

DWIT COLLEGE

DEERWALK INSTITUTE OF TECHNOLOGY



PHONE DIARY

An Android Application to Find Emergency Contacts

A MICRO PROJECT REPORT

Submitted to

Department of Computer Science and Information Technology

DWIT College

Submitted by

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CERTIFICATION

This Project entitled Phone Diary by RAJU SHRESTHA, under the supervision of Miss. Amrita Rai, Deerwalk Services Pvt. Ltd. is hereby submitted for the partial fulfillment of the requirements for the Fifth Semester Micro-Project.

Approved By

Signed

(Supervisor)
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Regards,

Raju Shrestha

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ABSTRACT

Phone Diary is concerned with providing contact numbers of different places and organizations like hospital, police, ambulance, emergency etc. which are very useful to people. People face different problem, when someone is sick and need ambulance or someone want to call police they do not have their contact number. To find that they have to search their contact numbers either on internet or see on newspaper or call to some service provider which is not cost and time effective.

This application contains the contact numbers which are very useful. The numbers are available in offline mode so that one should not have to go online for searching important numbers.

This application is entirely based on an android platform. Android studio will be used for creating the application in which database will be updated regularly. The users will be able to download the application from the google play store.

This application is targeted to everyone who is searching for contact numbers of different places and organization.

Keywords: Phone Diary, Android Application, Emergency Contacts

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LIST OF ABBREVIATIONS

DFD	Data Flow Diagram
ER	Entity Relationship

CHAPTER 1: INTRODUCTION

1.1 Background

Phone Diary is mobile based application that provides useful contact numbers of different place like hospitals, ambulance, blood banks, police office, fire extinguisher, electricity authority center, tourism board and so on.

All the contacts are stored during the development of application so that the contacts are available in offline mode and the data are updated on later version.

1.2 Problem Statement

People face different problem, the problem can be related to health, security, social service or anything. To solve their problem and get service at cost and time efficient way they have to call as far as possible. People do not know the contact numbers of different places like hospital, police, ambulance, blood banks etc. to call. To find this they have to search on internet or see on some newspapers or call to some service provider (Telecom). Finding number takes time and cost, which is not effective to the all users.

This application contains contact numbers including government as well as private organization which are very useful so, that one should not have to search on different places. This application also saves time and cost to search.

1.3 Objective

The objective of this application is as follows:

- a.) To provide a platform where all the important contact numbers are stored offline in an app.
- b.) To make the cost and time effective.

1.4 Scope and Limitation

1.4.1 Scope

This application provides useful contact numbers in cost and time effective way. This also reduces the internet or newspaper search problem to find the contact numbers to users.

1.4.2 Limitation

The application is available in offline mode so that one should update to latest version of application to get recent contact numbers and can only see it

1.5 Report Organization

This project report is organized as shown in block diagram in Figure 1:

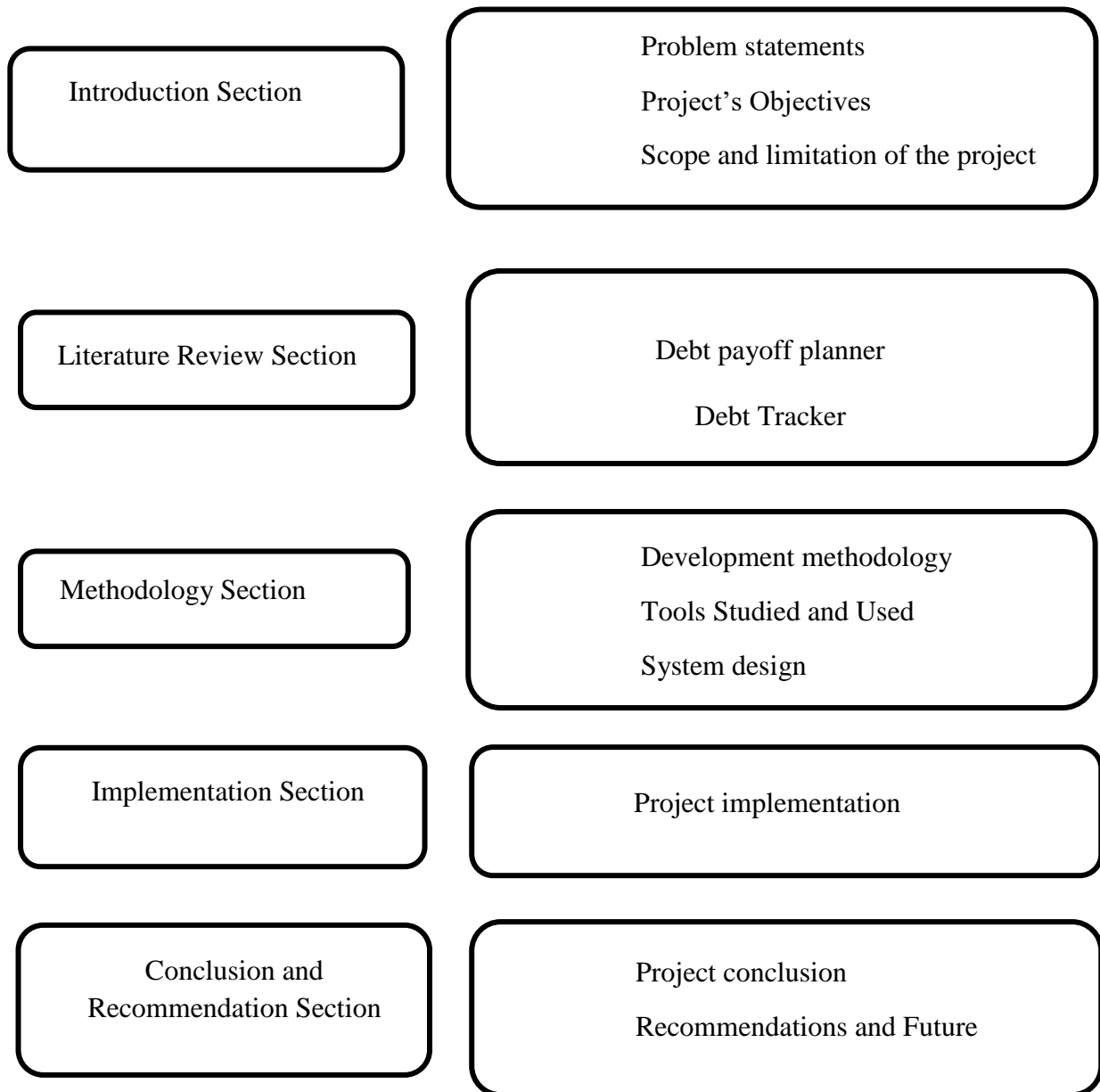


Figure 1 Project Block Diagram

CHAPTER 2: LITERATURE REVIEW

Background

Most of the people do not know where to find the contact numbers of different places like hospital, emergency, police, ambulance and so on. The only way to find these contact is by searching on internet or newspaper or call to some service provider. However, it takes time to search and is also not cost effective.

Some of the methods used to find the contact numbers are:

Internet search

One of the methods used to find the contact numbers by searching on internet. This method will give the contact number but it takes time and cost to search.

Newspaper search

Another method used to find the contact numbers through newspaper. However, it does not contain all the contact numbers and this is also not cost effective.

Call to service provider (Telecom)

This is also another method generally used to find the contact numbers by calling telecom service. However, this method is also not time effective.

2.1 Requirement Analysis

The requirement analysis for this project is broken down into functional and non-functional requirements and each are discussed below.

2.1.1 Functional requirements

The functional requirements of this project are:

- a.) Design an API to store contact number in local database and display to user.
- b.) Provide an interface to do above mentioned facilities.

2.1.2 Non-functional requirements

The non-functional requirements of this project are:

- a) **Security:** As anyone can use this application, no security feature is required in the application itself. However security is need in the web server to prevent unauthorized changes in the database.
- b) **Reliability:** Application developers can update the recent contact numbers to later version but users can only see it.

c) **Maintainability:** No special maintenance is required but updated is required for the new version to provide the recent contact numbers.

d) **Scalability:** As it is offline application, one can use at any time.

e) **Usability:** As this application uses a local database, it can be used without internet connection.

2.1.3 Project features

The current features of this mobile application are fetching data from the local database and display to users. The application uses an API to store data.

2.2 Feasibility Analysis

After gathering of the required resource, whether the completion of the project with the gathered resource is feasible or not is checked using the following feasibility analysis.

2.2.1 Technical feasibility

This project is technically feasible as it uses technologies that are presently used by the clients who are going to use this application. As it is an android application Android Studio is used as the IDE for the project. The only restriction is the requirement of the android version to be greater than 5.0 (Lollipop).

2.2.2 Economic feasibility

The project is economically feasible as the cost only associated to it is the cost of hosting the application.

2.2.3 Operational feasibility

The project is operationally feasible as any user having basic knowledge of smartphones can use it. The optional requirement is an internet connection to update and download the application on device.

CHAPTER 3: METHODOLOGY

Different methods used during the implementation of this project are discussed below.

3.1 Development Methodology

The water fall development model was followed for this project because it is simple, easy to understand and use it. Since, it is an individual project, it becomes easy to manage due to the rigidity of the model and each phase has specific deliverables and review process. It was used because the model phases are processed and completed one at a time and these phases do not overlap. Also the requirements are well understood at the beginning of this small project; so, the waterfall model is helpful in this.

3.2 Tools Studied and Used

An android application can be developed using various tools like android studio, phone gap and hybrid technology for native application development. For this project, Android studio is used because it uses quick growing gradle integration system, drag-and-drop GUI and code completion technique. MySQL database is used at the back end to keep the contact data information.

3.3 System Design

The system is described into two models. Data modeling and process modeling. Both models are described and discussed below.

3.4.1 Data modelling

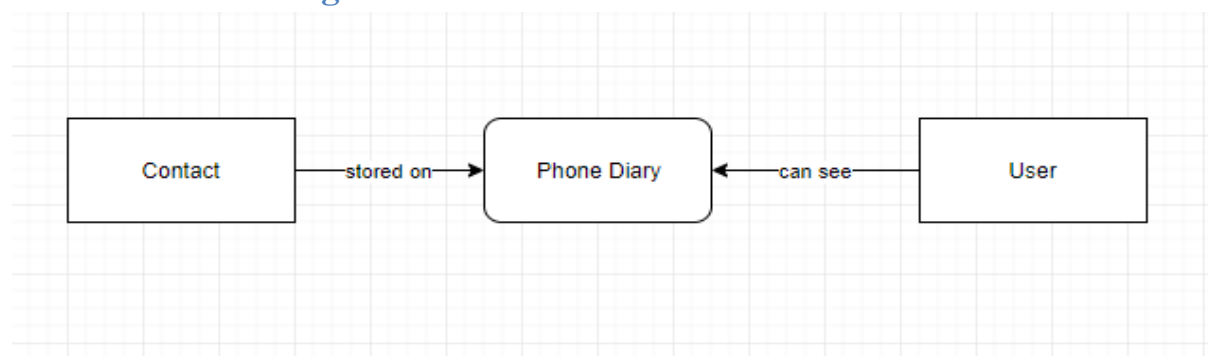


Figure 2 ER Diagram

The data modelling is shown using the ER diagram in Figure 2. There are two main entities user and Useful Contact. Contact has attributes like contact name and contact number and is in relationship with Phone Diary with respect to user is shown.

3.4.2 Process modelling

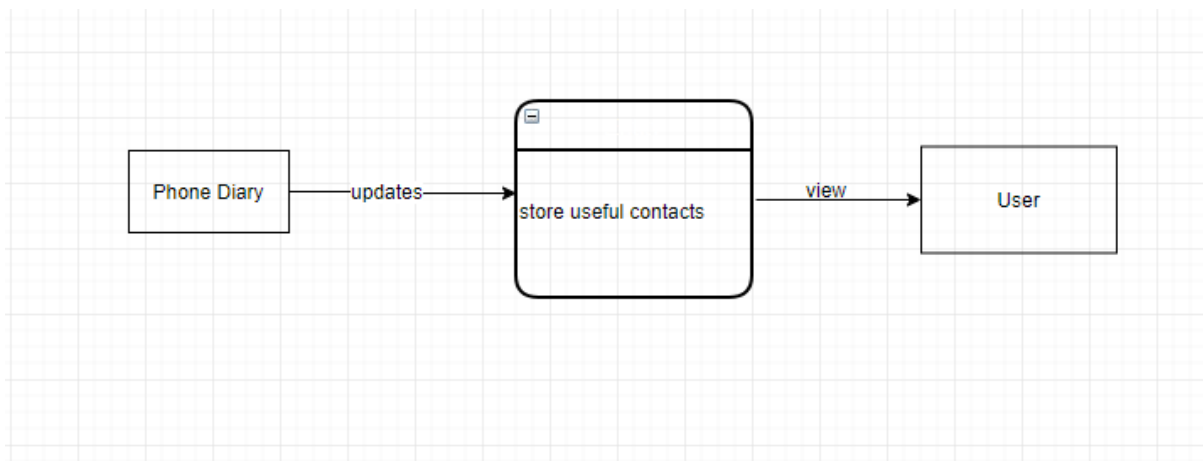


Figure 3 DFD

The process modeling is shown with the help of DFD as shown in figure 3. As shown in the figure user can only view the stored contact fetched from the database and an update will be reflected in the database server.

CHAPTER 4: IMPLEMENTATION

Phone Diary is an android application that will provide useful contact numbers. The contact data are stored with in the application so that one can find it through offline mode. This application will be useful for everyone who is searching for these contact numbers. One can use it after the successful installation of the application on their smart phones. And to get recent contact numbers one should update to latest version.

CHAPTER 5: CONCLUSION, RECOMMENDATIONS AND FUTURE ENHANCEMENTS

5.1 Conclusion

This project aims to provide the recent contact numbers different places including government as well as private organization which are generally used.

This project is targeted to all who are in search of contact numbers of different organization to solve their problem in time and cost effective way using recent technology. So, this application can be accepted to be fruitful for the users that can save cost and time to search the useful contact numbers. With this said, it can be concluded that the chosen project will be fruitful from the implementation point of view.

5.2 Recommendations

The size of the application increases as the data increases. So, to limit the application size different compression mechanisms are used. Further it is an offline application; the application needs to be updated regularly from the play store.

5.3 Future Enhancements

For future enhancements to this project, we can include more contact data of other government as well as private organization outside valley which are very useful and solve the problem in easy and cost effective way. So, one should not have to worry for finding contact.

REFERENCES

"Package Index | Android Developers", Developer.android.com, 2018. [Online].

Available: <https://developer.android.com/reference/packages.html>.

"Android software development", En.wikipedia.org, 2018. [Online].

Available: https://en.wikipedia.org/wiki/Android_software_development.

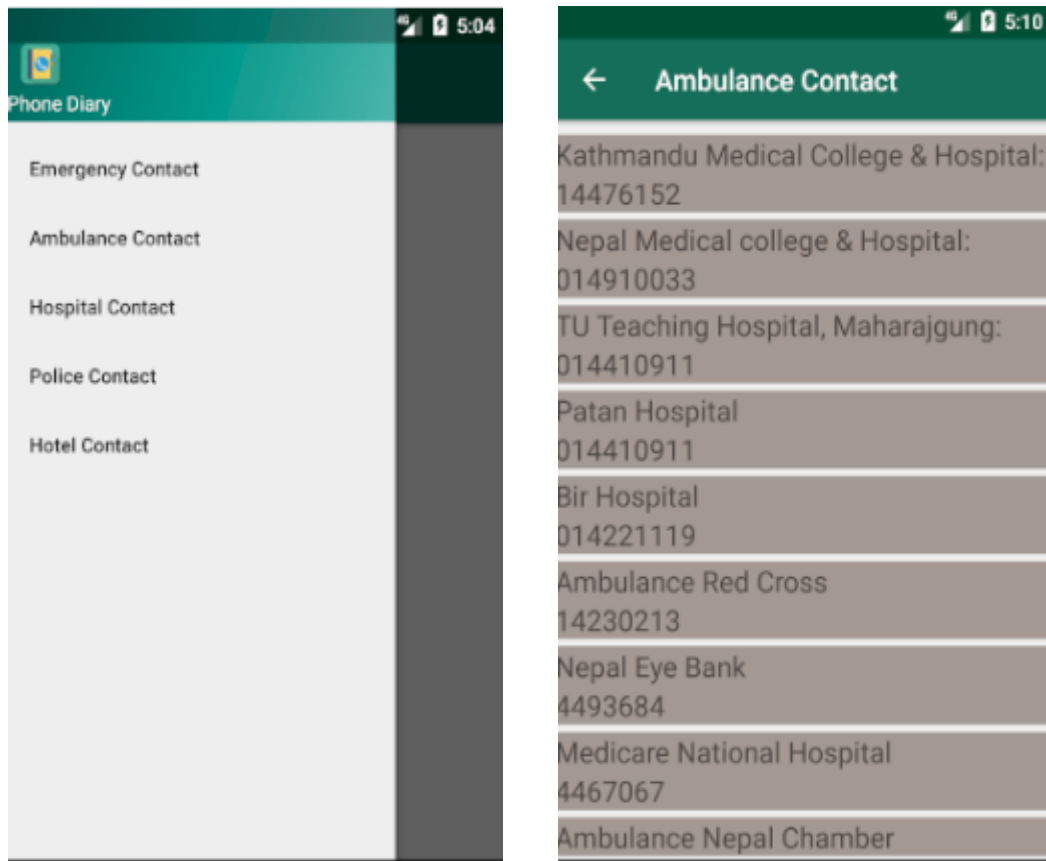
"PHP: Objects and references - Manual", Php.net, 2018. [Online].

Available: <http://php.net/manual/en/language.oop5.references.php>.

"MySQL:: MySQL 5.5 Reference Manual :: B.5.2.7 Too many connections",
Dev.mysql.com, 2018. [Online].

Available: <https://dev.mysql.com/doc/refman/5.5/en/too-many-connections.html>

APPENDIX



Phone Diary