



# HANDS-FREE EXPLORER: TRAVELING WITHOUT BAGGAGE

Keshava Gowda S P<sup>1</sup>, Dr M N Veena<sup>2</sup>

Research Scholar, Dept. of MCA, P.E.S College of Engineering, Mandya, India<sup>1</sup>

Professor & HOD, Dept. of MCA, P.E.S College of Engineering, Mandya, India<sup>2</sup>

**Abstract:** When we travel, it is important to be able to move freely without being weighed down by our baggage and luggage. There is a saying, "If you want to travel happy, you must travel light". A nagging problem for travelers is finding a place to stash their suitcases when they arrive in town too early to check into a hotel, or when they've checked out of their rooms and are planning adventures before heading to the airport. One possibility is carrying luggage to restaurants, museums or to a meeting with a potential client. Travel hands Free is an app that connects travelers looking for short-term bag storage with cafes, restaurants, gift shops and other businesses that have plenty of secure storage space. In addition to helping businesses turn unused or underutilized space into revenue-producing uses, the app also helps local economies by getting travelers to explore neighborhoods and reducing foot traffic.

**Keywords:** Hands-Free Travel, Local Economy Boost, Baggage Storage, Traveler Convenience.

## I. INTRODUCTION

The Hands-Free Explorer app offers a safe solution for anyone seeking a reliable place to keep their luggage. This convenient choice allows users to explore without the burden of carrying heavy and cumbersome bags. This software facilitates the establishment of a network for storing luggage by connecting users with local businesses around the nation, such as shops, cafés, and hotels. Hands Free Explorer users have the option to entrust their bags to a nearby local company, allowing them to enjoy their stay without worrying about their belongings. Local businesses may benefit from an additional source of revenue by offering their extra storage space, while travelers can use the app to find secure options for storing their luggage.

## II. LITERATURE SURVEY

[1] This paper explores that cloakr is considered the best choice in this area. Cloakr is a platform that aims to enhance the venue's database while ensuring the security of customers' belongings in a discreet manner.

[2] The paper discusses that Go Baggage Free offers convenient and affordable luggage storage facilities, known as locker rooms, located around Delhi for the convenience of tourists and travelers. Our crew carefully evaluates each storage facility to ensure easy accessibility, secure storage, and an exceptional customer experience. Our service is specifically designed to meet the needs of travelers and provide fast and secure storage solutions. Each location has been carefully selected to provide exceptional levels of customer service and security. Additional security measures include unique tamper-resistant ID zip locks, closed-circuit television monitoring and 24/7 access. Our Android app allows customers to book and manage luggage storage.

[3] This provides a service that allows customers to deposit their baggage at either the Domestic Terminals or the International Terminal and retrieve them at the other terminal. Bags may be stored for a maximum of 90 days, offering travelers a sense of independence and tranquility. This service allows travelers to explore the city or handle their transportation without the inconvenience of carrying their luggage.

[4] The proposed strategy involves deploying Internet of Things (IoT) storage kiosks in popular and highly trafficked locations. These kiosks are operated by scanning Quick Response (QR) codes using a smartphone app to lock or unlock them. A minimum feasible prototype was developed and rigorously tested in various situations and locations, demonstrating the system's ability to withstand modern threats. The suggested solution has received significant praise for its high level of security, achieved by QR Authentication and the randomness of QR code generation. These measures effectively protect against Quick Response Code Login (QRL) Jacking and QR phishing attacks



[5] In Contemporary train stations are increasingly implementing multifunctional concepts that benefit users, surrounding businesses, and local service providers. The SmartSTORE concept offers an innovative solution by revolutionizing the storage of both long-term and short-term luggage at prominent public transit hubs such as train stations. SmartSTORE enhances the appeal of public transit by using previously neglected spaces, while enhancing the safety, comfort, and convenience for passengers.

### III. PROBLEM STATEMENT

Carrying baggage may be somewhat burdensome, especially when arriving in a city before hotel check-in or while exploring after check-out. Traditional housing often fails to provide convenient storage options, while short-term rentals often lack this amenity. Consequently, travelers are burdened with their luggage, perhaps impeding their ability to fully appreciate local amenities such as restaurants, museums, or business engagements. In addition to physical exertion, the act of lugging large and unwieldy luggage restricts the ability to fully explore and engage with the surroundings, so impacting the whole holiday experience. In the absence of secure and temporary facilities for storing luggage, there may be consequences in terms of both security and logistics. Travelers may resort to hazardous or unpleasant tactics, such as entrusting their baggage to acquaintances or leaving it at vulnerable locations, so increasing the risk of theft or misplacement. This issue becomes particularly crucial in large urban areas where it is not practical to rent a car for the purpose of storing luggage. Local businesses that have additional storage space also miss out on potential revenue opportunities. The Hands-Free Explorer app establishes a network that connects users with local firms that provide secure and convenient luggage storage, thereby resolving these concerns. This innovative strategy not only enhances the travel experience but also provides a new revenue stream for the participating organizations, so helping both local businesses and tourists.

### IV. OBJECTIVE

- The app supports the growing trend of affordable travel by reducing the need for expensive luggage storage services at airports or hotels.
- Travelers can redirect financial resources to unique experiences rather than managing luggage logistics.
- It frees passengers from the physical burden of heavy bags, making travel more pleasant and comfortable.
- It uses the possibility of safe storage, reducing the risk of theft or loss of personal belongings.
- It allows passengers to make the most of their time by starting their adventures immediately upon arrival and continuing them after checkout.
- It supports local businesses by driving foot traffic and generating revenue through storage services.
- It allows travelers to focus on planning rewarding experiences without the distraction of baggage worries.

### V. METHODOLOGY

The iterative model of the Software Development Life Cycle (SDLC) was employed for the development of the Job Ease Android application. This approach involves repeated cycles of planning, designing, implementing, and testing, allowing for incremental development and continuous improvement. Initially, a basic version of the app was developed, focusing on core functionalities such as job demand registration and payment tracking.

The Hands-Free Explorer app follows an iterative model of the Software Development Life Cycle (SDLC), which involves constructing the app over a series of repeated cycles. Each cycle includes steps such as planning, designing, implementing, and testing. Initially, a rudimentary version of the application is created, focusing mostly on fundamental functionalities such as connecting users with nearby businesses that provide secure storage options and allowing users to book storage space for their belongings. Subsequently, a select cohort of customers conducts testing on this prototype to get feedback on its performance and usability. This input serves as a catalyst for further iterations of the application to enhance its functionality by including real-time notifications, payment integration, and user feedback. Each iteration addresses identified issues and incorporates user feedback, ensuring continuous improvement and adaptation to evolving requirements. Through the use of a hands-free city exploration, this iterative approach guarantees that the finished product is user-friendly, reliable, and effectively meets the needs of both tourists and local businesses, ultimately enhancing the holiday experience.

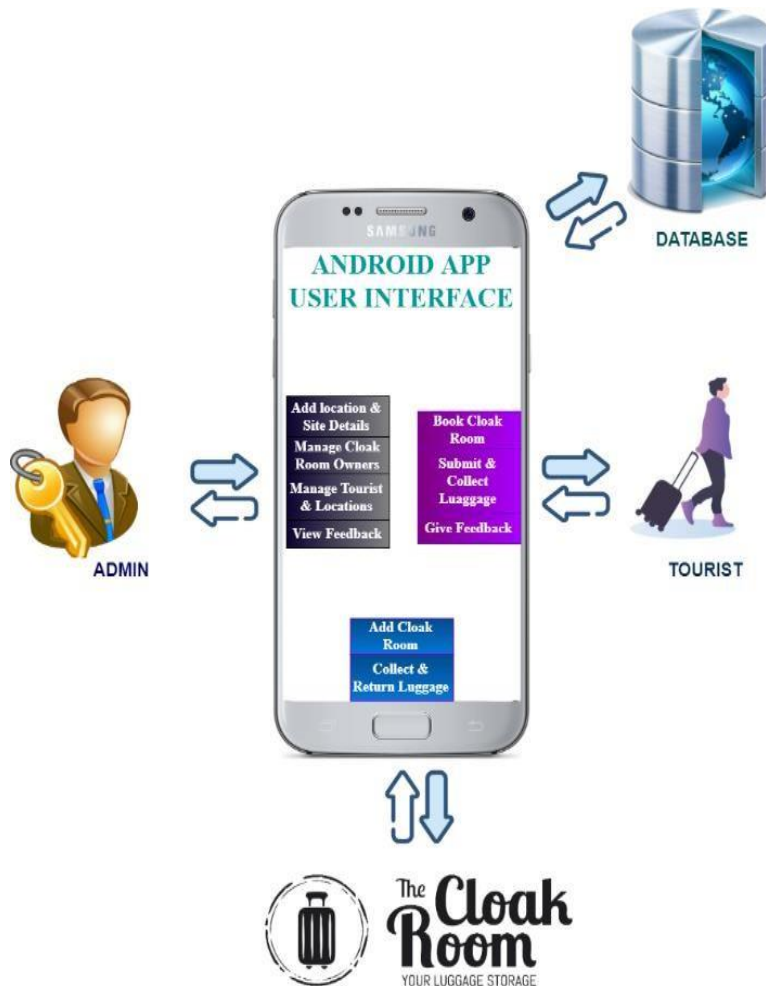


Fig 1. System Architecture

## VI. PROPOSED SYSTEM

This service may be particularly beneficial for day traders, pilgrims traveling from smaller settlements to larger ones, and those awaiting train connections. Cloak rooms provide a convenient solution for those who want to avoid the inconvenience of carrying their baggage across the city while engaged in business or sightseeing. Our application provides a convenient solution for locating and leasing nearby storage facilities, which are available around the city and offered by local businesses. Simply make an online reservation for your storage, go to the designated location, check in your belongings, and enjoy your urban lifestyle. That is really straightforward.

### Advantages of Proposed System:

It is evident that the cost of travel is becoming more affordable and Traveling is more relaxed and unburdened by heavy luggage.



UI OF THE APP



Figure 1: Home Screen

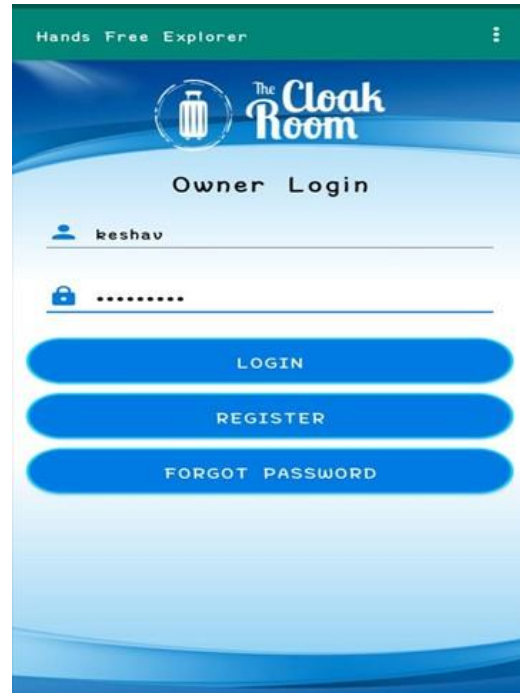


Figure 2: Cloak Room Login Page



Figure 3: Cloak Room Owner Home Screen



Figure 4: Add Cloak Room



Figure 5: Tourist Login



Figure 6: Booking Process

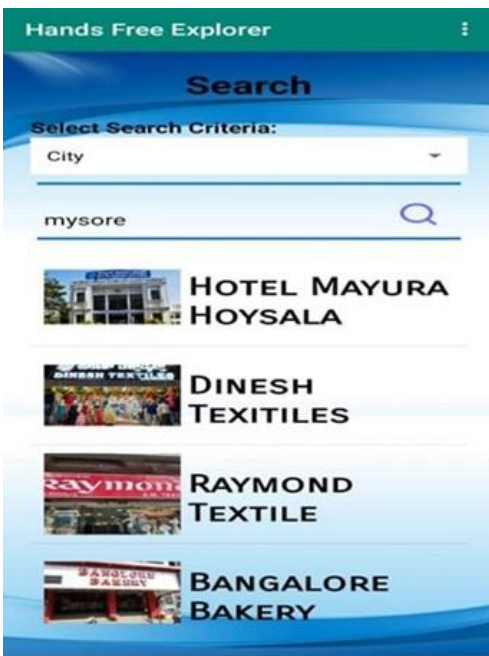


Figure 6: Searching Cloak Room

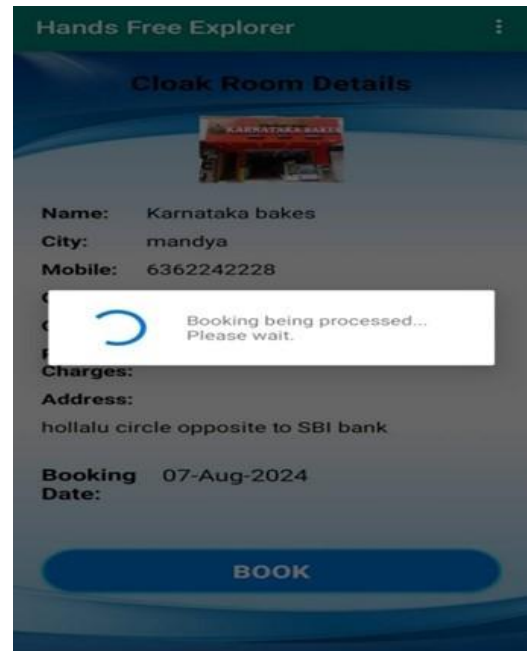


Figure 7: Booking Cloak Room





Figure 7: Text Message to Tourist

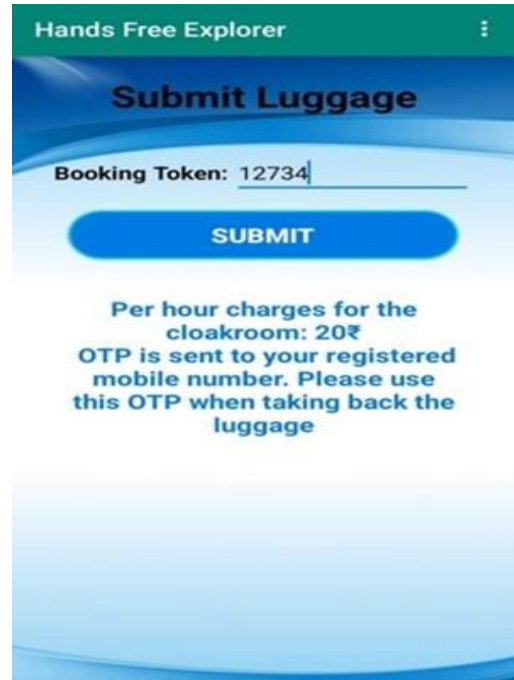


Figure 8: Submit Luggage Through Token

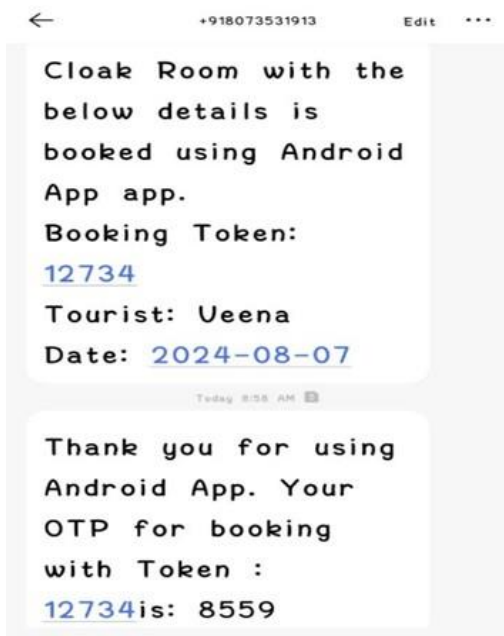


Figure 9: OTP Received to Tourist

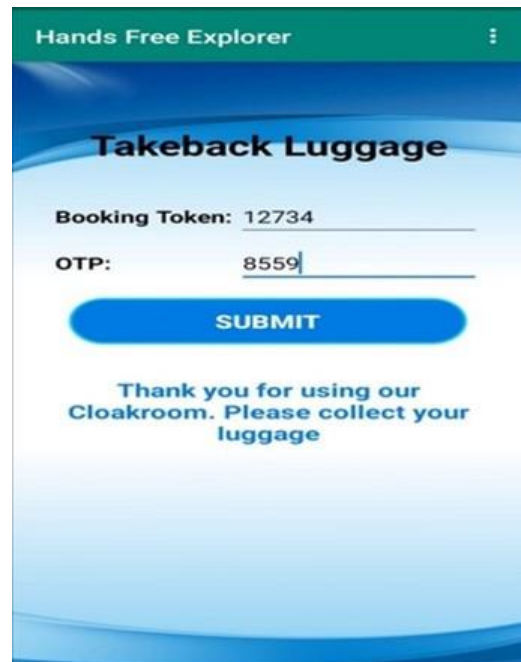


Figure 10: Takeback Luggage Through OTP

**VII. IMPLEMENTATION**

A stage of the software development life cycle (SDLC), system implementation is the process of building, testing, and deploying a planned system. Conversion of the system design into executable code is crucial even before the software system is put into use. Here is a chronology of the main actions required in system installation.

During execution, you can insert layout components. You can create and modify View and ViewGroup objects programmatically in your application. You have the option to declare and manage the user interface (UI) of your application using either or both of these techniques, thanks to the Android framework. For example, you can use XML to describe the default layouts for your application, including the screen components and attributes that will be displayed in them. Then, you can add code to your program that will modify the runtime states of the screen objects, including the ones specified in XML

**VIII. CONCLUSION AND FUTURE SCOPE**

The Hands-Free Explorer Android app allows travelers to simply store their luggage in authorized storage places, known as cloak rooms, enabling them to freely tour the city without carrying their bags. This function ensures secure handling of personal belongings, allowing tourists to fully enjoy their time in the city without the inconvenience of carrying their luggage. The program enhances the ease of travel by optimizing the procedures for checking in and retrieving luggage.

The proposed improvements for the Hands-Free Explorer app include incorporating benefits for frequent users and adding compatibility with local languages. Integrating regional language options would enhance the accessibility of the app to a diverse audience and enable users to participate in their local language. This advancement will enhance the experience for both domestic and international tourists. In addition, implementing a discount system for regular users will incentivize continuous app use via rewards such as points or reduced storage fees. These enhancements aim to enhance the appeal of the application and broaden its user base, so bolstering its long-term viability and growth in the very competitive travel services sector.

**REFERENCES**

- [1]. Khan, M. A., & Younis, M. A. (2020). "Design and Development of Mobile Applications for Learning Enhancement." *International Journal of Computer Applications*, 180(14), 1-5.
- [2]. Jin, X., & Wu, Z. (2020). "The Design and Development of Mobile Applications Based on User Experience." *Journal of Software Engineering and Applications*, 8(6), 317-328.
- [3]. Mannan, M. S., & Sheikh, A. A. (2020). "A Review of Backend Technologies for Mobile Applications." *Journal of Computer Science and Technology*, 35(2), 243-258.
- [4]. Bertino, E., & Sandhu, R. S. (2021). "Database Security—Concepts, Approaches, and Challenges." *IEEE Transactions on Knowledge and Data Engineering*, 17(1), 60-72.
- [5]. Krauss, M. (2021). "Localization Strategies for Global E-Business." *Globalization and Localization Association (GALA)*
- [6]. Esselink, B. (2023). "A Practical Guide to Localization." John Benjamins Publishing.