Locket app

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Tasks :

We were on a Webex call and discussed and wrote the file with each other here below are the tasks of converting word file to LaTeX.

Reem —How to use the application, preparing application interfaces, writing application database details, software architecture.

Shahd —Writing functional and non-functional requirements, conducting an analytical study through a questionnaire, writing the introduction, similar programs.

Abstract

In an era where there is an increasing need for innovative digital solutions, Locket stands out as a revolutionary tool that redefines the concept of communication and engagement in the digital world. Combining ease of use with advanced technology, Locket enables users to create and share interactive content in new and innovative ways. By incorporating features such as content personalization and data analytics, Locket delivers a unique experience that enhances user engagement and opens up new horizons for social communication.

Chapter 1

1.1 Introduction

Locket is a widget that displays live photos from your best friends right on your home screen. You and your best friends will see new photos of each other every time you unlock your phone It's a glimpse A little about what everyone does all day , We conducted a survey to find out people's opinions about the Locket app and we found that their overall experience with the app is excellent at 65.2 and the features they use most frequently at 95.7 are sharing photos with friends and they rated the ease of the app from easy to difficult at 71.7 very easy and also most did not face any problems while using the app at 82.6 and we found that most users learned about the Locket app at 58.7 from their friends and 47.8 recommend downloading the program

1.2 The goal of the Locket program

• The "Locket" program, particularly known as the Locket Lock Screen app, aims to enhance the way users interact with their smartphones by allowing them to display photos and messages from those they love directly on their lock screens. Here are some key goals and purposes of the Locket program:

• Personal Connection : The app helps users maintain a deeper connection with friends and family by showcasing their photos and messages, making the lock screen a more personal space.

• Ease of Use : Locket is designed to be user-friendly, allowing users to easily manage and customize what appears on their lock screens without requiring extensive technical knowledge.

• Real-Time Sharing : Users can send and receive photos directly to each other's lock screens in real-time, creating a dynamic and interactive experience.

• Enhanced Engagement : By providing a platform for sharing moments and memories, Locket encourages users to engage more with their social circles, fostering a sense of community and connection.

• Privacy : The app typically emphasizes privacy, ensuring that shared content is only visible to intended recipients.

1.3 Related Work

RELATED WORK	ADVANTAGES	DISADVANTAGES
Snapchat app	Privacy: Snapchat provides privacy for users to document their moments by sending photos and videos that disappear after a certain period, which provides a high level of privacy. interactive interface: The application features an effective and easy-to-use user interface, making it attractive. Stories: The application allows users to share their moments with friends through "stories" that last for 24 hours, which enhances communication between friends and family. Filters: Snapchat provides a wide range of innovative filters and lenses that can be used to edit photos and videos. Direct communication: It also provides text and voice messages and documents moments through photos and videos in a private and direct manner to specific people.	Privacy: Although the photos disappear, there is always the possibility of taking screenshots, which may lead to privacy violations. Lack of advanced search features: Searching for users or content on Snapchat is limited compared to other social media applications. Addiction to use: Excessive use of the application can lead to addiction, especially among young people. Lack of focus on permanent content: The application focuses primarily on temporary content, making it less suitable for users who want to share permanent content. Security challenges: Like any social media application, users can be exposed to risks such as cyberbullying or fraud.$ 299
Instagram app	Social Communication: Instagram provides an easy and fun platform to connect with friends and family and share everyday moments. Visual Content: Instagram focuses heavily on visual content (photos and videos), making it an ideal platform to showcase creativity and artistic skills. Marketing: Instagram has become a powerful marketing tool for individuals and businesses, as they can reach and engage with a wide audience directly. Content Discovery: Instagram provides an intelligent algorithm that helps users discover new and interesting content. Groups: Groups allow users to interact with people who share common interests. Edits: The app provides a wide range of tools and effects that can be used to edit photos and videos.	Social Media Addiction: Excessive use of Instagram can lead to social media addiction and negatively impact mental health. Social Comparison: Browsing other people's content on Instagram can lead to feelings of jealousy, envy, and comparison with oneself. Wasted Time: Instagram can consume a lot of time and effort, affecting productivity in daily life. Privacy: Users may be subject to privacy violations, especially if privacy settings are not set properly. Fake news: Fake content and fake news can spread easily on Instagram. Psychological pressure: Some users may feel pressure to maintain a perfect image on Instagram.
WhatsApp app	Ease of use: WhatsApp features a simple and easy-to-use user interface, making it suitable for all age groups. Free communication: WhatsApp allows you to send text messages, photos, videos, voice and video calls for free over the Internet, saving traditional communication costs. Groups: Chat groups can be created to host a large number of people, making it easy to communicate between friends, family and colleagues. Group calls: WhatsApp supports video and group calls, making it an effective tool for remote work and study. Encryption: WhatsApp provides end-to-end encryption for most of your conversations, ensuring the privacy of your data. Integration with devices: WhatsApp works seamlessly on various smart devices, including smartphones, tablets and computers.	Privacy: Despite encryption, there are some concerns about data privacy, especially with the company's privacy policy updates. Notifications: Constant notifications from WhatsApp can be annoying to users, especially if there are many active groups. Data consumption: Excessive use of WhatsApp, especially when making video calls, can consume large amounts of data. Addiction: Excessive use of WhatsApp can lead to addiction and distraction from other tasks. Fake news: WhatsApp groups can contribute to the spread of fake news and rumors. Hacking: Despite encryption, there is always a risk of hacking, especially in the case of using modified WhatsApp applications.
Facebook app	Social Networking: Facebook makes it easy to connect with friends and family, and build new relationships. Share Content: You can share photos, videos, and posts with others and interact with their posts. Stay Informed: You can follow the latest news and global events through news pages and public pages. Marketing and Business: Facebook provides an excellent platform for businesses to market their products and services and reach a wider audience. Groups: You can join groups with common interests to connect with people who share the same interests as you. Events: You can create and invite events to make planning and connecting with friends easier.	Time Wasting: Facebook addiction can waste a lot of time. Privacy: There are concerns about data privacy, as Facebook can collect a lot of information about users. Fake News: A lot of fake news and rumors are spread on Facebook. Cyberbullying: Users can be cyberbullied on Facebook. Addiction: Excessive use of Facebook can lead to addiction and affect mental health. Social Comparisons: Constantly comparing others' lives on Facebook can lead to feelings of anxiety and dissatisfaction.

Figure 1.1: Related Work

1.3.1 Our Model

Locket is an app designed for innovative and direct photo sharing with friends and family. It features a simple user interface, making it easy for users of all ages to enjoy. By sharing everyday moments, the app strengthens social connections and offers a fun alternative to traditional messaging apps. Users receive instant notifications for new photos, adding to the lively communication experience. Privacy options allow users to control who can see and send them photos, while customization features let them choose their preferred photo sharing circle .

Chapter 2

2.1 Functional Requirement

2.1.1 User Requirement

- The user shall be able to log in or create an account with a number or email

- The user shall be able to log out or delete his account

- The user shall be able to add friends via contacts or by username

- The user shall be able to take a photo or video when opening the home page

- The user shall be able to write text on the photo or add general things such as music, location, weather, clock and other texts

- The user shall be able to add his best friends to the home screen

- The user shall be able to save the content he has taken or the content of his friends

- The user shall be able to activate zoom and flash as well

- The user shall be able to share his shots or the shots of his friends

- The user shall be able to delete or block a friend or report bad content

- The user shall be able to respond to his friends' shots and add emojis to the shot

- The user shall be able to show all exclusive shots throughout the day to his friends and also Access to his friends' pages separately

- The user shall be able to return to the snapshot logs

- The user shall be able to add only 20 friends or family members to share special moments.

- The user shall be able to add a personal photo to the profile and change it at any time

- The user shall be able to add his birthday and upon adding the program sends a congratulation

2.2 Non-functional requirements

- Response time: The system should provide an even loading speed within 2 seconds.

- Processing capacity: The system should support simultaneous application use without performance degradation.

- Synchronization speed: The system should balance data between devices within 5 seconds.

- Data encryption: The system should encrypt personal data (images and messages) during transmission and at rest.

- User authentication: The system should implement multi-factor authentication to ensure the integrity and security of accounts.

- Privacy controls: The system should allow users to determine who can access the medal content.

- User interface: The system should provide a user-friendly interface.

- Accessibility: The system should comply with accessibility standards to enable its use by all categories.

- Technical support: The system should provide easy support services for users, such as FAQs and live support.

- Backup: The system should provide regular data backups to enable quick data recovery.

- Device compatibility: The system should be available on major operating systems (iOS and Android).

- User growth: The system must be scalable to accommodate an increasing number of users without degrading the system.

2.3 How to use the Locket app

• Add a Locket widget to your home screen

• When a friend sends you a photo, it instantly appears in your Locket widget

• To reply by sharing a photo, tap the widget, take a photo with your camera, then tap Send! And it will appear Right on your friends home screens

2.3.1 For your close friends

• To keep things under control, you can only have 20 friends on the app.

• No need to worry about the number of followers in Locket, just add your best friends and family And enjoy the moment .

• With Locket, you can be yourself and share photos with only the people who matter to you.

2.3.2 React on friends photos

• Send a reaction from Locket to your friends to let them know you saw their photo.

• They'll receive a notification and you'll love watching the emoji fall like rain on your photo.

• We do not count or track interactions; So you can be yourself without worrying about Likes and filters like other platforms.

2.3.3 Create a log from Locket images

• As you and your friends take photos in Locket you'll create a log of everything sent.

• Share them as photos or use the video summary feature to stitch together your and your friends' memories, and document Moments of happiness.

• Locket will also create a video summary for you of all the photos you've shared at the end of each month.

Chapter 3

3.1   Program design

3.1.1   Application interfaces

Figure 3.1: sing in or create account

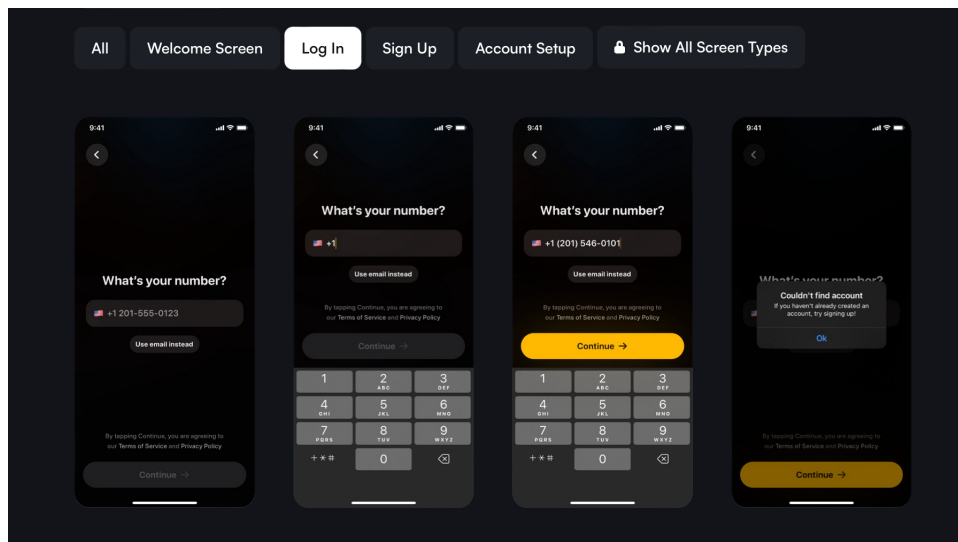• When you open the application, the sign in interface or create a new account will appear.

Figure 3.2: login

• When you select "sing in", the login interface appears and the user is required to enter his phone number. After that, he may see the interface "I could not find the account", which means that the account is already present in the application database.
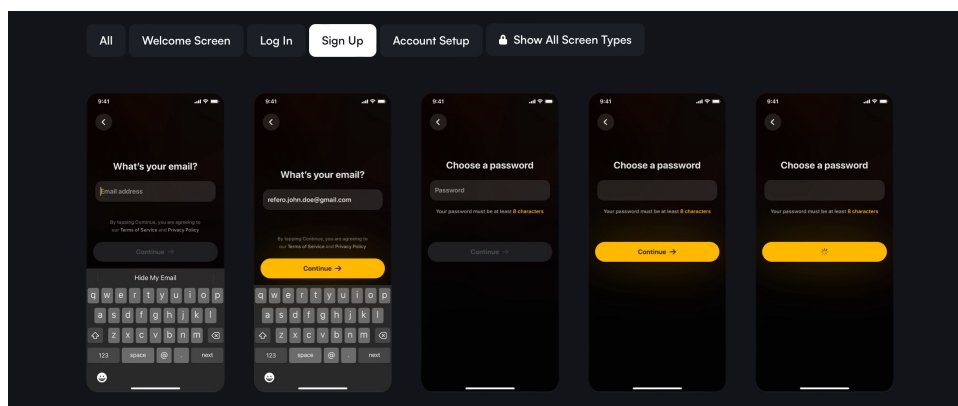

Figure 3.3: sing up

• When selecting "Login", a "Login" interface will appear, requiring the user to enter his email "What is your email" and then click "Continue" at the bottom of the screen.After that, another interface will appear to enter the user code "Choose a password" requiring him to enter a password consisting of 8 characters "Your password must be at least 8 characters" and then click "Continue" at the bottom of the screen.
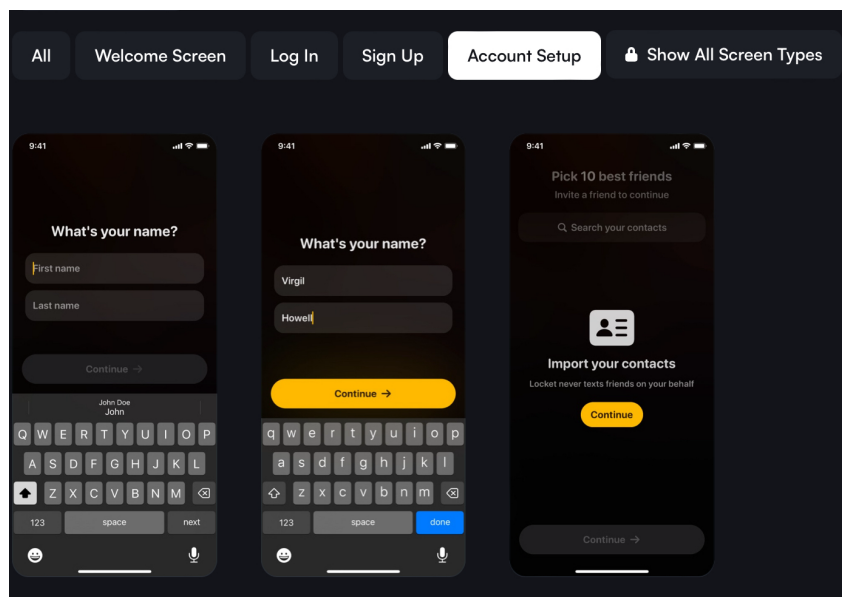
Figure 3.4: Account setup

• After that, the user will go to his account settings, an interface will appear for setting up the account, requiring the user to enter his name "What is your name", "First name", "Last name", then click "Continue" at the bottom of the screen. After that the interface for choosing friends will appear "Choose the best 10 friends" to share photos with them, and it also requires importing the user's contacts "Import your contacts" and then clicking "Continue" at the bottom of the screen .

Figure 3.5: Receive,chat,send

• "Receive" The user can view new photos of friends throughout the day."Chat" There is a special interface to respond to friends' photos.

Figure 3.6: History,your friends,photo and video capture

• A special history interface to explore photos and go back in time. There is a friends management interface that will show you the friends added to the program "Your Friends" and the user will see more suggested friends to add "Show More Friends". Photo and video capture interface: It allows the user to take photos through it and he can take the photo or video through the rear or front camera, and he can also use the flash while taking the photo and video as well.
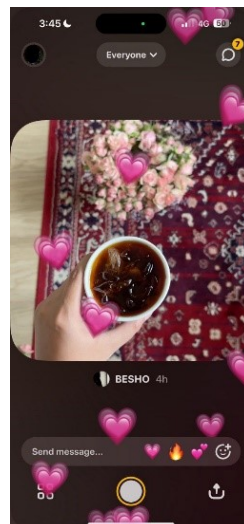

Figure 3.7: Intract with friends

• User can interact with friends from the log interface by sending emojis that appear at the bottom of the screen,The emojis will appear to users and friends like rain.
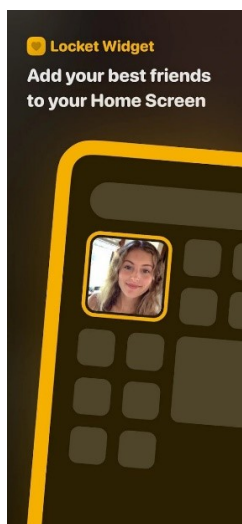
Figure 3.8: Shortcut to the application

• The user can add a shortcut to the application on the home screen of the user's phone, which will show him the latest photos sent by friends.

3.1.2 Application Data Base

• Account information: When you create an account with us we collect your phone number, email, full name, and birthday (day and month).

• Contact information of your friends: Locket may, with your permission, access your mobile contact list including saved phone numbers and names, to help you connect with people you know on Locket.

• Photos and videos: When you choose to send a photo or video to a friend's Locket Widget, you provide Locket with the photo or video taken and associated metadata, including the file type and size, and the time the photo or video was taken.

• Correspondence and other communications: When you contact us, including about our Services, via email, social media or by other means, you provide us with Personal Data, such as your full name, email address, telephone number and the content of your communications.

• Payment information: Our payment processor(s) will collect the financial information necessary to process your payments, including name, payment card information, and billing information. Our third-party payment processors will handle your payment information in accordance with their own privacy policy. We do not have access to your full payment card information.

• Chat messages and reactions: When you choose to send messages and reactions to friends on Locket, you provide Locket with the message or reaction sent. We may review the contents of these messages if a user reports, or we otherwise detect, a potential trust and safety violation or potentially illegal or illicit activity or violations of our Terms and Conditions, as permitted by applicable laws.
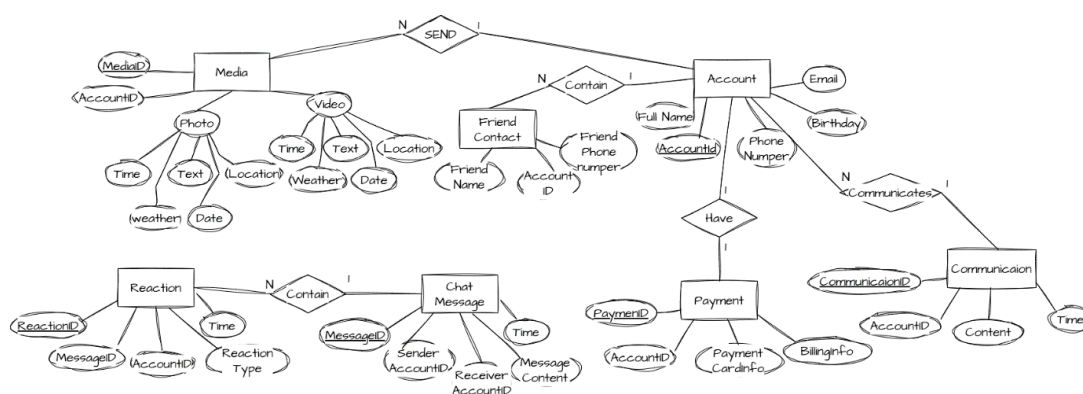

Figure 3.9: Entity Relationship Diagram(ERD)

This diagram shows us how the user creates his own account and how he sends media, whether he sends pictures or videos, and everyone can respond to them with an emoji or respond with a comment. The user can also do the same thing, as the user's comment reaches the chat log. Also, if the user wants to upgrade to Locket Plus, it provides him with an application without ads and importing pictures from the camera album, as well as knowing who viewed his Locket. He can add unlimited friends, and he can also send longer videos, send longer comments, and many more features.
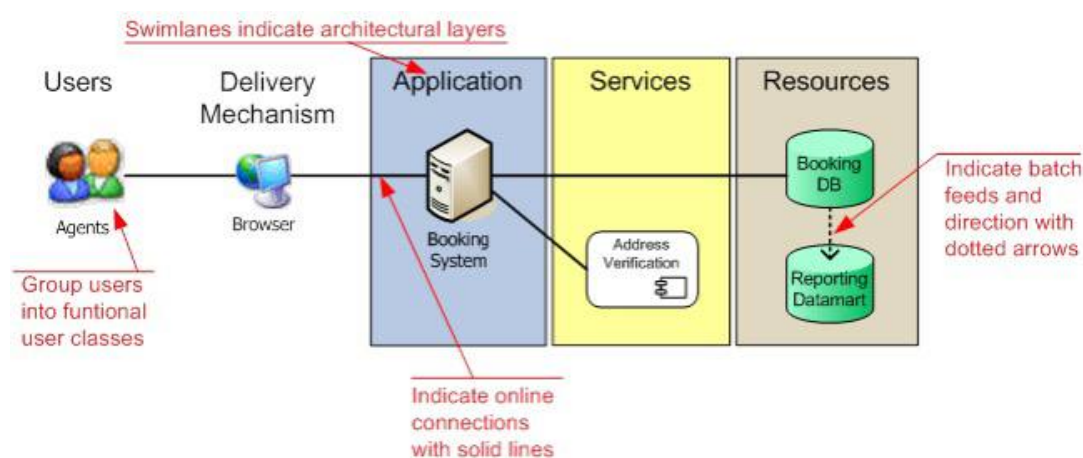

Figure 3.10: System Architecture

This diagram shows us how users interact with each other by sending photos via the messaging mechanisms and then passing them through the system reservation. From here, the user begins to specify the recipients of the photo, whether all or a certain number of people he chooses. After specifying it, the photo goes through the server and makes sure of the correct destination. After that, the photos are saved in records in the databases to interact with them at any time and retrieve memories.

3.2   Conclusion

In conclusion, the Locket application is a standout choice for anyone looking to enhance their mobile experience by fostering deeper connections With those they love. By transforming your lock screen into a canvas for personal photos and messages, Locket brings a unique and heartfelt touch to your daily interactions For anyone seeking a way to enhance their digital experience and maintain close ties with loved ones, downloading the Locket app is highly recommended. It offers a fresh perspective on how we engage with our devices and each other, making every glance at your phone a reminder of those who matter most.

References

- Apple. (2023). What is Locket? How to use the iPhone app everyone's talking about. Retrieved from https://apps.apple.com/sa/story/id1647059807?l=ar

- Our Safer Schools. (2022, February 2). Locket widget. Retrieved from https://oursaferschools.co.uk/2022/02/02/locket-widget/

- Siddhi Sonwalkar. (2021, September 11). Locket product case study. Medium. Retrieved from https://medium.com/@siddhisonwalkar1/locket-product-case-study-e79e0823070c

- Refero. (n.d.). Locket. Retrieved from https://refero.design/apps/80

- Locket. (n.d.). Retrieved from https://locket.camera/

- Apple. (2023). Facebook. Retrieved from https://apps.apple.com/sa/app/facebook/id284882215?l=ar

- Apple. (2023). Snapchat. Retrieved from https://apps.apple.com/sa/app/snapchat/id447188370?l=ar

- Apple. (2023). WhatsApp Messenger. Retrieved from https://apps.apple.com/sa/app/whatsapp-messenger/id310633997?l=ar

- Apple. (2023). Instagram. Retrieved from https://apps.apple.com/sa/app/instagram/id389801252?l=ar

- Screen Rant. (2021, September 29). What is the Locket iPhone app and how to use it? https://screenrant.com/what-is-locket-iphone-app-how-use/

- Locket—FAQs. Retrieved October 21, 2024, from https://locket.photos/faq.html

- Locket Camera. (2023, November 27).Privacy policy. Retrieved October 21, 2024, from https://locket.camera/privacy

• Product Hunt. (2024).Locket Widget - Product Information, Latest Updates, and Reviews 2024. Retrieved October 21, 2024, from https://www.producthunt.com/products/locket-widget

• Systems Flow, Inc.(2012, August 13). System architecture diagrams. Retrieved October 21, 2024, from http://www.sysflow.com/blog/system-architecture-diagrams/

• Miller, C. (2022, January 13). 'Locket' is a viral new app that lets friends share photos straight to your iPhone Home Screen. 9to5Mac. Retrieved October 21, 2024, from https://9to5mac.com/2022/01/13/locket-app-iphone-widgets/