Diary4Life

A close up of a sign

Description automatically generated

Created

by

Zhibo Zhang

# Idea

Personal Online/Offline Diary

# Summary

According to our ancestors, the physical diary is the most used way to note down our daily activity so that we may be able to have a look at our accomplishments, happy moments, and important events in the future. Diary4Life application is designed for personal use only and is mainly focused on the quality of personal story recording, and user-friendly interface. The application is designed for ease of use with the clearest and simplest layout. This allows people from different age groups to use this system. As the users input their stories each time, the software will generate all the story into a timeline layout display format, which produces a brand-new experience for users to view their past stories. Moreover, this application will allow clients to share their personal diaries to their friends or family with URL through email, Facebook, Twitter, and Instagram, along with high privacy settings. This application allows users to write down their memories or moments in their android phones, which is much more secure than traditional ways like writing in a diary book. In this application, it introduces reminders and notifications features, the application sends reminders on a daily basis just to remind clients to take their time writing down what important event happened during the day, and if they do not have anything to write down, they can simply decline the pop-up message. The application also introduces the notification feature which shows the user what had happened the same day last month or year to keep them on track of what they did in the past. When it comes to writing a diary, we think about writing text, but it is not always an efficient way to record our story. Therefore, the application provides many ways users can express their thoughts in a more colorful way through the pictures and videos or through the audios that will make this application different from others. In this application all the four methods for example text, image, audio, and video will be implemented that will give the users more choice to choose and will not force the users to type all the things in the text. This diary will be an audiovisual diary and you may enjoy your joyful moments in future whenever you want. Diary4Life will change the current scenario from the old way to the digital in writing diaries. Diary will be helpful for people to take notes about their life and make their life much more interesting. Furthermore, it will promote and encourage the use of diaries with goals, educational lessons, and activities to cement its importance and assure consistent use.

## Functionality

In the market there are many applications available for the same purpose, but Diary4Life Application stands different from the others in many ways. The application has all four types of methods to input the data and to make the diary both audio and visual. This application also provides the feature for the users to see what they have changed during a period or how much progression they made between different points of time.

* Manage diary entries: Add, Modify, and Delete
* View entries as a timeline
* Backup Diary
* Personalize their diary with themes and custom settings
* Provide four ways to input the data audio, video, text, image
* Client information protected
* Allow to capture images and attach them to the diary
* Configurable fonts and font size
* Rich text editor
* Flexible Time scheduling
* Retrieve data as per the date and time
* Direct access to any moment in your life by searching date and time
* Easy navigate between pages
* Analyze entries and draw new meaning for your life moving forward

# Technical Requirements

## Database

A database is required to house all the user accounts and diary entries.

## Mobile App

An Android mobile app that allows users to have access to their diary anywhere, anytime with the added bonus of reminders, gorgeous animations and more.

## Security

Strong security will be implemented to provide safety of one’s data from prying eyes. High level encryption will be used on the data that is stored in the servers, on the devices and while it is being transmitted to and from the database. For the application to succeed, the data must remain private and confidential at all time and at all cost.

## Goal

Allow users to learn and experience the benefits of diaries. Benefits such as improved writing skill, self-reflection, reduce stress, improve creativity, cherishing memorable moments and much more. All the while, the application remains universally accessible and, most important, private.

# Technologies

## Microsoft SQL Lite (under consideration)

Application will use MS SQL Lite to house all the data for user to use the app offline.

## Android Studio

Android Studio will allow the development of the mobile application that will interact with the database from a mobile device.

## Encryption

The application deals with highly confidential information and data security is of the utmost importance. Therefore, the server, web application and mobile application will all implement encryption.

## Firebase

Firebase is a BaaS and is used to power the back end of the system. It manages hosting, databases, and user authentication.

# UML

## Use Case Diagram

A close up of text on a white background

Description automatically generated

## Sequence Diagrams

A screenshot of a cell phone

Description automatically generated

A screenshot of a cell phone

Description automatically generated

## Activity Diagrams

A close up of text on a white background

Description automatically generated

A close up of text on a white background

Description automatically generated

# Interfaces

## Android Interface

The android interface is with all the features that are presented and made for the users easy to navigate between different activities. They are the following:

1. Login Activity
2. Allow users login to the system and manage diary
3. Signup Activity
4. To allow registration for users to use the system
5. Main Activity
6. Landing page for users once they log in successfully
7. Direct access to core features
8. Settings Activity
9. Allows modifying certain settings of the application
10. Gives users option to personalize the application theme
11. Diary Management Activity
12. Allows users to add, update, delete and search within their diary
13. Analyze Activity (under consideration)
14. Implements the rigorous self-reflection system
15. Timeline Activity
16. Displays a timeline based on the user's diary