

**FACULTY:** FACULTY OF COMPUTING AND INFORMATION MANAGEMENT

**COURSE**: BARCHELOR OF SCIENCE IN SOFTWARE DEVELOPMENT

**SUBJECT** :PROJECT PROPOSAL

**TITTLE: RECOVERY OF DEAD SIMCARDS**

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**REGNO: 18/05139**

**SUPERVISOR:** MR EZEKIEL KURIA

**DATE:**30/09/2020

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# Dedication

I would like to dedicate to my country, Kenya and for the genuine effort and concern that is there in regards towards reduction of maternal deaths and the wellbeing of the citizens and the people of Kenya.

I would also like to dedicate it to my family who have been with me through this gruesome time of the research project. For their unending love, concern and support.

**NAME:** IAN MWENESI

**REG/NO:** 18/05139

**SIGNATURE:**

**DATE**: \_\_**19thrd SEPTEMBER 2020**\_

This project has been submitted for examination purposes for my approval to the project supervisor.

**SUPERVISOR: DR. EZEKIEL MWANGI**

**SIGNATURE\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ DATE\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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**DECLARATION**

To： Project Supervisor: - Faculty of Computing and Information management (FOCIM)- KCA University

I hereby declare that：

□ This is my original work and has never been presented in any university for the purpose of degree.

□ I have done a thorough research.

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# **Acknowledgement**

I acknowledge Dr. Ezekiel Mwangi for his immense contribution towards the making of the project to be what it is today. I appreciate Prof.Ogao whose lectures on research methodology proved invaluable during the course of working on the research project.

My colleagues in the degree program whose advice was priceless and the encouragement helped us get through the hard times together. Thankyou you all.

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# **1.3 LIST OF ACRONYMS AND ABBREVIATIONS**

BDI- Biometric data information

SMS – Short Message Service

NSP- Network service provider

SRS- Software Requirements Specification.

ID- Identity card

PLC -Public Limited Company

UPS- Uninterrupted power supply

Terms used

Deceased- a dead person. Some on who already died.

Burial permit- a document issued by the local government authority giving permission for the burial and funeral planning for the deceased to be conducted in a certain area.

Android- Developed by Google, a popular operating system for smart phones.

GUI- Graphical User Interface. An interface that receives and reacts to the user input with a graphical display

Local government- is a form of public administration which, in a majority of contexts, exists as the lowest tier of administration within a given state.

Chief- a leader or ruler of a people

Safaricom PLC -is a listed Kenyan mobile network operator

Branch- a mobile banking app supported by android that allows one to borrow money from online at an interest without having to go to the bank.

Tala- a mobile banking app supported by android that allows one to borrow money from online at an interest without having to go to the bank.

E wallet- money in soft copy. Not tangible

Lending-related to borrowing money

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# **Abstract**

This project was done with the aim of modernizing the service acquiring a burial permit and a death certificate for a deceased person. The existing process of is still manual where the legal government administrator (chief) usually fills for you a form with a pen indicating that you are now legally bounded by the law of Kenya to conduct your last respect to the fallen person. The existing system has resulted in errors while disbursing and generating a death certificate. Also, in some cases, the miss out on the services that the initiative offers because of the breakdown of communication. The initiative does not have an appointment booking feature for the mobile clinics. This has led to a lot of inefficiencies when it comes to services that require specialized medical care and also some drugs for certain conditions were not procured beforehand.

A thorough analysis was done to come up with all the user requirements and to help the developer get a clear picture of what he was to do. The familiarization was done through unstructured questionnaires, observation and interviews.

The user requirements were modelled into a system design that guided the system developer and programmer on how to implement the new system. Thereafter the blueprint of the system was transformed to a working application. The application was developed using android studio. The database part of the system was achieved through MySQL.

The testing phase was done by both users and the developer of the application. It was done to ensure that the application meets the user requirements and it works as it was intended to. Upon satisfaction and approval by the user, the project entered the implementation phase. Direct change over method was highly favored since there no other system in place. The application implementation was success.

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# **CHAPTER ONE: INTRODUCTION**

## **1.0 Introduction**

The introduction of mobile telecommunication in Africa and the world has greatly impacted our society in a positive way.

The emergence of Network Service Providers like SAFARICOM PLC, AIRTEL KE and TELKOM in Kenya and some parts of East Africa has positively impacted the society not only to the way we communicate with one another but also to the way we solve process and interrelate different aspects of telecommunication

## **1.1 Background**

All this is an achievement of the telecommunication evolution from the famous 20th century land lines, to Telephone booths commonly known as” simu ya jamii” to the current electronic simcards chips that are inserted to mobile devices and support the following:

1.Enabling calling and receiving text messages across the region at affordable rates

2. Low internet browsing charges

3. Easening the transfer of money through electronic cash transfer (MPESA services) among others.

5.Social network connectivity

6.Data privacy and protection

However, all this greatness comes with a flaw that; when the simcards holder dies, the simcards gets into the hands of other people (immediate family members) who end up violating the data privacy and protection policy.

It has been reported recently that the rise in Digital / Online Fraud and robbery has been attributed and facilitated by this simcards

Criminal gangs, cyber fraudsters and conmen have been caught being in possession of simcards whose owners have died or accidentally misplaced.

And it is this loophole that has led to massive frauding and criminal gang operations within Nairobi and its environs from the most trusted Giant telecommunication network Safaricom to innocent Kenyans.

It is for this reason I’m inspired to write a project and create a system that will help curb fraudsters and probably recover the “dead simcards” and renew them for use to other new subscribers.

## **1.2 The problem statement**

Since time immemorial burial permit process has been a manual, tedious and time-consuming process., sometimes it ends up in a lot of errors when designing a death certificate.

* My project seeks to alleviate these problems by the development of a mobile application that will serve burial permit generation platform and also as a module for generating a death card, disabling from network, updating census database among other functionalities.
* The existing systems are manual, no place uses the electronic /biometric registration of the deceased information’

## **1.3 .0 The proposed system**

The proposed system will be called the EDR (Electronic Death Registration) system. It will be deployed as an android based application for the start before further analysis and testing’s is done to develop a desktop or device-based system.

This app will help in

* Reducing the time limit required to process, and generate a burial permit and a death card.:
* Recording accurately the information of the deceased.
* Encrypting /storing/protecting the information from unauthorized persons
* Identify dead simcards, send the information to a network service provider for disabling in real time.
* To be used by economists to model a countries population GDP, among other vital information for the population for example during budgeting for a certain financial year.

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In general, the application will be a kind of society re-engineering system. It will modernize the normalcy with which the society operates under. From time saving, to data protection, to population models to E-Cards that can act as e- wallets.

### **1.3.1 General Objectives**

1. Design a way on how to recover or block those dead simcards within a short period after death of the holder.
2. Digitize the process of acquiring a burial permit such that the information is reflected to the network service provider server and the deceased information is recorded
3. Create a prototype of digital burial permit Identify one telecommunication network in Kenya where the problem exits.
4. Identify some of the crimes and frauds conducted by imposters of the dead.
5. Come up with a database.
6. Test
7. Review
8. Test again

### **1.3.2 Project specific objectives**

The (system)application seeks to:

* Reduce congestion, time limit and ease the process of applying and processing a burial permit to its simplest form.
* Automatically identify phone numbers whose owners have died and recycle them back for use.
* Reduce cases of online fraud and conning by ensuring all active numbers are routed to live people, those dead, their numbers are disabled, renewed and sold to others.
* Generate a death card that can work as an E- wallet for the” yatima fund,”, the widows fund, insurance cover for the deceased, pension among other beneficiaries that link between the family, the deceased and the government or any particular institution.
* Ease the hustle of getting a burial permit, death certificate among other documents associated with the deceased.

### **1.3.3 Significance:**

1. Reduce the time limit required to process both the burial and death certificate.
2. Generate a digital burial permit by electronic means, also, a digital death card that contains the information of the deceased person and can be used as e wallet for the distribution of money to the orphan’s, widows and widowers.
3. The digital death card can be applied in many systems that require authentication of the deceased person, such services include loan application, pension, insurance compensation among others.
4. Reduce frauding using deceased peoples simcards.
5. Lower crime rate through impersonation.
6. Recover more simcards that can be renewed foe newer subscribers.
7. The data exchanged between the system and the immigration department database under the death and birth registration department can be used to generate a model of a countries true population at any given time i.e.

**POPULATION current** = {Previous(x) +New Births(y)}-New Deaths(z)

1. Reduce corruption at local government when acquiring death permit.
2. Ensure data protection by our network service providers by disabling numbers whose owners are no longer alive. This helps in renewing/ recycling back dead simcards and also decongesting the network bandwidth

## **1.4 Justification of the proposed system**

The new system will help in;

# **Secure system filling**

Being a collaborative process between public and the regional government data collected using the app will help in allocation decongesting, authenticating and protecting the privacy of the collected data.

# **Reduction online fraud**

Because the dead simcards will be disabled and recycled back to the market, then massive borrowing, online fraud and impersonation will reduce greatly.

# **Automation**

Because the system will be an application, service renderence will be faster, precise, accurate and 24/7

# **Access to death registration services**

application will have timely updates tips. This will help the users to have access to information.

## **1.5 METHODOLOGY**

**The system will be implemented using the iterative methodology.**

The methodology will allow me to turn the entire project into small jobs and also allow me to add value to the entire project as it evolves it also allows for agility. I will incorporate UML diagrams which include use case diagrams, data flow diagrams, entity relationship diagrams and activity diagrams. All these diagrams will show the system in different perspectives

1. **System Requirement Specification**

The document has been attached. Please refer to Chapter 3 of this document

1. **System Analysis**

The developers, the users and the administrators develop a framework to guide the development of the application. The brain-storm helps the developers to have a mental and logical picture of the requirements of the system. This brings forth the requirements definition document.

1. **System Design**

The team will develop the technical blueprint of the overall system. The architecture will also be included here.

1. **Validation and Testing**

The application will be tested to see if it fits the System Requirement Specification criteria developed beforehand. Meeting the criteria shows the application fits the criteria. The tests will be standard and set to show validity of the application.

**Implementation and Maintenance**

The application will be rolled out and a user guide and a training conference undertaken to prepare the staff and users of the application.

Improvements will be periodical where need be. The updates will be patched into the existing system to make it smoother and up to date. This will also be dependent on the feedback from the users

This will be in the future when the system is in full thrust operation.

# **1.6 Resources**

|  |  |  |  |
| --- | --- | --- | --- |
| **ITEM** | **QUANTITY** | **ESTIMATED COST** | **ACTUAL COST** |
| **LAPTOP** | **1** | **53000** | **50000** |
| **EXTERNAL HARD DRIVE** | **1** | **9000** | **9000** |
| **SMART PHONE** | **2** | **12000** | **13000** |
| **DATA BUNDLES** | **-** | **3000** | **2500** |
| **APPLICATION HOSTING** | **-** | **2000** | **2000** |
| **STATIONERY** | **-** | **5000** | **4500** |

**Report to:**

The progress report will be given to the senior lecture (KCA University) Dr. Ezekiel Mwangi, my supervisor.

**Project schedule**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **TaskNo.** | **Description** | **Task duration** | **Planned start date** | **Planned completion date** | **Deliverables** |
| **1** | Project proposal | 1 week | 30st January 2020 | 7th February 2020 | Project proposal |
| **2** | Requirement specification design | 1 week | 10th February 2020 | 17th February 2020 | System requirement specification document |
| **3** | System design specification document | 4 weeks | 19th February 2020 | 18th march 2020 | System design specification document |
| **4** | Preparation of progress report | 1 week | 20th March 2020 | 27th March 2020 | Presentation |
| **5** | Test plan document design | 2 weeks | 30th March 2020 | 13th March 2020 | Test plan document |
| **6** | System coding and compiling | 5 weeks | 17th March 2020 | 22nd May 2020 | Progress presentation |
| **7** | System testing | 2 weeks | 25th May 2020 | 8th May 2020 | Test results |
| **8** | Implementation strategy document design | 1 week | 12th May 2020 | 19th May 2020 | Implementation strategy document |
| **9** | User manual design | 1 week | 22nd May 2020 | 29th May 2020 | User manual |
| **10** | Compilation of system and final documentation | 1 week | 1st June 2020 | 8th June 2020 | Final project documentation and compiled system |
| **11** | Project presentation | 1 day | 10th august 2020 | 10th august 2020 | Present project |

# **CHAPTER 2: LITERATURE REVIEW**

## **2.0 Introduction**

As of the moment I have not come across such an initiative and so I have decided to undertake a research project to address the above-named issue. The existing are manual where by the chief fills in a prefilled form with ink and hands it to the next of kin on behalf of the deceased persons.

## **2.1 Cons**

1. -The process is slow
2. -The process does not guarantee data protection
3. -It is difficult to acquire or make reference to the data in future **Conclusion**

-The project is viable as it complements the government’s objectives (through the immigration- death and birth registration) to provide quality services the people and offer privacy protection to their information.

-Being application, it will revolutionize the way funds are appropriated and help in their distribution to more prudent issues.

## **2.2 Conclusion**

It is my wish that the project becomes a reality in order to enhance efficiency, data protection in most telecommunication network companies and guarantee the public privacy and protection against fraudsters.