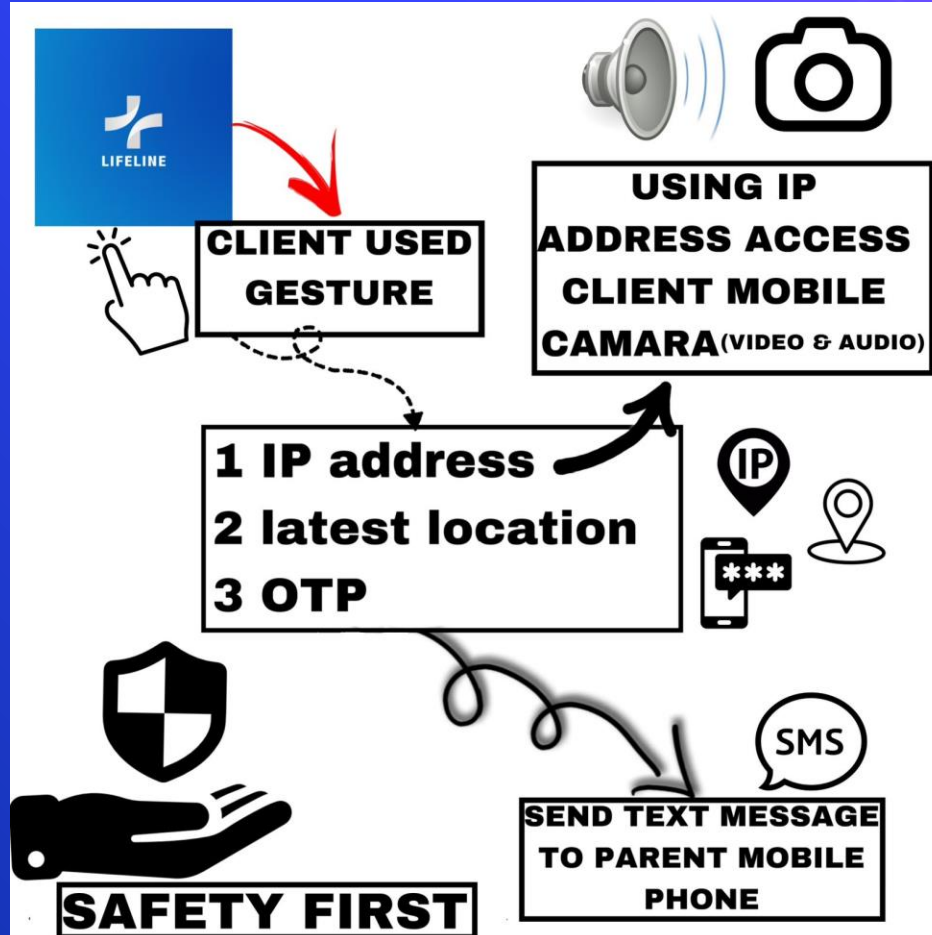
Project Title : LIFELINE

## Project Definition :

- The application will provide safety to children by accessing their location and camera and transferring the data to the parent



# HOW IT IS WORK?



# Module for LIFELINE

## ❑ Login module

- This is a basic login page to login into the application.
- There are three login pages in Lifeline one is for Parent , second is For Admin and other is for Child



# OTP generator module

- As this application is based on tracking system the security of the victim or user is our top priority.
- This module generates a new One time password for both the user to connect to a server.



# SMS module

- ⬡ To deliver the OTP in the Parent device this module is very necessary.
- ⬡ This module will deliver the session key or the OTP to respected Parent through their Contact number.



# GESTURE module

- ⬡ Gesture are used to provoke an event and activate the further functioning of the application.
- ⬡ Gesture such as swipes , multi-taps are used to trigger an event.



# Camera with audio module

- ⬡ Camera or video with audio is one of the prime feature of the LifeLine.
- ⬡ This module is essential for capturing the live footage of the emergency situation.



# Live Location module

- ⬡ This is the base most important module of LifeLine .
- ⬡ As the name suggest this module shares the live location or the last known location of the victim to the administrator.



# Functional and non Functional Requirement

## FUNCTIONAL REQUIREMENT

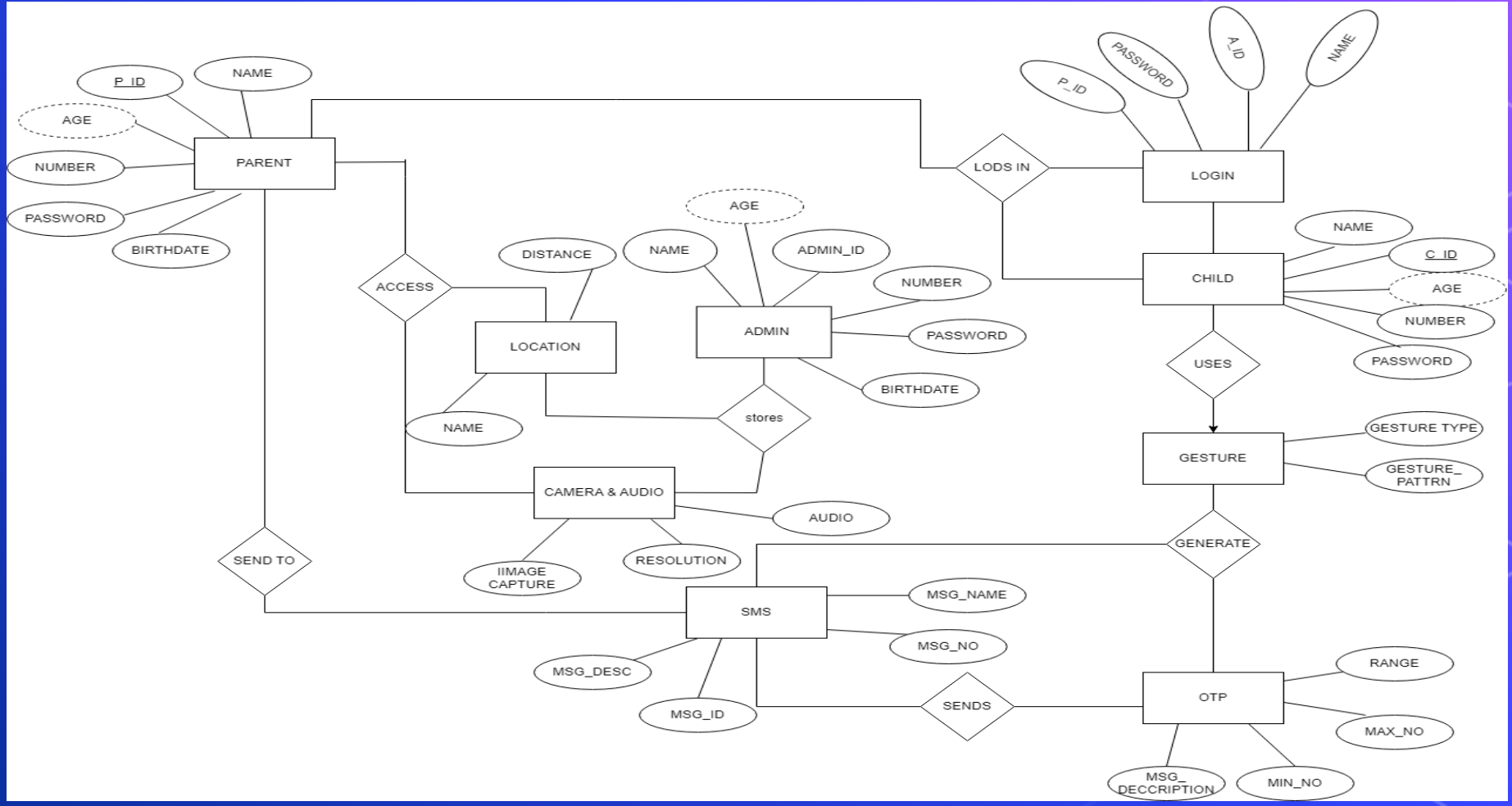
1. Register and login Login of the parents into the system is required. Only after the registration the parents will be able to access the application by entering their Id and passwords.
2. Managing children account To store, view and update the details of the student in the database. Parents will only be able to view the data, only admin can manipulates the data.

## NON-FUNCTIONAL REQUIREMENT

- 1.Children must have an android mobile phone.
2. Mobile phone should be able to access the network.
3. Location in the device should be on.

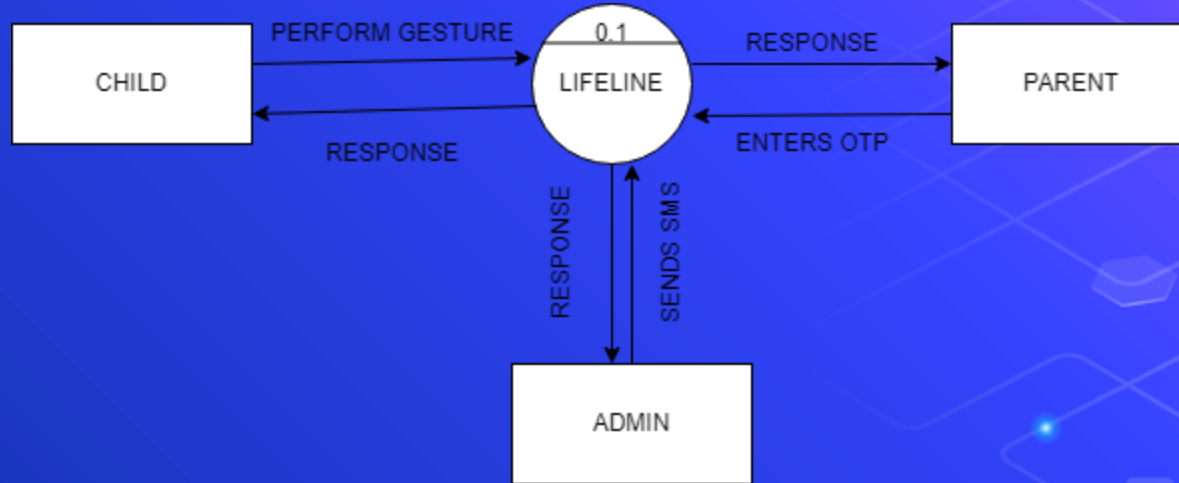


# ER Diagram

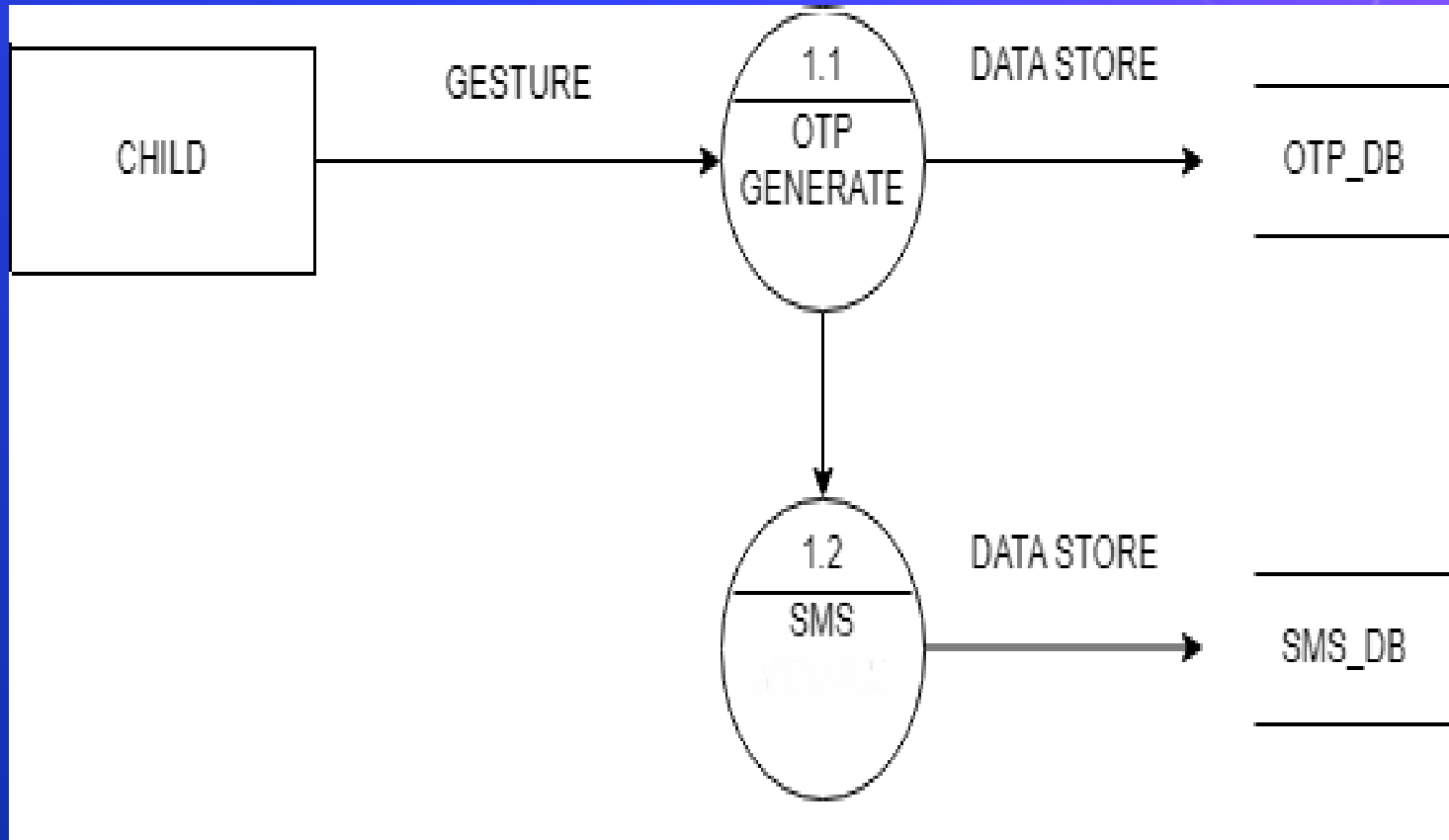


# Data Flow Diagram

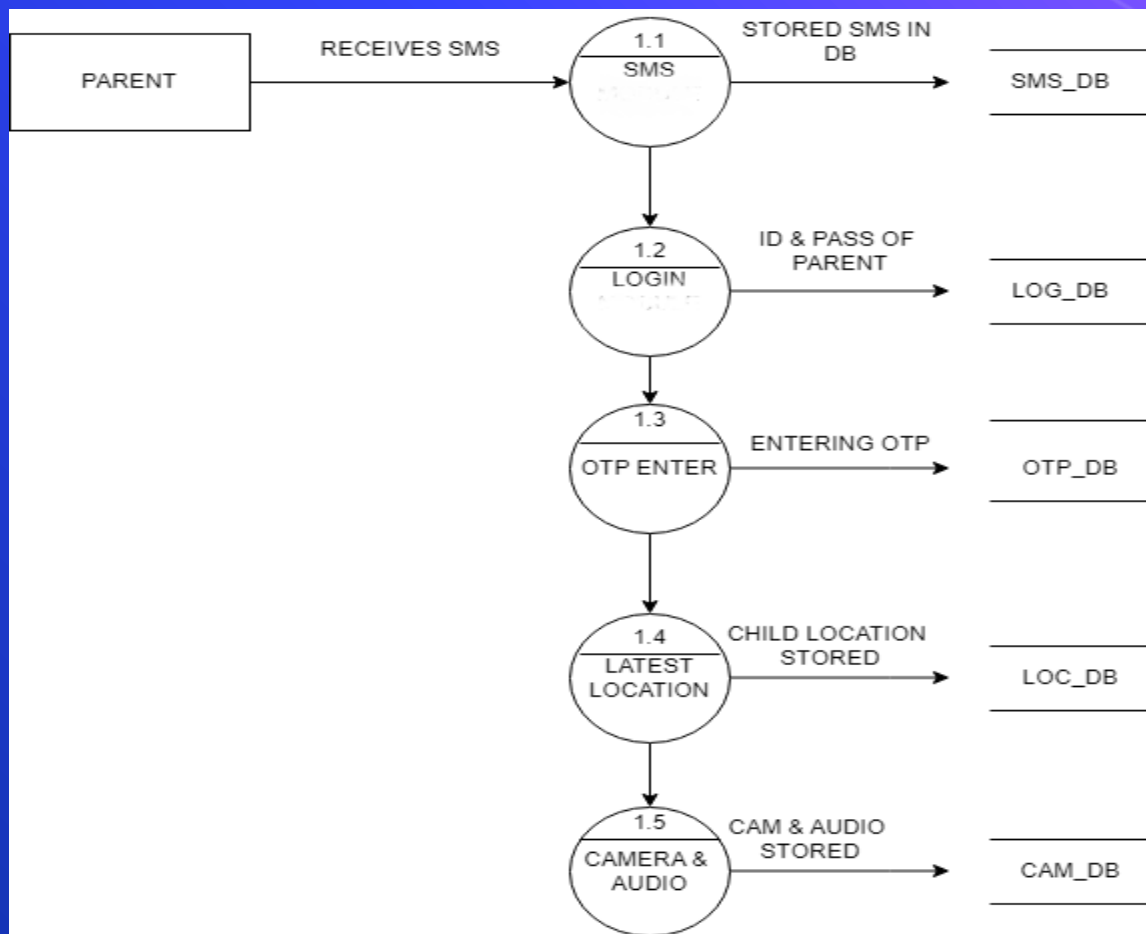
Level 0 DFD or Context level DFD



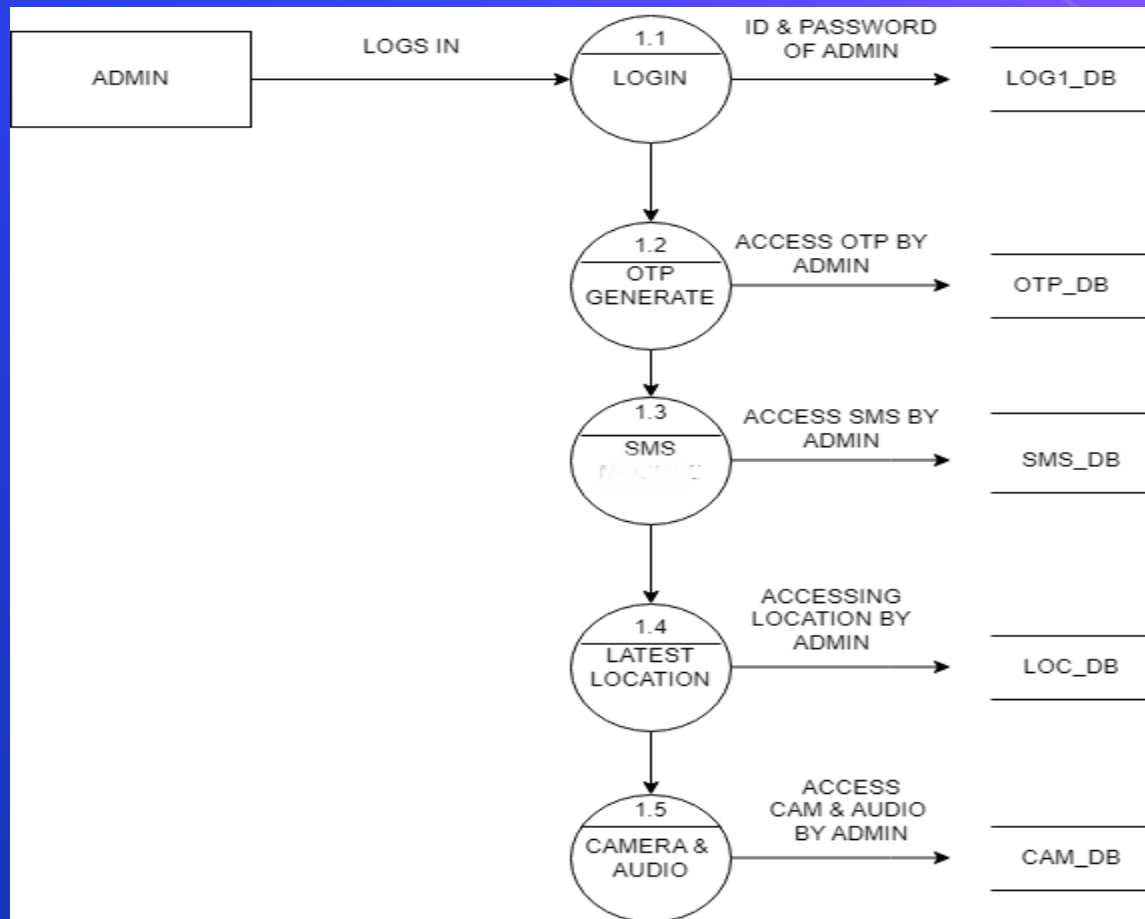
## Level 1 DFD : Child



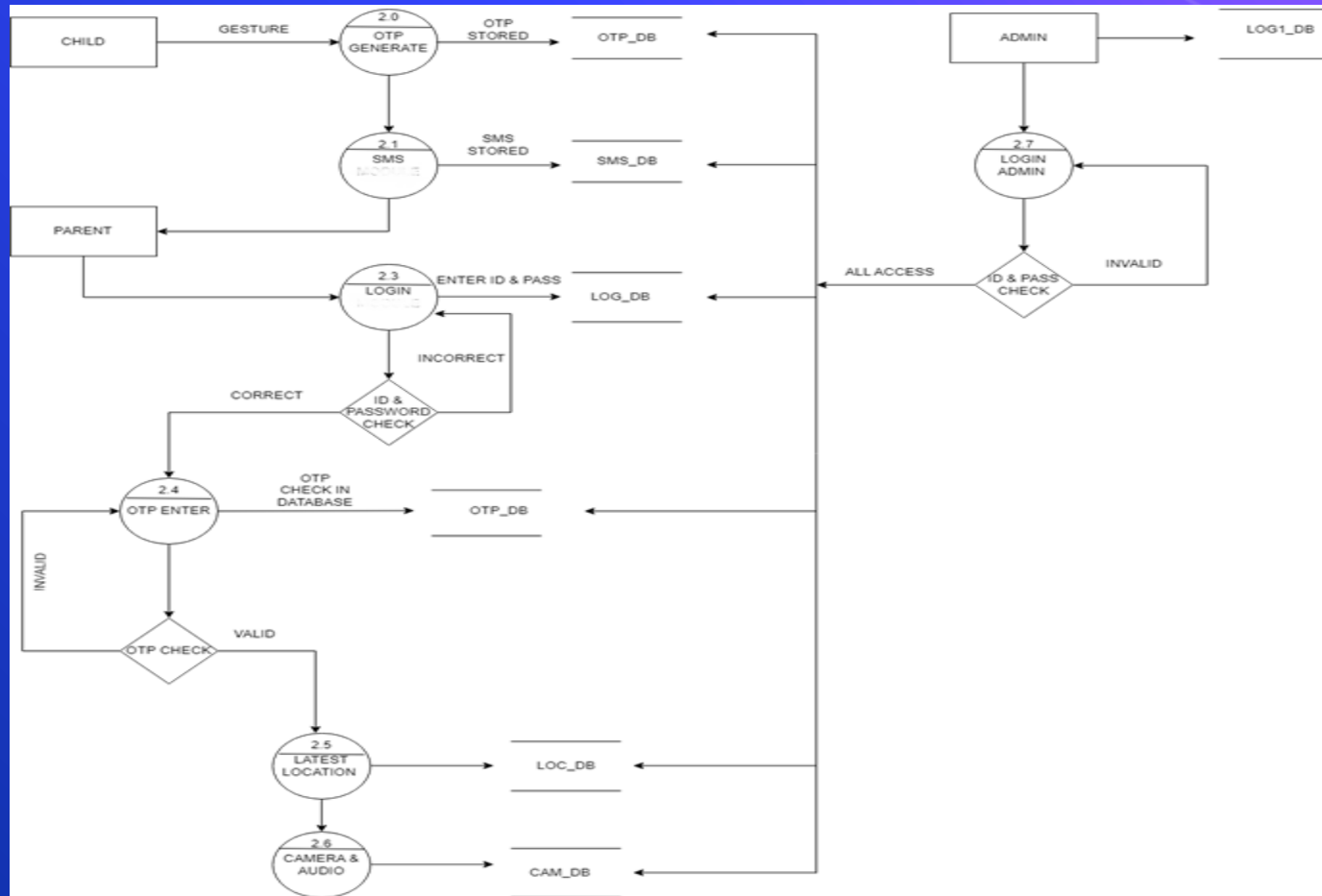
## Level1 DFD : Parent



## Level1 DFD : ADMIN



## Level2 DFD



# TABLE SPECIFICATION

## 1] Log1\_DB

Sr no	Name	Data type	Constraint	description
1)	A_id	Int	Primary key	To store admin_id
2)	A_name	Varchar2	Not null	To store admin name
3)	Age	Int	Not null	To store the age
4)	Number	Int	Not null	To store mobile number
5)	Password	Varchar2	Not null	To store password
6)	Address	Varchar2	Not null	To store the address

## 2] OTP\_DB

Sr no	Name	Data type	Constraint	description
1)	Msg_description	Varchar2	Not null	To store msg description
2)	Range	Int	Not null	To store the range
3)	Min_no	Int	Not null	To store the minimum number.
4)	Max_no	Int	Not null	To store the maximum number



### 3]LOC\_DB

Sr no	Name	Data type	Constraint	Description
1)	Name	Varchar2	Not null	To store the name of location
2)	Distance	Varchar2	Not null	To store the data about distance

## 4] LOG\_DB

Sr no	Name	Data type	Constraint	description
1)	P_id	Int	Primary key	To store parent_id
2)	P_name	Varchar2	Not null	To store parent name
3)	Age	Int	Not null	To store the age
4)	Number	Int	Not null	To store mobile number
5)	Password	Varchar2	Not null	To store password
6)	Address	Varchar2	Not null	To store the address

## 5] CAM\_DB

Sr no	Name	Data type	Constraint	Description
1)	Image	Varchar2	Not null	To the image data
2)	Resolution	Varchar2	Not null	To store the resolution specification
3)	Audio	Varchar2	Not null	To store audio data

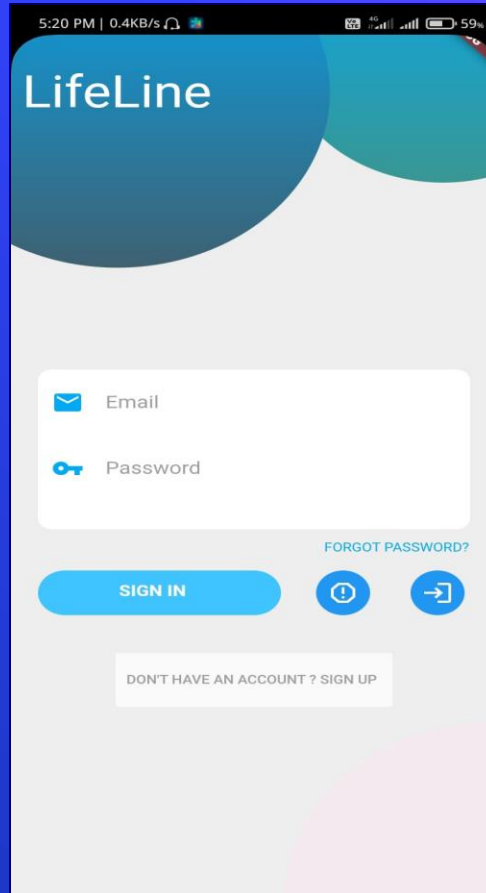
## 6] SMS\_DB

Sr no	Name	Data type	Constraints	Description
1)	Msg_id	Varchar2	Not null	To store the msg_id
2)	Msg_name	Varchar2	Not null	To store the msg_name
3)	Msg_no	Int	Not null	To store the msg number
4)	Msg_description	Varchar2	Not null	To store the msg description.

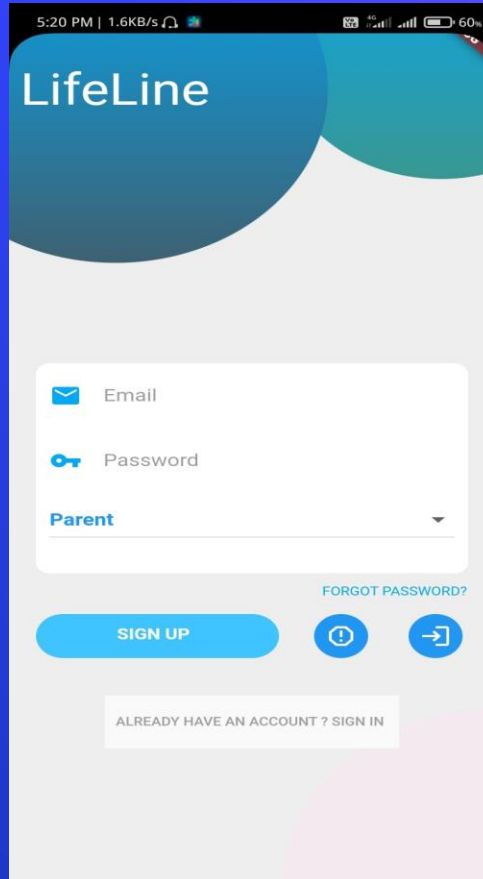
# Implementation



# 1. LOGIN PAGE



## 2. SIGN UP PAGE



The image shows a mobile application interface for a sign-up page. At the top, the status bar displays the time as 5:20 PM, a data speed of 1.6KB/s, and a battery level of 60%. The app's header features the "LifeLine" logo in white text on a teal background. Below the header, there is a white form with three input fields: "Email" with an envelope icon, "Password" with a key icon, and a role selection dropdown menu currently set to "Parent". To the right of the form, there is a link that says "FORGOT PASSWORD?". Below the form is a prominent blue "SIGN UP" button. To the right of this button are two circular icons: one with a clock and another with a right-pointing arrow. At the bottom of the page, there is a light gray button that reads "ALREADY HAVE AN ACCOUNT ? SIGN IN".

5:20 PM | 1.6KB/s | 60%

# LifeLine

Email

Password

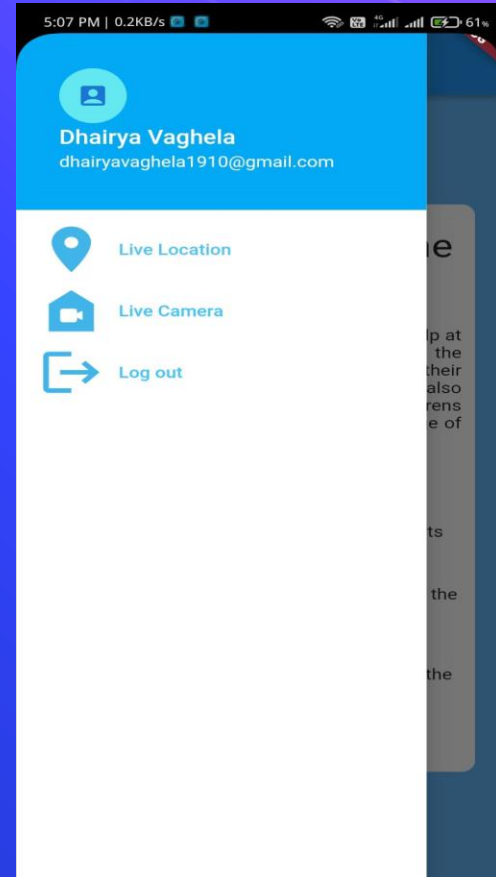
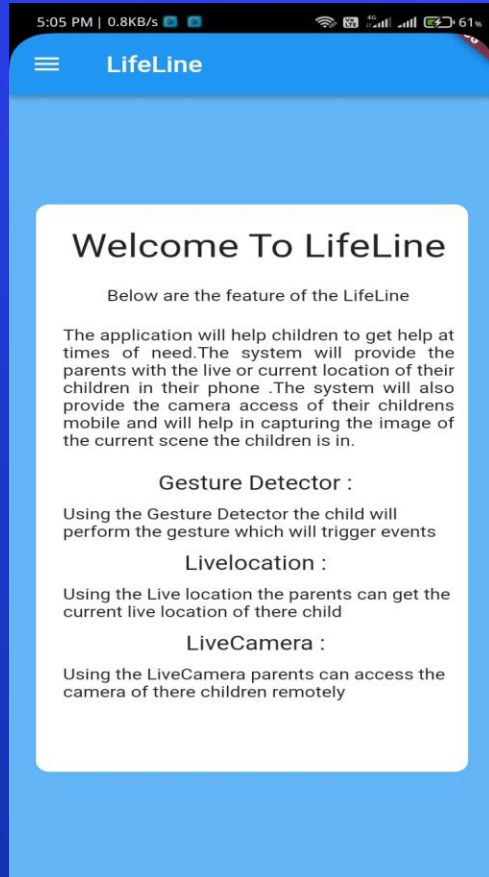
Parent

FORGOT PASSWORD?

SIGN UP

ALREADY HAVE AN ACCOUNT ? SIGN IN

# 3. HOMEPAGE





# 4. LIVE LOCATION



## ➤ ADVANTAGES

- It provides security to children in case of emergency situation or at time of needs.
- It provide tracking ability to parents to track their children . It provides live tracking features.
- It is free to use and can be used in any android device.
- It is reliable the location tracked will be accurate.
- It is very easy to use and understand.



# DISADVANTAGES

- To use this application network should be available all the time. Without network this application will be of no use.
- This application is only compatible with android operating system.
- The camera of the device should be operational if you need to access the camera.
- Device must be power on while using the application. It won't work if mobile phone is switched off or the phone is dead.

# Thank you!

Any questions?

