SEBLAK APPLICATION "NEWS ABOUT THE ACCIDENT" ANDROID BASED

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Abstract— The SEBLAK application "Regarding Accident News" based on android is present to provide news and information validly to the families of victims, with the use of features in the application that contain clear information. The stage of making the application starts from the preparation of the data needed and used tools Unified Modeling Language (UML) in designing diagrams such as ERD, Usecase, Activity Diagram up to Sequence Diagrams, then designing or designing systems and applications, implementation and testing applications. Hopefully with this application the victim's family will get valid information about the accident that befell the victim. Of course this application is very helpful in finding information on families of victims who have had accidents in South Jakarta in particular.

Key :Android, UML, ERD, Use case, Activity Diagram, Sequence Diagram, Accident news

Intisari— Tingkat kecelakaan di Jakarta Selatan menurut Data Laporan Kecelakaan Lalu Lintas dari Polri Daerah Metro Jaya Direktorat Lalu Lintas Sat Lantas Wilayah Jakarta Selatan pada 3 tahun terakhir sangat tinggi, jumlah korbannya mencapai 1406 orang. Aplikasi SEBLAK "Seputar Berita Kecelakaan" berbasis android hadir untuk memberikan berita dan informasi secara valid kepada keluarga korban , dengan penggunaan fitur fitur yang ada dalam aplikasi berisi informasi yang jelas. Tahap pembuatan aplikasi menggunakan metode pengembangan sistem *waterfall* dengan menggunakan *tools Unified Modeling Languange* (UML) dalam mendesain diagram seperti ERD, Usecase, Activity Diagram dan Diagram Sequence Diagram. Diharapkan dengan aplikasi ini keluarga korban akan mendapatkan informasi yang valid mengenai kecelakaan yang menimpa korban. Tentunya aplikasi ini sangat membantu mencari informasi keluarga korban yang mengalami kecelakaan di Jakarta Selatan khususnya.

Kata Kunci: Android, UML, ERD, Use case, Activity Diagram, Sequence Diagram, Berita Kecelakaan

INTRODUCTION

According to the Traffic Corps Report. Indonesian National Police (KORLANTAS POLRI), in 2016 the number of accidents reached 105,375 incidents with a total of three victims every hour (Ntmcpolri.info, 2017).

The results of an interview with the Metro Jaya Regional Police of the Traffic Directorate of the South Jakarta Sat Traffic Unit Mr. Triyatno (Triyatno, 2018) explained the level of accidents in South Jakarta according to the Traffic Accident Report Data in the last three years was very high, the number of victims reached 1406 people. Most cases occurred in 2016 with 486 victims. In 2017 the number of victims decreased but is still close to the number of victims in 2016 which was 465 people. While cases this year from January to September 2018 the number of victims has reached 455 people.

The number of accidents that occur today at the scene sometimes by people enshrined in social media, the story of the victims of this accident in a news portal tirto.id (Putri, 2017) becomes a phenomenon in itself. The victim's family received information for more than two hours to confirm, Sociologist Dr. Sigit Rochadi said that the phenomenon had an impact on the community who published the accident as evidence of their existence in providing information for the victims' families. From this, the confusion of information circulates within the

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community and does not provide the validity of data for the victims' families.

In research (Febrian, Dengen, & Cahyono, 2019) discussing the dissemination of information to the public required the use of significant technological developments such as smartphones. Smartphones as a media technology that is growing and popular in every level of society are considered to be the right means to become information media, reported by Emarketer data, in Indonesia the number of Smartphone users reached 86.6 million in 2017 and is predicted to increase in the following years.

In research (Tandiono et al., 2019) making an Android-based application which is a subset of software for mobile phones which includes the operating system, middleware and using the Java programming language.

The purpose of this study is to design an Android-based application with the waterfall method of accident news information in the South Jakarta area, namely BEFORE "Around the Accident News" this application helps victims' families get information about accidents with the family confirmation feature on their smartphones.
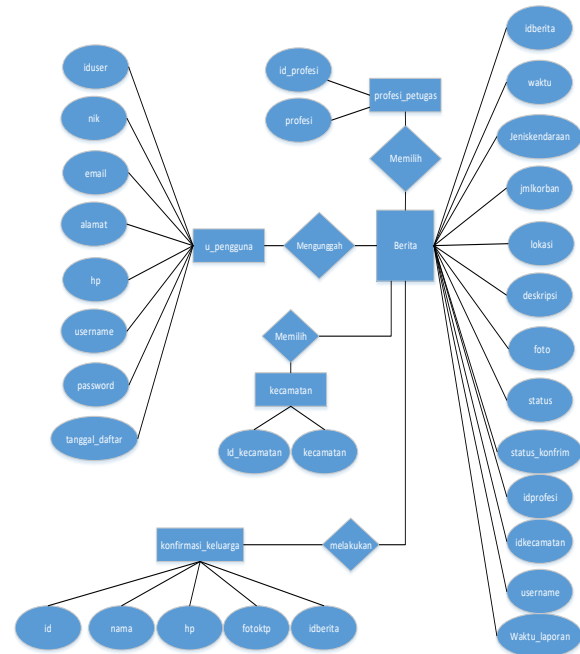
MATERIALS AND METHODS

In the software development process using the waterfall model includes system analysts, system design, program code writing, program trials, and system maintenance.

The waterfall model consists of analysis, design, coding, testing, and implementation. The analysis is the stage of collecting research data in application design. Design is the design phase of software before writing program code, in this case, includes the making of ERD (Entity Relationship Diagram), and its constituent tables (Pure Syamsudin, Agussalim & Lestari, Uning & Susanti, 2018). Coding is the stage of writing program code in a particular programming language in this case covering all supporters of the software used and the hardware. Testing is the stage of testing the functionality of the application.

In the writing phase of the program code the researcher carries out documentation through the Unified Modeling Language which is a visual modeling language (Ernawati, Johar, & Setiawan, 2019) which has a general-purpose nature in specifying, building on the documents of a software.

The stages of designing an application design begin with the creation of an Entity Relationship Diagram (ERD), and the design of a table structure. ERD is used to describe databases in the field of information technology and business information systems (Wijaya, Palit, & Purba, 2018)

ERD in the application based on Android-based "Accident News" can be seen in Figure 1.

Sources: (Nurul Fiqri, Ahmad dan Zen, Nabila dan Azmmi,Riri Anisah dan Anggraeni, 2019)
Figure 1 Entity Relationship Diagram (ERD)

In the ERD above, it explains about how the user uploads the news in the filling, the user chooses the profession of the officer and the area where the accident occurred and after the news is published, it waits for confirmation from the family with the fields listed as shown above. Writing program code in designing the application for SEBLAK (Regarding Accident News) uses the PhoneGap framework with the Android platform (Kartono & Mulwinda, 2017). The hardware and software requirements are in the following table:

Table 1 Table of Hardware Requirements

Hardware type	Minimum Hardware Specifications	Specifications of the device used
RAM	RAM 2 Giga	RAM 4 Giga
HARDDISK	500 Giga	1 Tera
PROSESSOR	Minimum Speed of 1.95 GHz	Intel Core I3

Sources: (Nurul Fiqri, Ahmad dan Zen, Nabila dan Azmmi,Riri Anisah dan Anggraeni, 2019)

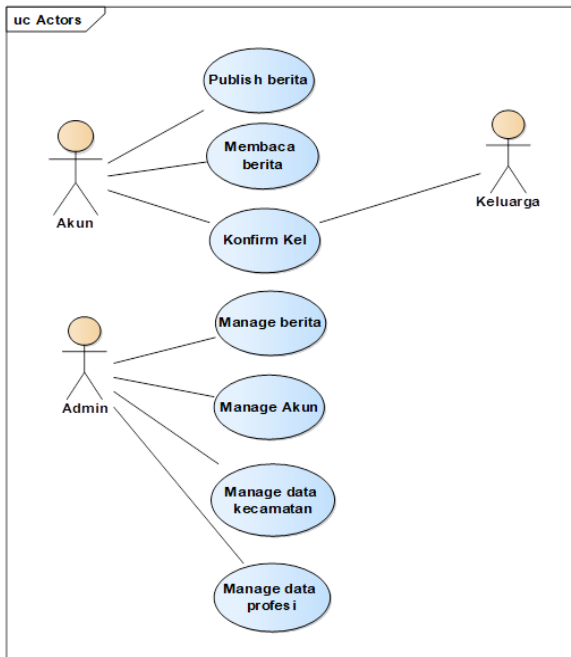Table 2 Table Software Requirements

Software type	Minimum Software Specifications	Specifications of the device used
Operating system	Android Studio, Windows	Android Studio 3.4.1, Windows 10
Application Software	Framework (Code Igniter), PhpMySQL, Dreamweaver, EA (Enterprise	Framework (Code Igniter),

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Architecture)		PhpMySQL, Dreamweaver 8, EA version 9 (Enterprise Architecture)
Documentation	Microsoft Word, Microsoft Excel, Microsoft PowerPoint	Microsoft Word 2016 , Microsoft Excel 2016, Prezi
Editing	Adobe Dreamweaver	Adobe CS 6

Sources: (Nurul Fiqri, Ahmad dan Zen, Nabila dan Azmmi,Riri Anisah dan Anggraeni, 2019)

RESULTS AND DISCUSSION

In his book (Pressman, 2011) Unified Modeling Language (UML) is the standard language for writing blueprint software. UML can be used to visualize, determine, construct, and document artifacts from an intensive software system.

Sources: (Nurul Fiqri, Ahmad dan Zen, Nabila dan Azmmi,Riri Anisah dan Anggraeni, 2019)
Figure 2 Use case Application

In the above use case explains the work functions of the SEBLAK application is divided into three, namely the account as a user in publishing news, reading news until later can confirm the news if the accident becomes part of his family, then the admin can perform functions in managing news, managing users, managing district data to manage professional data.
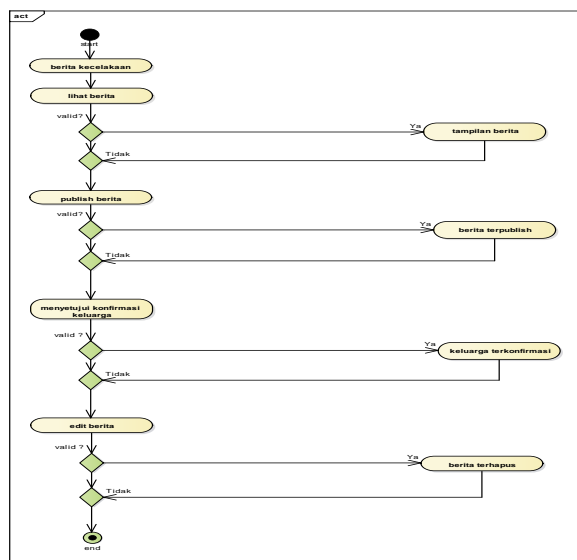
For admin activity is as follows:

Sources: (Nurul Fiqri, Ahmad dan Zen, Nabila dan Azmmi,Riri Anisah dan Anggraeni, 2019)
Figure 3 Admin login diagram Activity

The picture above explains the sequence of activities carried out by the admin when logging in the SEBLAK application, starting from entering the username, then enter the password, validating the login, by seeing whether the data is stored in the database or not until the system validates it and then the admin menu opens.

Sources: (Nurul Fiqri, Ahmad dan Zen, Nabila dan Azmmi,Riri Anisah dan Anggraeni, 2019)
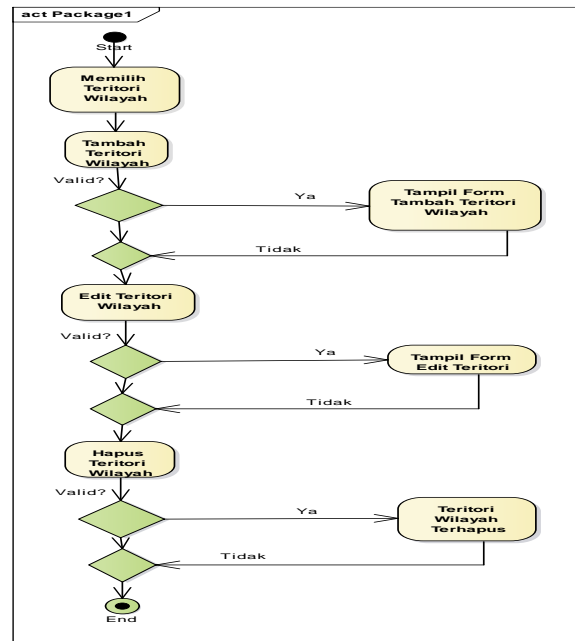Figure 4 Activity diagram admin managing news

The picture above explains the sequence of activities carried out by the admin in managing accident news by looking at the news display,

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viewing the publishing news display, the display of confirmation of family members, the news editing view, and the deleted news display.

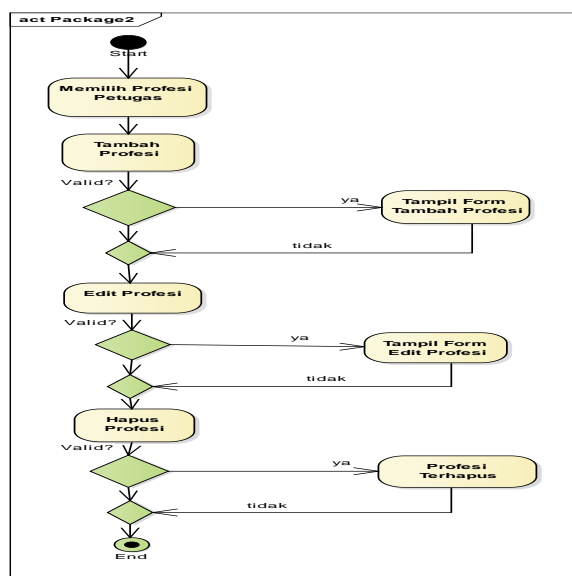
Sources: (Nurul Fiqri, Ahmad dan Zen, Nabila dan Azmmi,Riri Anisah dan Anggraeni, 2019)
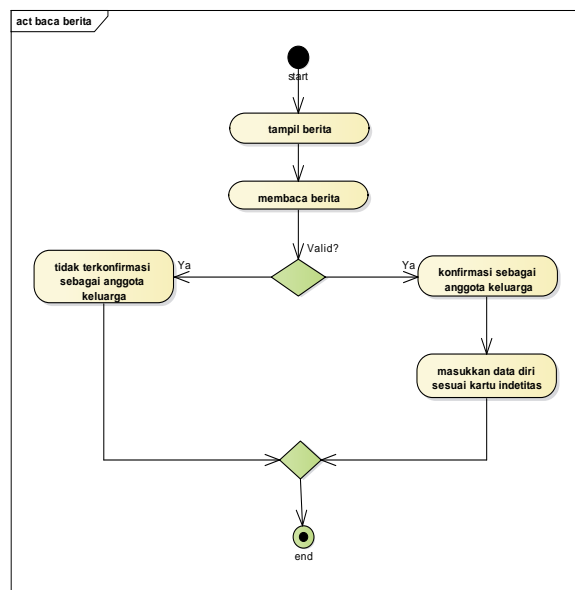Figure 5 Admin activity diagram managing accounts

The picture above explains the sequence of activities carried out by the admin in managing user accounts by searching for user data and deleting user data

Sources: (Fiqri,Zen,Azmmi,Anggraeni,2019)
Figure 6 Admin activity diagram managing the officer profession

The picture above explains the sequence of activities carried out by the admin in managing the

professional profession by adding professional officer data, editing official profession data and deleting official profession data.

Sources: (Nurul Fiqri, Ahmad dan Zen, Nabila dan Azmmi,Riri Anisah dan Anggraeni, 2019)
Figure 7 Diagram of administrative activities managing territorial territories

The picture above explains the sequence of activities carried out by the admin in managing territorial areas by adding territorial area data, installing territorial area data and installing territorial area data.
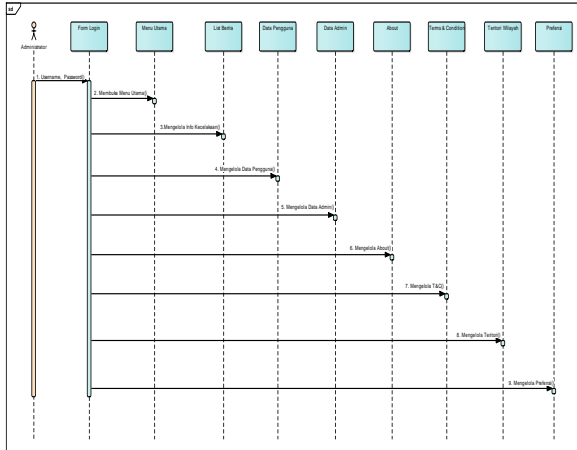

Sources: (Nurul Fiqri, Ahmad dan Zen, Nabila dan Azmmi,Riri Anisah dan Anggraeni, 2019)
Figure 8 Activity diagram read user news

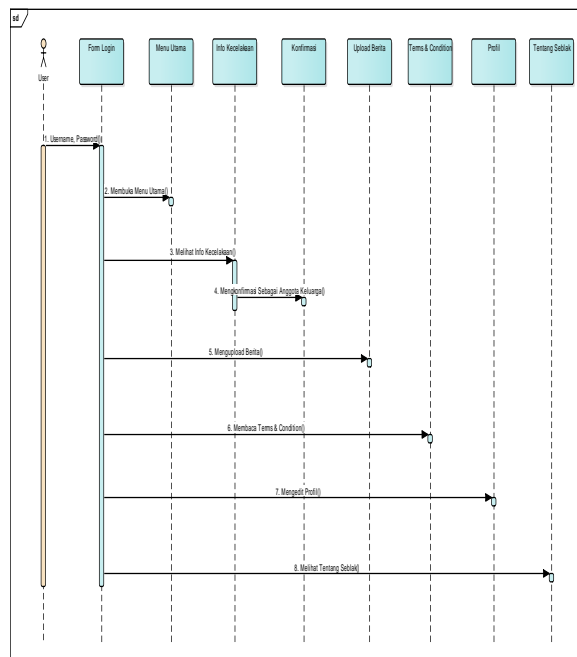Pictured above explains how users read news from the application menu display Seblak "Regarding Accident News" and given a choice whether or not the victim is a family and then with the confirmation of the family in the input data themselves correspond confirm identity. Here is a look Sequence diagrams Seblak application "News Regarding Accident" based on android:
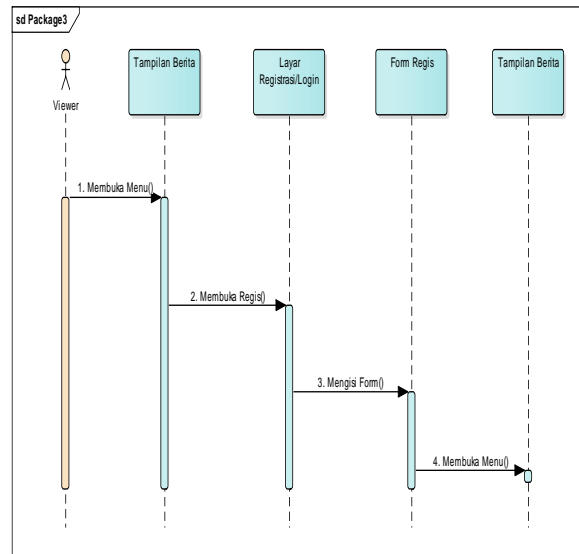

Sources: (Nurul Fiqri, Ahmad dan Zen, Nabila dan Azmmi,Riri Anisah dan Anggraeni, 2019)
Figure 9 Admin Sequence diagram

The picture above shows the dynamic communication between objects during the execution of the command, this explains the object processed by the admin in executing data management.
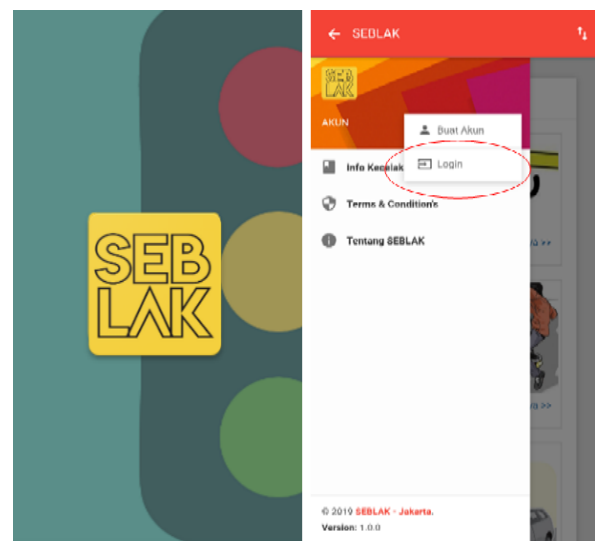

Sources: (Nurul Fiqri, Ahmad dan Zen, Nabila dan Azmmi,Riri Anisah dan Anggraeni, 2019)
Figure 10 User Sequence diagram

The picture above explains how the user in executing the profile, uploading news to confirm if the victim is his family
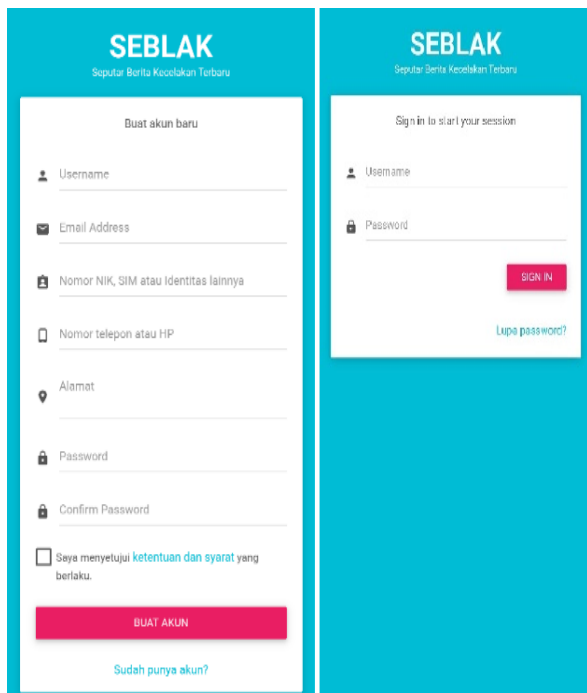

Sources: (Nurul Fiqri, Ahmad dan Zen, Nabila dan Azmmi,Riri Anisah dan Anggraeni, 2019)
Figure 11 Sequence diagram viewer (family confirmation)

The picture above explains how the viewer executes the feature if the accident victim is his family by registering as is done by the user. The next stage of implementation in the Android-based SEBLAK Application "Regarding the Accident News" is designed with the use of the minimum Android operating system version "Lolipop" up to the latest "Pie" at this time, the initial appearance of the SEBLAK application is as shown below:
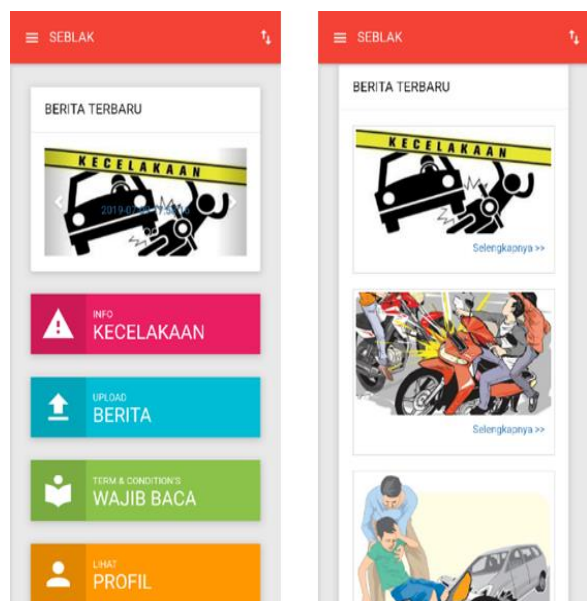

Sources: (Nurul Fiqri, Ahmad dan Zen, Nabila dan Azmmi,Riri Anisah dan Anggraeni, 2019)
Figure 12 Initial appearance of the SEBLAK logo

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After installing the Play Store, the Seblak application, if you don't have an account, you can register an account first
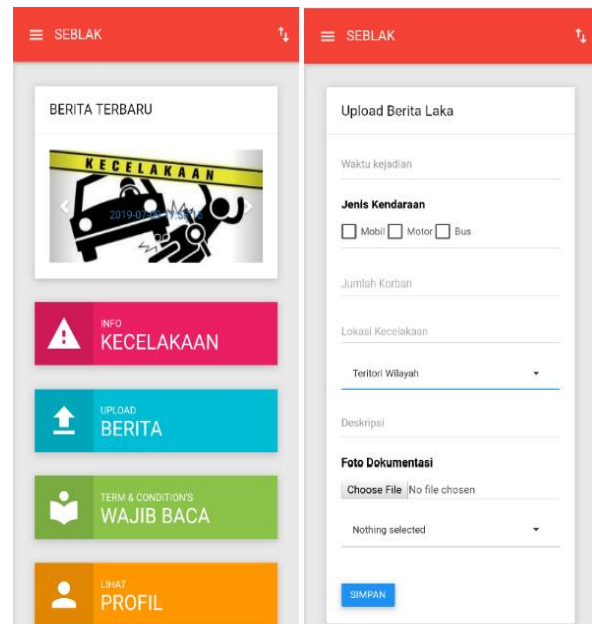

Sources: (Nurul Fiqri, Ahmad dan Zen, Nabila dan Azmmi,Riri Anisah dan Anggraeni, 2019)
Figure 13 Display of accident info

Users can fill out the account registration form as shown above by filling in various data including personal identity.
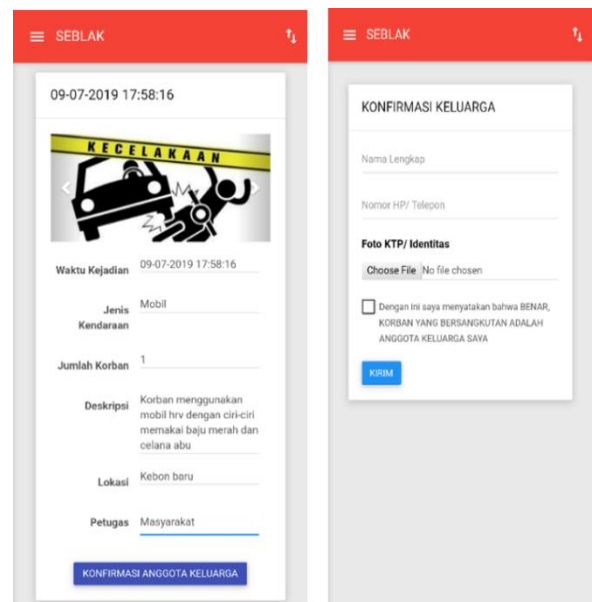

Sources: (Nurul Fiqri, Ahmad dan Zen, Nabila dan Azmmi,Riri Anisah dan Anggraeni, 2019)
Figure 14 Display Accident Data

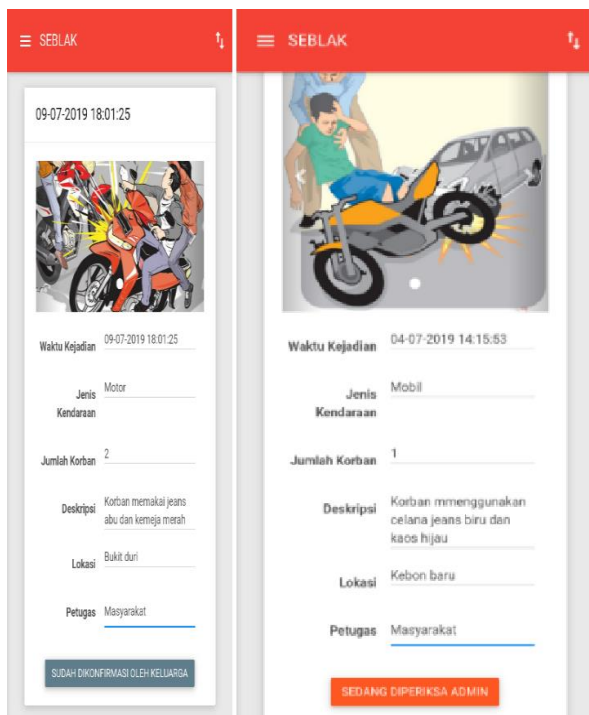In the picture above, both the viewer and user can see the crash information in the application.

Sources: (Nurul Fiqri, Ahmad dan Zen, Nabila dan Azmmi,Riri Anisah dan Anggraeni, 2019)
Figure 15 Display of Accident News

User can also upload accident news on the news upload menu, and fill in various conditions of the victim in the fields provided.

Sources: (Nurul Fiqri, Ahmad dan Zen, Nabila dan Azmmi,Riri Anisah dan Anggraeni, 2019)
Figure 16 Display Confirms Family

In the picture above, the user can confirm the news, if the victim in the news is the user's family or relative

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Sources: (Nurul Fiqri, Ahmad dan Zen, Nabila dan Azmmi,Riri Anisah dan Anggraeni, 2019)
Figure 17 News view confirmed

If the news has been confirmed by the family, the admin will check the user's data and validate the news as shown above.

Sources: (Nurul Fiqri, Ahmad dan Zen, Nabila dan Azmmi,Riri Anisah dan Anggraeni, 2019)
Figure 18 Displays of Term and Conditions

Users are advised to read the Terms & Conditions in the application so that users can find out the terms and conditions for using the application

CONCLUSION

Through this android-based SEBLAK application, it can help social institutions in handling and notifying valid information about accidents in the South Jakarta area to victims' families in a valid and clear manner through the victim's family confirmation feature. This application in the future can also embrace medical parties to be a bridge of information between victims and families. In addition, this application can also minimize hoax news that often occurs in Indonesia regarding accidents on existing social media.

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