Enhancing Emergency Communication: A Comprehensive Analysis Of The Rescue 1122 Mobile App

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Abstract

The study aims to provide insights into the app's strengths, usability features, and potential improvements, aligning recommendations for addressing diverse emergency situations. Punjab Emergency Services (PES), known as Rescue 1122, has played a vital role in managing emergencies in Punjab, Pakistan, since 2006. The Rescue 1122 mobile application aims to enhance emergency communication. This study uses a visual analysis component that systematically examines app elements under the direction of media studies. Usability concerns are addressed through thematic coding, ensuring a robust foundation for the study's objectives. Features like user registration, emergency icons, call processes, vehicle tracking, response time tracking, and sidebar functionality are analyzed. Each feature enhances the app's t[1]ransparency, user-friendliness, and overall effectiveness in emergency communication. In conclusion, this study provides a comprehensive analysis of the Rescue 1122 mobile app, emphasizing its strengths, usability features, and potential improvements. The recommended enhancements align with evolving user needs, ensuring the app's continued relevance in emergency communication. Recommendations for future updates include incorporating emergency SMS, video calls, more contact numbers, and in-built emergency applications. These enhancements aim to make the Rescue 1122 mobile app more versatile, user-friendly, and capable of addressing diverse emergency scenarios.

Keywords: Emergency Mobile App, Visual Analysis, Thematic Coding, Rescue 1122, Emergency Communication, Adoption.

1. Introduction

Emergency communication used to be centralized (Rubin & Chisnell, 2008) and one-way (Alfonso & Suzanne, 2008) may provide several challenges, including location, response time etc in emergency situations. Emergency services fail when communication channels are slow or overloaded (Carreras et al., 2022). Emergency victims struggle for aid; if the emergency request is delayed, relief will be delayed. Slow communication delays emergency response time and affects victim condition (Mior Khir, 2015). Emergency response requires high-quality, trustworthy communications. A unique communication strategy saves lives and properties in better way. Emergency management relies on response seekers and emergency services communicating well to reduce harm (Aliperti, et al. 2020). Mobile informatics, especially emergency apps, may help (Tan, et al. 2017) and provide one-to-one, one-to-many,

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and many-to-one communication patterns, which encourage users to share more information and connect during crises (Tan, et al. 2017). Emergency smart phone apps allow people to rapidly contact emergency services and automatically provide important information to authorities. Mobile apps allow users to get requests, concise event descriptions, and exact location. Emergency response systems need real-time mobile app data since catastrophes might damage infrastructure (Amailef & Lu, 2008). Government and public institutions need real-time location data for emergency and disaster response. Finding victims faster would improve rescue efficiency and save lives and property (Sadoun & Al-Bayari, 2007). Recent mobile application studies have examined software and mobile apps (Hsu & Lin, 2015; Liu, Zhao, et al. 2015), mobile banking apps (Al-Jabri & Sohail, 2012), mobile commerce apps and related activities (De Kerviler, et al. 2016), and hospitality mobile apps. These studies have not examined emergency mobile app usage

Mobile applications are seldom used for emergency communication, but they are noticeable. Tan et al. (2017) uncovered two important disaster-related mobile applications in academic literature. Social media facilitates communication and information sharing in normal and emergency situations. Disaster-related crowd sourcing, collaboration, alerts, information aggregation, and user-generated notifications fall under the second group. Safety GPS, Help Bridge, Motorola Alert, Emergency Alert, FEMA app, SignAlert, ELERTS, and My112 aid crisis communication (Romano et al., 2016). Knowledge gaps are a major issue, according to the UN's International Strategy for Disaster Education Platform, 2005. Users may actively use mobile services to share emergency information, including their position, with nearby others in need. Aloudat et al. (2014) call this service a location-based mobile emergency communicaion system that greatly enhances response.

2. Background

South Asia's largest emergency service, Punjab Emergency Service (PES), Rescue 1122, was founded in 2006 under the Punjab Emergency Act 2006 to professionally manage medical, road, fire, and other emergencies. Its ambulances, rescue, fire, and community emergency response teams have rescued millions of Punjabis in emergencies by preserving standards and timeliness (Peter et al., 2019). Rescue 1122 handles situations via phone calls. Emergency calls to 1122 include incident details and location for immediate assistance. In order to respond quickly, 1122 emergency vehicles have GPS trackers (Maqsood et al. 2020). However, emergency response times vary by region and are delayed. Callers' difficulties in conveying their location during phone calls may have caused this delay. Fake calls and misinformation about events hinder response. Emergency mobile apps prevent bogus calls and sluggish responses. Automatic requests can be generated from mobile apps. Requests go to the nearest station, saving time. Requester may follow progress. Mobile phone call systems are plagued by false calls and erroneous location information (Peter et al., 2019).

Rescue 1122 has launched a smart phone app to speed up emergency response. Rescue 1122 mobile application (RMA) is consumer-focused emergency communication software that provides correct emergency locations to rescuers and its users. Punjab Chief Minister Sardar Usman Buzdar launched the Rescue Mobile Application (RMA) on December 12, 2021, underlining its importance in improving emergency response time. He stressed that the program might effectively locate people in crucial circumstances, improving citizen service. He also believed the app will reduce needless calls and improve the services of Rescue 1122 (The Nation, December 12, 2021). Punjab Emergency Service, Rescue 1122, and Hoboetech developed the Rescue Mobile App. Hoboetech is an institution and communication platforms for app development. Over 100,000 Android users have downloaded the Rescue 1122 Mobile

App, which has a 4.5 rating. It is a two-way communications system and unique mobile phone software that connects users in medical, road accident, fire, and other emergencies. Over 100,000 people have downloaded the Rescue 1122 mobile app (RMA) in two years to seek help in emergencies (Google Play, 2021). However, the app has received few emergency requests through RMA. Therefore, functionality of RMA must be explored immediately.

3. Objectives:

- Assess the existing usability features of the Rescue 1122 mobile app to determine its effectiveness in facilitating quick and efficient responses during emergency situations.
- Identify and analyze the strengths and weaknesses of the Rescue 1122 app, considering its current functionalities and user interface, to provide a comprehensive understanding of its performance.
- Provide targeted recommendations for enhancing the app's functionality, user interface, and overall user experience based on identified weaknesses and emerging user needs.

4. Research Questions:

- What are the current strengths of the Rescue 1122 app in facilitating emergency responses?

- What usability features does the Rescue 1122 app currently offer?

- In what ways can the Rescue 1122 app be improved to enhance its overall performance?

Research on emergency communication has increased since 2010, mostly concentrating on the response (Tan et al., 2017). Research indicates that during emergency situation, individuals often rely on familiar, commonly used, and trustworthy communication channels (Liu, 2017; Tan et al., 2017). However, contemporary scholarly research tends to mostly concentrate on emergency mobile applications rather than pre-existing social media platforms (Tan et al., 2017). According to Aloudat et al. (2014), location-based emergency management applications require further theoretical and empirical research to solve their challenges. Localization, customization, and intimacy in location-based apps may boost safety (Barnes, 2003). Numerous studies have shown the importance of mobile devices and apps in emergency management and emergency response. Arca (2012) proposed a complete communication system to raise awareness and enhance information flow before, during, and after catastrophes using mobile devices. Romano et al. (2016) designed emergency response mobile apps using contemporary mobile sensors to provide effective alerting systems. Jadhav et al. (2014) examined, Android emergency management software that uses GPS and cloud computing to respond to accidents. De Guzman et al. (2014) developed geo-location-based mobile emergency response apps for command centers to quickly deploy emergency units. Bolle et al. (2011) studied how ordinary bystanders may video contact dispatch centers to improve medical emergency. Expanding the scope, Becker et al. (2019) examined post-earthquake communication and coordination problems using social media and other technologies. Wu et al. (2012) stressed the need of immediate emergency service contact via cell phones, demonstrating their significant influence on death rates. It highlights the diverse approaches and innovations in the field and the role of technology in improving emergency communication and response systems, aligned with the global initiative to modernize government services through contemporary technologies (Erskine & Pepper, 2016).

5. Methodology

Utilizing ideas from content analysis (Neuendorf, 2016), this study employs visual analysis to carefully investigate the features, characteristics, and functioning (Rose, 2022) of the Rescue 1122 mobile app. The approach is informed by existing concepts in media studies and human-computer interaction (Dix et al., 2004), drawing from the work of Norman (2002) and Tondreau (2009), using theme coding techniques influenced by Braun and Clarke (2006).The research technique for this study utilizes a thorough approach to examine the usage pattern of mobile applications inside the Rescue 1122 emergency framework. The visual analysis component adheres to a systematic methodology and considerations of usability. Data collection includes the acquisition of visual elements linked to the Rescue 1122 mobile application, such as screenshots and images. The features are systematically identified, including User Registration, Emergency Icons and Call Processes. Feature coding classifies graphic elements, while contextual analysis investigates their impact on the app's efficacy during emergency scenarios. The codebook, crucial for methodical categorization, undergoes regular revisions to maintain its validity and dependability, guaranteeing authenticity and uniform coding:

6. Visual Analysis Codebook

6.1 User Registration (UR):
- UR1: Registration of Two SIM Numbers
- UR2: Username and Profile Picture are required during Registration

6.2 Emergency Icons (EI):
- EI1: Medical emergency icon
- EI2: Road accident emergency icon
- EI3: Fire emergency icon
- EI4: Other emergency icons

6.3 Emergency Call Process (EC):
- EC1: Verifying the Emergency Location on GPS before Making a Call
- EC2: Helpline Number 1122 is automatically provided for Dialing

6.4 Vehicle Tracking (VT):
- VT1: Real-Time Tracking of the Emergency Vehicle's Location
- VT2: Presentation of the Emergency Vehicle Number

6.5 Response Time Tracking (RT):
- RT1: Real-time Display of the Precise Response Time
- RT2: Display of Total Emergency Procedure Time

6.6 Sidebar Functionality (SF):
- SF1: Emergency History Access
- SF2: Video-based Literature on Health Safety and Environment
- SF3: Explicit Demonstration of User Feedback Mechanism
- SF4: Documentation on the Application's Functionality

6.7 Analysis and Discussion
The examination of the Rescue Mobile App's visuals is crucial for comprehending its design and features. The methodical analysis of visual components, investigating the user interface, graphic depictions, and overall visual composition. Through the use of a comprehensive codebook, our objective is to analyze and examine certain elements that are essential to

emergency communication. These elements include user registration, emergency icons, emergency call procedures, vehicle tracking, response time monitoring and Sidebar Functionality. Visual analysis offers a detailed comprehension of user interactions with the app's interface in emergency scenarios, revealing insights about usability, transparency and the overall efficacy of the app's emergency response functionalities. This section explains the methods used to analyze the visual components of the app in order to get valuable insights about its usefulness. The analysis involves theme coding and contextual interpretation. To understand the emergency communication process facilitated by the RMA, a comprehensive flow chart is presented below for detailed insights.
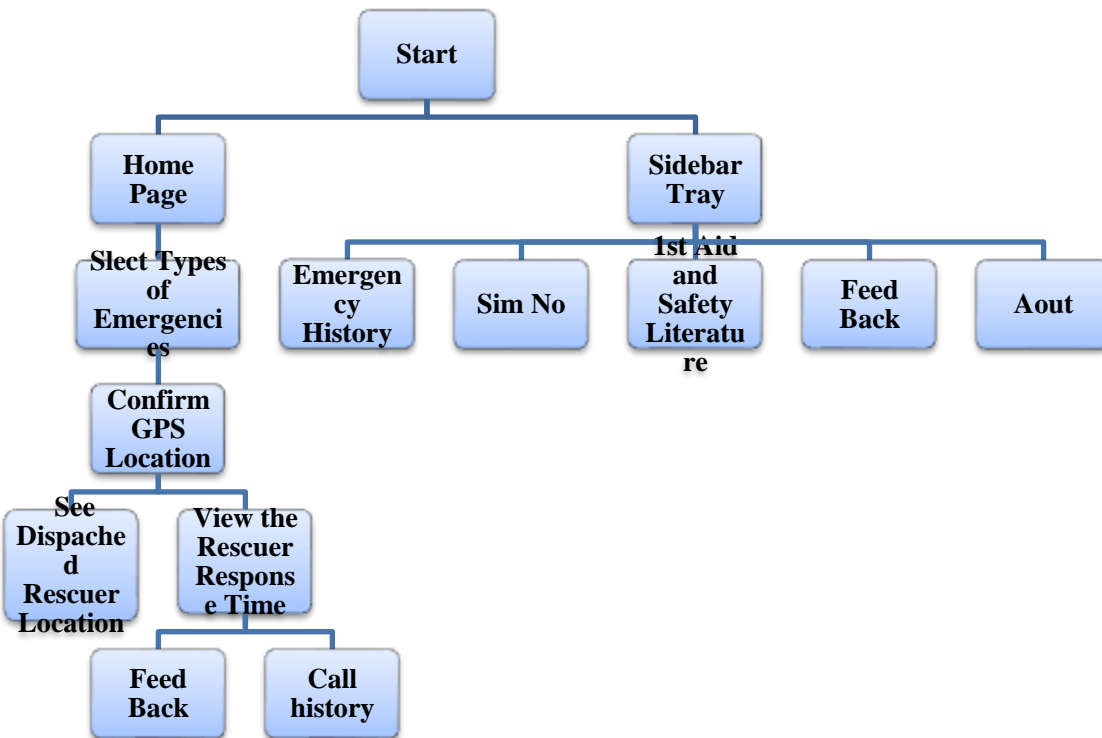
**Figure 1: Rescue Mobile Application communication flow chart.**

7. Comprehensive Analysis of Rescue 1122 Mobile App Features

The codebook created for the visual analysis of the Rescue 1122 mobile app features acts as a systematic framework, organizing following visual aspects and guaranteeing a disciplined approach to the analysis process. Every allocated code correlates precisely to a particular feature detected during the evaluation of visual components, making it easier to conduct a thorough and step-by-step analysis of the app's functionality. This technique deepens the comprehension of the many facets of the Rescue 1122 mobile application.

7.1 User Registration (UR)

7.1.1 UR1: Registration of Two SIM Numbers

Analysis: This functionality allows the user to register and modify two SIM numbers throughout the registration process. The addition of this feature greatly improves the app's usefulness, especially for users who own numerous SIM cards. The software guarantees the proper representation of users' contact information by enabling the registration of dual SIM numbers. This is especially advantageous in emergency scenarios when effective communication is crucial. Users who own numerous SIM cards may be certain that the app provides access to all pertinent contact information, hence improving the overall efficiency of the emergency mobile service. This function provides to the practical requirements of customers who have numerous SIM cards, bringing the app in line with the varied communication patterns of its users. The app's user-centric design incorporates the prominent display of two SIM numbers, guaranteeing full and dependable contact information for efficient emergency communication.
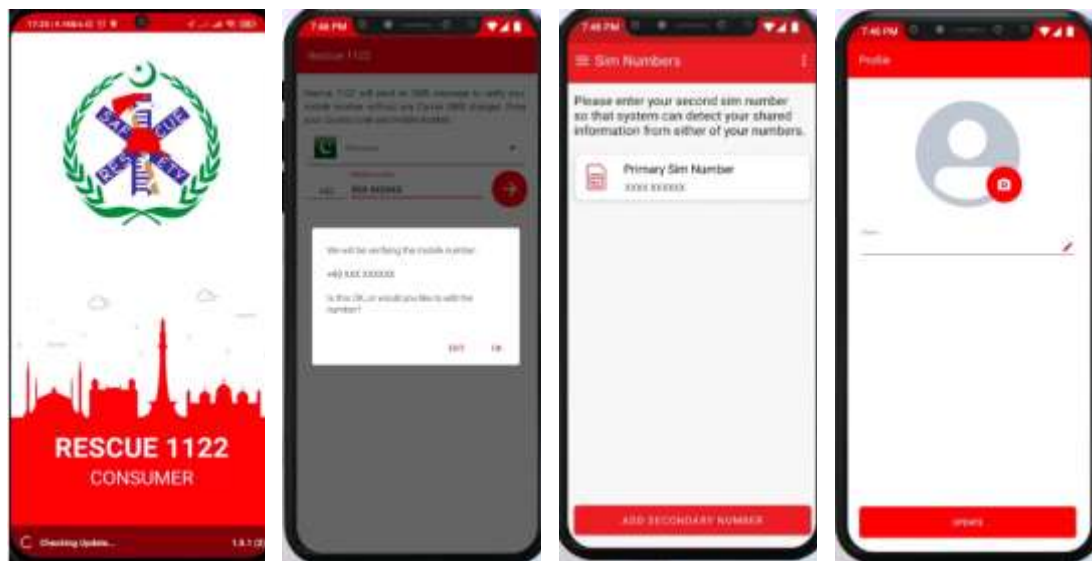
UR1a   UR1b   UR1c   UR2

Figure 2: User Registrations

7.1.2 UR2: Username and Profile Picture are required during Registration

The use of usernames and profile images during the registration process offers a degree of customizations that improves user identification and involvement. Users have the ability to create unique profiles, enhancing the significance and user-focused nature of their interactions with the application. This feature not only enhances usability but also cultivates a feeling of ownership and connection to the software, hence significantly impacting the entire user experience.

7.2 Emergency Icons (EI)

7.2.1 EI1: Medical Emergency Icon

Analysis: Push the medical icon in the event of medical emergencies. The addition of a specialized medical emergency symbol offers consumers a smooth and effective means of

recognizing and obtaining appropriate help in the event of a medical emergency. This user-friendly design optimizes the user experience, enabling prompt and focused reaction in crucial scenarios.

EI1,EI2,EI3,EI4

Figure 3: Emergency Icons on Main Page

7.2.2 EI2: Road Accident Emergency Icon

Analysis: Press the road accident icon in the event of road traffic emergencies. The road accident emergency symbol is an essential tool that enables people to quickly access services linked to road accidents. This feature highlights the app's ability to promptly respond to various emergency situations, particularly those relating to road traffic issues. Users have the ability to rapidly take suitable activities, which in turn contributes to the effectiveness of emergency response.

7.2.3 EI3: Fire Emergency Icon

Analysis: Push the fire icon to report fire emergencies, the inclusion of a specialized fire emergency symbol guarantees quick access to fire-related emergency services. This feature improves the app's overall scope by specifically targeting a certain kind of crises. Users may quickly interact with the app to request help in the event of a fire emergency, showcasing the app's customized ability to respond.

7.2.4 EI4: Other Emergencies Icon

Analysis: Tap other icon for various types of emergencies. The app's capacity to include other emergency symbol, such as those for criminal calls, drowning incidents, building collapses, and other unanticipated catastrophes, demonstrates its adaptability to many unexpected situations. The dynamic method guarantees convenient user access to the precise emergency services they need, demonstrating the app's adaptability and significance in meeting changing user requirements. In addition to the highlighted icons, the app's design may include modification options for adding or modifying icons in response to changing emergency

requirements. By allowing for a high degree of customization, the software can effectively adapt to new threats or meet unique local needs.

7.3 Emergency Call Process (EC)

7.3.1 EC1: Verifying the Emergency Location on GPS before Making a Call

Analysis: Implementing a mandatory GPS position confirmation from users prior to starting an emergency call is an essential functionality that greatly improves the overall efficiency of the application. This approach adheres to the most effective methods in emergency response systems, guaranteeing the transmission of precise location data to emergency services. The software improves the dependability of the emergency response by reducing response time via the use of GPS confirmation. Users get advantages from a system that exhibits transparency and accountability, therefore cultivating confidence in the application's capacity to provide prompt and accurate aid in crucial circumstances.

EC1   EC2
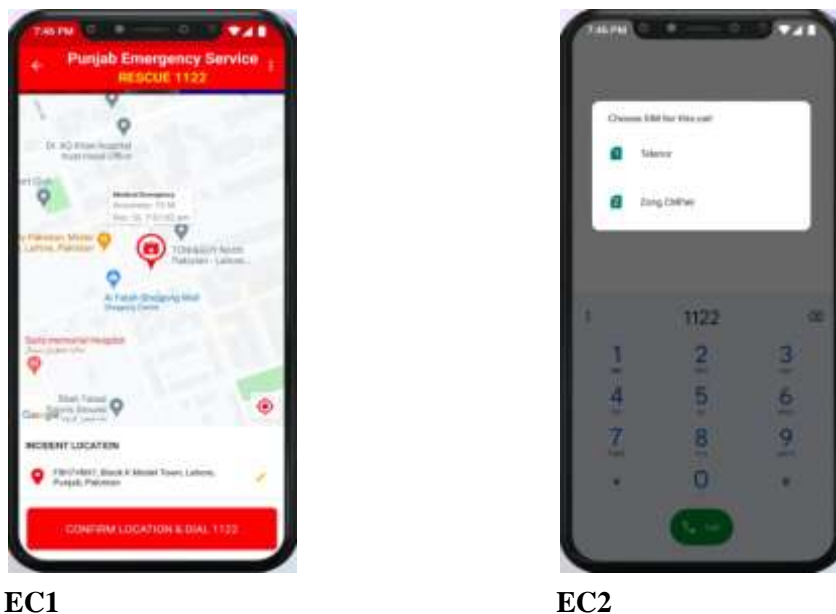
Figure 4: Emergency Call Process

7.3.2 EC2: Helpline Number 1122 is automatically provided for Dialing

Analysis: The implementation of an automated system that prominently shows the Rescue 1122 helpline number for dialing is an intuitive and clear method for starting emergency calls. This feature ensures a transparent and smooth procedure for initiating calls, inspiring users with trust in the efficiency of the emergency call system. The software streamlines the user experience by immediately displaying the hotline number, hence alleviating cognitive burden during high-stress scenarios. The transparency not only boosts user trust but also helps the app's accessibility and usefulness in emergency situations. In general, this characteristic enhances the app's reputation for being dependable and effective under critical circumstances, which in turn influences users' favorable view.

7.4 Vehicle Tracking (VT)

7.4.1 VT1: Real-Time Tracking of the Emergency Vehicle's Location

Analysis: The inclusion of real-time location monitoring is an essential attribute that greatly improves the understanding of the current situation during emergency reactions. Users may actively watch the real-time progress and movement of the emergency vehicle using this feature. This function enhances users' comprehension of the current emergency scenario and facilitates efficient collaboration between users and emergency responders by providing real-time updates on the vehicle's whereabouts. The capacity to monitor in real-time enhances the responsiveness and transparency of the emergency communication system.

VT1, VT2

Figure 5: Vehicle Tracking

7.4.2 VT2: Presentation of the Emergency Vehicle Number

Analysis: The inclusion of the emergency vehicle number is a crucial feature of the emergency mobile application. This feature is essential for providing users with confidence and making it easier to identify the car that is responding. Clear and conspicuous display of the emergency vehicle number enhances communication efficiency between users and responders during emergency circumstances. The enhanced visibility of vehicle identification facilitates effective communication, enabling users to effortlessly access and transmits information pertaining to the vehicle in question. In the end, the presentation of the emergency vehicle number boosts consumer assurance and guarantees more efficient communication channels during crucial circumstances.

7.5 Response Time Tracking (RT)

7.5.1 RT1: Real-time Display of the Precise Response Time

Analysis: Providing visual cues that accurately display the response time is crucial for building user trust and confidence in the emergency mobile application. Through the provision of up-to-the-minute information, users get a comprehensive knowledge of the emergency response system's effectiveness. The app's openness enhances users' trust in its capacity to rapidly and efficiently manage situations.

RT1, RT2

Figure 6: Response Time Tracking

7.5.2 RT2: Display of Total Emergency Procedure Time

Analysis: The inclusion of the complete emergency process time is crucial for enhancing transparency inside the emergency mobile application. By displaying the whole time of the operation, consumers get a thorough comprehension of the entire process—from the first report of an emergency to the finalization of the response. This level of openness not only ensures that consumers are well-informed, but also plays a crucial role in fostering accountability within the emergency services. Users may evaluate the overall effectiveness of the system, resulting in a user base communication that is more educated and more confident.

7.6 Sidebar Functionality (SF)

7.6.1 SF1: Emergency History Access

Analysis: The incorporation of an emergency history feature, which can be accessed via the sidebar, provides users with a very useful tool. This feature enables users to thoroughly examine previous occurrences, including crucial information such as the emergency hotline number, kind of emergency, particularly the emergency vehicle involved, response time, duration of the situation, and user evaluations of Rescue 1122 services. In addition, the time stamped records provide the precise date and time of each incident, providing users with a chronological perspective.

**7.6.2 SF2: Video-based Literature on Health Safety and Environment**

Analysis: The inclusion of eight educational videos in the sidebar, addressing subjects like first aid, basic life support (BLS), fire safety, road safety, maintaining cleanliness, and three videos promoting a healthy and safe lifestyle in Pakistan, demonstrates the app's dedication to promoting safety awareness and preparedness. The sidebar's dual use is in line with the app's position as an educational resource. Users may readily access and see these movies, therefore enhancing their knowledge and proficiency in emergency response and general well-being.

7.6.3 SF3: Explicit Demonstration of User Feedback Mechanism

Analysis: The sidebar integrates a transparent and intuitive feedback system, prioritizing user-friendliness for the participants of the app. Users are presented with two separate alternatives, providing ideas or lodging complaints. This transparency promotes engaged user involvement in the feedback process, cultivating an atmosphere where users feel empowered to provide their perspectives and viewpoints, eventually contributing to the continuous development of the app and emergencies.

7.6.4 SF4: Documentation on the Application's Functionality

Analysis: The incorporation of literature on the app's features in the sidebar functions as an informative tool for users. This feature guarantees that customers are well informed about the capabilities and operations of the emergency mobile app.

Sidebar Tray		SF1	SF2	SF3	SF4
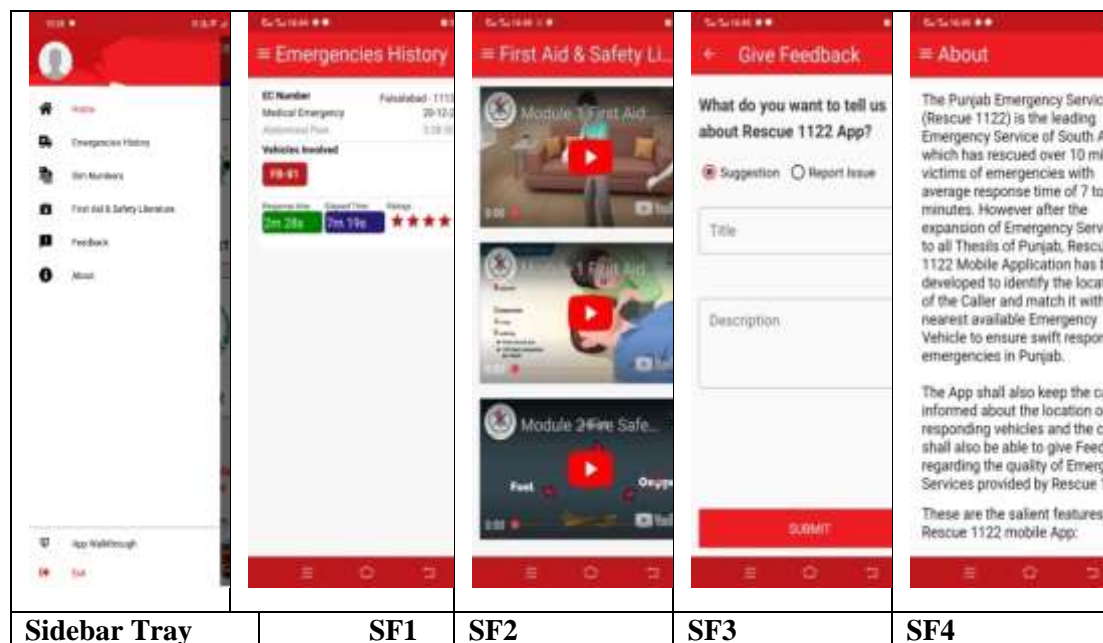
Figure 7: Sidebar Functionality

The software enhances user comprehension and skill by offering easily accessible and thorough documentation. This leads to a more efficient exploitation of the app's functionality in emergency scenarios.

8. Conclusion

The User Registration (UR) functionality of the emergency mobile application plays a crucial role in improving the ease of use and customization. The software caters to the practical requirements of users who own multiple SIM cards by enabling the registration of two SIM numbers. This feature ensures that users have complete contact information for efficient emergency communication. By including usernames and profile images, a sense of individuality is created, which enhances user identification and promotes active participation. Regarding the Emergency Icons (EI) function, the app's user-friendly design enables users to conveniently choose specialized icons for certain circumstances, simplifying answers and offering a visually simple interface. The Emergency Call Process (EC) guarantees a user-

friendly start with GPS location confirmation and automated presentation of the helpline number, fostering transparency and dependability in emergency calls. The Vehicle Tracking (VT) and Response Time Tracking (RT) capabilities provide immediate understanding of the current situation and provide clear understanding of the emergency response system. The Sidebar Functionality (SF) includes a comprehensive examination of emergency history, instructional material, and a transparent feedback system, enhancing the user's experience. To summarize, the emergency mobile application shows a dedication to designing for the user's needs, being transparent, and being able to adjust to different emergency situations. These qualities greatly enhance its usefulness in a wide range of emergency circumstances.

9. Recommendations

In order to expand the user experiences of the Rescue 1122 mobile app and improve its features and functioning, it is essential to include the following suggestions in future updates:

- By including an emergency SMS function, customers are able to transmit distress signals using text messages, therefore creating a prompt and direct link with emergency services or assigned contacts. This solution tackles the difficulties faced during situations when communication is limited and offers a useful means of communication, particularly for those with impairments.
- The use of a video call function enables rescue teams to visually evaluate emergency scenarios, therefore enhancing their comprehension of the occurrence and its possible risks. The utilization of real-time visual communication significantly improves the effectiveness of emergency response endeavors.
- Allowing users to add several contact numbers guarantees that, during critical circumstances, messages and alarms may be delivered to all persons who are capable of offering aid. This functionality improves the app's efficiency in facilitating emergency coordination within a user's network.
- It is advisable to prioritize the incorporation of emergency apps as built-in capabilities on smart phones instead of making them available for download. This strategy guarantees broader accessibility and availability, since users will not be required to download the app individually.

These proposals together enhance the Rescue 1122 mobile app, making it more adaptable, user-friendly, and capable of handling various emergency situations. The suggested characteristics not only improve the app's operation but also address a wide range of user requirements and emergency communication difficulties.

10. Limitations

Visual analysis, while valuable, has inherent limitations in capturing all aspects of the user experience:

- Some user attitudes or preferences may not be fully captured through visual elements alone.
- Require additional research methods, such as user interviews or surveys, to provide a more comprehensive understanding of user preferences and experiences.
- The study acknowledges the need for a multi-method approach to triangulate findings and offer a more holistic view of the user experience.

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Codebook for Visual Analysis

Feature	Code	Feature Description	Contextual Analysis
User Registration	UR1	Registration of Two SIM Numbers	Enabling the registration of two SIM numbers with customizable settings improves the functionality of the emergency mobile app. This feature caters to users who have multiple SIM cards, ensuring that accurate and complete contact information is available for efficient emergency communication. Consequently, it aligns with the varied communication preferences of users.
	UR2	Username and Profile Picture are required during Registration	Usernames and profile images throughout the registration process improve user identification and engagement, promoting a feeling of ownership and connection, and favorably impacting the entire user experience by providing significant customization.

Emergency Icons	EI1	Medical Emergency Icon	The medical emergency icon improves user experience by enabling quick and focused access to pertinent resources in times of medical crises, demonstrating an intuitive and effective design.
	EI2	Road Accident Emergency Icon	The road accident emergency icons allows users to promptly access and navigate to services linked to road accidents, highlighting the app's timeliness and underscoring its efficacy in handling various emergency situations, especially those pertaining to road traffic crises.
	EI3	Fire Emergency Icon	Fire emergency icon in the app enables users to quickly access fire-related services, boosting its comprehensiveness by explicitly addressing the requirements of users encountering fire crises.
	EI4	Other Emergency Icon	The app's incorporation of a wide range of emergencies, such as those representing criminal calls, drowning incidents, building collapses, and other assorted crises, showcases its capacity to adjust and provide users with a flexible and pertinent tool for accessing particular emergency services that are customized to meet changing requirements.
Emergency Call Process	EC1	Verifying the Emergency Location on GPS before to Making a Call	The inclusion of GPS verification prior to initiating an emergency call, the app's efficacy is improved as it adheres to established standards, guarantees precise location data, reduces response time, and promotes transparency and accountability for prompt and accurate aid in critical circumstances.
	EC2	Helpline Number 1122 is automatically provided for Dialing	The automatic display of the Rescue 1122 helpline number in the Rescue 1122 mobile app's interface is a user-friendly and transparent feature. It simplifies the process of making emergency calls, reduces mental effort, boosts user confidence, and improves overall accessibility and usability in emergency situations.

Vehicle Tracking	VT1	Real-Time Tracking of the Emergency Vehicle's Location	Real-time monitoring of the position of emergency vehicles improves awareness of the issue, facilitates efficient coordination, and helps to a more prompt and transparent emergency communication system by providing users with current information on the vehicle's movement and progress.
	VT2	Presentation of the Emergency Vehicle Number	The inclusion of the emergency vehicle number in the app boosts user assurance and streamlines communication between users and responders in emergency situations, hence promoting communication transparency and efficient information exchange.
Response Time Tracking	RT1	Real-time Display of the Precise Response Time	The inclusion of a visual representation of the precise response time significantly enhances user trust and confidence in the emergency mobile application. This feature offers real-time information, so reinforcing users' belief in the system's promptness and its capacity to effectively address emergency situations.
	RT2	Display of total emergency procedure time	The inclusion of the whole emergency procedure duration on the mobile app improves transparency, giving consumers a thorough understanding of the full emergency response process and encouraging responsibility within the emergency services. This, in turn, cultivates an educated and self-assured user community.
Sidebar Functionality	SF1	Emergency History Access	The emergency history feature offers the users a valuable tool that allows for a thorough examination of previous incidents. It provides information on emergency call numbers, the type of emergencies, the vehicles involved, response times, elapsed times, user ratings, and times tamped records for chronological reference.
	SF2	Video-based Literature on Health Safety and Environment	The app's commitment to health safety and environment education is evident through the addition educational videos. These videos cover various topics such as first aid, BLS, safety measures, and lifestyle promotion. This aligns with the app's purpose as a comprehensive and easily accessible educational resource, aimed at improving users' emergency response knowledge and overall well-being.
	SF3	Explicit Demonstration of User Feedback Mechanism	An easily understandable and accessible feedback system that provides clear choices for users to provide suggestions or file complaints, promoting active user participation and empowerment for continuous app development.

SF4	Documentation on the Application's Functionality	Improves user's knowledge, comprehension, and skill in efficiently using its features during emergency scenarios.