MULTIMEDIA UNIVERSITY OF KENYA

FACULTY OF COMPUTING & INFORMATION TECHNOLOGY

PROJECT PROPOSAL

PEER TO PEER ANDROID LENDING SYSTEM

BY

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Submitted in partial fulfillment of the requirements of Bachelor of Science in Software Engineering of Multimedia University of Kenya

DECLARATION

I hereby declare that this Project is my own work and has, to the best of my knowledge, not been submitted to any other institution of higher learning.

Student: MRONGO RABIN **Registration Number: CIT-227-031/2016**

Signature: ..... Date: .....

This project has been submitted as a partial fulfillment of requirements for the Bachelor of Science in Software Engineering of Multimedia University of Kenya with my approval as the University supervisor.

Supervisor: MR. DISHON KIIRU

Signature: ..... Date: .....

DEDICATION

This work is dedicated to my parents, Mr. and Mrs. Mrongo. This is because of their support my education. This is to honour them for their efforts in my studies. Not forgetting the discussions and the advices I received, this project proposal is a special dedication to my classmates for the nourishment in this academic journey and it is my prayer that may the good Lord help you and fulfill the desires of your heart. I will always reserve a special place for them in my heart. May God bless them all!

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First and foremost, I wish to thank the God Almighty, for enabling me to come this far and making everything possible for the project to be a success. Throughout the hard times He always gave me hope and assurance that all is well.

It is with deep sense of indebtedness and gratitude that I reflect on my academics training. It would be impossible to mention all those who have influenced me during these formative years of academic journey. In expressing my thanks to all who in one way or another assisted me in my education, I would like to express my sincere appreciation to my project supervisor, Mr. Dishon Kiiru, for the guidance, help and support not forgetting his valuable advice. I also wish to extend my sincere gratitude to my parents Mr. and Mrs. Mrongo for financial and moral support during entire project period. My siblings for your prayers and best wishes have seen me through this. I would also like to give some special thanks to my classmates and friends whom I consulted from when I got stack, and the discussion forums we held because of our projects. Finally, my sincere gratitude goes to the administration of MMU fraternity for the facilities they provided me with, to make this project a success.

May God bless you all.

ABSTRACT

Peer-to-peer lending started out as a relatively simple system for facilitating loans between individuals online, but has since grown into a complex ecosystem of technologies, institutions, and auxiliary startups. This research studies the impact of the reduced financing by the banks and the rise of pee-to-peer lending. The research will determine how a mobile platform can be used to enable lenders invest by lending directly to borrowers and get profitable returns. The system to be developed aims at enabling lenders to access quick loans without the banking middle-man at affordable rates.

This system will be a result of a case study of Software Engineering class of 2019/2020 of the Multimedia University of Kenya. A sample from which the data will be collected will be obtained from the population. Questionnaires will be used to collect the primary data and will be supplemented with some secondary data from interviews, observation and analysis of bank documents. The documents will include audited financial statements of banks and performance data from Central Bank of Kenya annual banking survey reports. The results of the study will be analyzed using Statistical package for social studies (SPSS Version 19) where different data will be analyzed in form of tables, graphs and pie charts.

In order to successfully develop this project, the researcher will employ the use of Software development methodology whereby we will use the Waterfall model and also carry out review of existing solutions in order to improve on areas of weaknesses apart from providing transactional history and good reports to the user. The conclusion of the research will be based on the findings of this study. The system will be created using the Android language. NodeJS will be used as the back-end scripting language.

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LIST ABBREVIATIONS

U.S	-	United States
P2P	-	Peer-to Peer
CBK	-	Central Bank of Kenya
KCB	-	Kenya Commercial Bank

CHAPTER ONE

INTRODUCTION

This chapter will give a background to the study, the purpose and its objectives as well as the scope, justifications and limitations of the proposed system.

1.1 BACKGROUND STUDY

Banks and the existing financial institutions are very reluctant to lend low class individuals and small business enterprises with little income. This may be because of the dangerous crisis world's economy has faced in the past. For instance, the collapse of the financial system in the United States starting in 2008 shattered public confidence in the traditional intermediaries of the financial system, the regulated banks. Not only did the mainstream financial system implode leaving millions of borrowers baring an extraordinary debt burden, the contraction that followed left individuals and small businesses cut off from fresh sources of credit (S. Benediktsdottir, J. Danielsson & G. Zoega). "Disintermediation," the idea that we can have credit without banks, became a political rallying cry for those interested in reforming the financial system to better serve the interests of consumers. As the Financial Times has put it, peer-to-peer lending companies offered to "revolutionize credit by cutting out, or disintermediating, banks from the traditional lending process" (Alloway, 2015).

Although the amount of credit available through peer-to-peer lending is miniscule in comparison to traditional credit, the public attention given to this phenomenon is significant. Peer-to-peer lending started out as a relatively simple system for facilitating loans between individuals online, but has since grown into a complex ecosystem of technologies, institutions, and auxiliary start-ups. While by definition, the term "peer-to-peer" designates exchange between individuals, the term has increasingly become a misnomer for this industry, which is increasingly referred to as "marketplace" lending. Initially, borrowers could crowdfund loans by appealing to multiple small investors. But today, the majority of peer-to-peer loans are purchased by large investors like banks, hedge funds, and wealth management firms. The entry of these investors has motivated a growth of start-ups and other actors dedicated to advising investors, performing loan data analysis, and automating the investment process. The promise of disintermediation, or

removing the banks from the equation, has given way to a wide array of intermediaries, including but not limited to banks.

Calls for increased regulation of alternative consumer lending have centred around greater monitoring of data accuracy in underwriting, scrutiny on compliance with laws like the Equal Credit Opportunity Act at the level of credit decision-making, and the Fair Credit Reporting Act at the level of consumer information and transparency. Unlike other forms of online lending, however, peer-to-peer lending platforms typically rely on mainstream credit data to approve loan requests and to assign interest rates. Lenders then use loan-level data to select and further screen loans for investment. In this system, loan decisions are diffused across multiple investors, an arrangement which poses challenges to defining what discrimination might look like in this context, or where accountability might lie. Peer-to-peer lending also complicates visions of what a fair lending model might look like.

While consumer protection laws in lending are designed to deter discrimination against protected categories such as race, sex, and religion, the norms of what constitutes fairness towards consumers is not set by legal mandate and may change over time. Going beyond the point where underwriting decisions are made, efforts to discern where to locate questions of fairness and discrimination in the peer-to-peer lending world may depend on examining the business model and broader ecosystem in which peer-to-peer lending is situated. The goal of this primer is to map out this ecosystem and ask where incentives to profit and obligations of accountability for protecting consumers lie, and what functions are served through the circulation of loan data across the loan funding process. Peer-to-peer lending also complicates visions of what a fair lending model might look like.

1.2 STATEMENT OF THE PROBLEM

The means in our living is always not enough to satisfy all our day to day needs. It hasn't always been easy for small businesses or individuals to get bank money to meeting their urgent financial needs. The problem? Their inability to satisfy traditional banks or the financial institutions with enough underwriting guidelines (Chen, 2015).

Just as it has always been, no individual can exist without a help from a neighbour. It confirms the statement that "*we live because of other people*" thus "*no man is an island."* In pursuit to

fulfil the demands presented by the cares of this life individuals are always pushed to the wall to a greater extent that they are left with no other option other than to borrow from friends and return later.

Historically, the collapse of the financial system starting in 2008 shattered public confidence in the traditional intermediaries of the financial system, the regulated banks. Not only did the mainstream financial system implode leaving millions of borrowers baring an extraordinary debt burden, the contraction that followed left individuals and small businesses cut off from fresh sources of credit.

The worldwide financial collapse resulted on a cash shortage throughout capital markets further squeezing the financial liquidity of banks. Ever since, banks have been reluctant to finance individuals, households and small businesses because of the credit suffocation.

New loans to large borrowers fell by 47% during the peak period of the financial crisis (fourth quarter of 2008) relative to the prior quarter and by 79% relative to the peak of the credit boom (second quarter of 2007). New lending for real investment (such as working capital and capital expenditures) fell by only 14% in the last quarter of 2008, but contracted nearly as much as new lending for restructuring (LBOs, M&As, share repurchases) relative to the peak of the credit boom (Iyashinaa & Scharfstienb 2009).

Since banks have always been reluctant in giving short term loans to individuals and small business, peer to peer lending has gained much popularity with an intension of meeting the financial needs of individuals and small businesses.

1.3 PURPOSE OF THE STUDY

To cut out the banking middle-man in lending individuals with low incomes and small businesses so as to provide lower rates for borrowers, while investors get far improved headline rates.

1.4 RESEARCH OBJECTIVES

1.4.1 Aim of the Study

To develop a peer-to-peer Android lending system.

1.4.2 Objectives of the Study

i. To build a mobile platform where lenders can invest by lending directly to borrowers and get profitable returns.
ii. To enable borrowers to access quick loans without the banking middle-man at affordable rates.
iii. To increase innovation in the financial lending environment.

1.4.3 Research Questions

i. How can a mobile platform be used to enable lenders invest by lending directly to borrowers and get profitable returns?
ii. How can the system enable lenders to access quick loans without the banking middle-man at affordable rates?
iii. How can innovation be adopted in financial lending by means of a mobile application?

1.4.4 Justification of the Study

In many countries where peer to peer lending financial operations have already been operational these enterprises found “breeding ground” to expand and supply with funds many households and small businesses, allowing them to survive or even flourish. Thus, the peer to peer companies have become visible, though yet small, in the financial map, creating a new sector of financial services while smaller economic units constituting valuable social cells, benefited on their struggle to survival. (Simitas, 2013)

1.4.5 Scope of the Study

In Kenya, the concept of peer to peer lending is almost completely unknown or recognized as a form of financial institution. Nevertheless, the country is suffering by an unprecedented lack of liquidity strangling the economic activities of individuals and small businesses, as businesses and households have limited access to credit. Banks appear not only reluctant but virtually unable to cover the credit needs of the markets, due to their own financial challenges.

This project will seek to provide an alternative source of credit for smart phone users in Kenya, specifically among peers (those who are roughly economically equivalent). The project will look at a case study of the Software Engineering class of 2019/2020 of Multimedia University of Kenya.

1.5 LIMITATIONS OF THE PROPOSED SYSTEM

i. Lack of a well-documented legal framework regulating peer to peer lending within the country to provide appropriate standards for the proposed system.
ii. The application will only be accessible to customers in possession of smart phones.
iii. Since the system will be based on the principle “disintermediation” it will require all the participants to be acquaintances so as to avoid instances of defaulting repayments.

1.6 ASSUMPTIONS OF THE STUDY

i. The platform will comply with international regulations and policy concerning lending.
ii. The mobile money application will also be made accessible to a wide category of smartphones.
iii. The system will keep a copy of all the mobile money transactions.
iv. All users of the system are literate and the system will be easy to use without need for help.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The concept of peer to peer lending, although comprising the mastering and use of digital technology, internet and computer science, various banking and financial tools, is actually a very old and quite simple (Simitas, 2013).

Undoubtedly, long before the conception of the notion of money, as soon as the first human beings firstly acquired belongings, they felt the need to share them with other persons who had a use for those belongings and were asking for consensus to use them. Furthermore, the lending and borrowing of material goods produced a feeling of deprivation to the lender and a moral obligation for some kind of compensation to the borrower. In the course of history, as the economic life of societies moved forward to inventing means of exchange and storing value, the notion of money was instituted and the object of the loan as well as the aforementioned obligation for compensation of some kind were, from that point and on, easily translated to monetary units. On the other hand, the motives of lenders stopped being exclusively emotional or humanitarian and evolved to a pursuit of profit. Lending started to accommodate the notion of investment. This pursuit of profit through lending, led to the creation of financial intermediaries and institutions, that have completely dominated all process of lending throughout the world (Samitas, 2013).

The peer to peer lending or P2P (person to person lending) is therefore nothing new if not just a new twist of an old idea. The difference between it and the traditional interpersonal lending is just the use of contemporary technology. It is the practice of lending money to the unrelated individuals or ‘peers’ without going through the financial intermediaries such as the banks and the financial institutions. As the banking middle man is being cut out, the borrowers the borrowers are charged with lower rates while the lenders get significantly higher rates than they would get from a bank or a traditional lender. The peer-to-peer platform allows investors to be enlisted into its group of potential lenders and individuals seeking to finance their activities through borrowing as prospective borrowers (Samitas, 2013, p.5)

In Kenya, lending between people has been strictly informal. It is usually done in cash with little or no documentation and is generally limited to a close network of people in a lender's community. That could be changing fast (Wein, Musya and Vidal).

2.2 History of P2P lending in the US

Peer to peer lending has a decade-long history in the US while in Kenya it is relatively still new to borrowers. There exist several online platforms offering peer to peer lending in the US and their main focus is on financing borrowers with their "peers". It is true that Peer-to-peer lending may not have begun in the US, but it has quickly spread to dominate the personal loan market and is slowly making its way into other markets.

The first company to offer peer-to-peer lending was Zopa, a UK company that has since issued more than $2.9 billion in loans since it was founded in February 2005. In the US, the prospect of loans funded without the help of banks started in San Francisco in 2006. Its beginnings were small: Prosper launched in February 2006, followed by LendingClub. Now the largest peer-to-peer platform in the world, LendingClub started as one of Facebook's first applications (Corre, 2017).

Before 2008, P2P lenders had fewer restrictions on borrower eligibility, and their offers weren't registered as securities. This changed in 2008 after the Securities and Exchange Commission (SEC) intervened, citing the need for compliance with the Securities Act of 1933 (Corre, 2017).

In 2008, the US found itself deep inside the global financial crisis. When the banks weren't willing to lend money, borrowers began turning to peer-to-peer platforms. Even those who were able to borrow from traditional banks found better deals from P2P lenders. Investors, shying away from the volatile stock market, saw P2P platforms as less risky.

This mindset continues today, with prime and subprime borrowers able to access credit for more competitive rates and investors willing to provide them with the funds.

Peer-to-peer lending may be just over a decade old, but it's making waves in the banking scene. Although individual lenders are being pushed out by larger lending firms, there are still quite a few P2P lenders that leave room for people to invest in their peers. And for those looking for a

loan that doesn't come from a bank, there are plenty of peer-to-peer options available for you to compare(Corre, 2017).

2.3 Peer to peer Lending in Kenya

Lending between people in emerging markets like Kenya has been strictly informal. It is usually done in cash with little or no documentation and is generally limited to a close network of people in a lender's community (Wein, Musya and Vidal).

In Kenya, the concept of peer to peer lending is almost completely unknown or recognized as a form of financial institution. Nevertheless, the country is suffering by an unprecedented lack of liquidity strangling the economic activities of individuals and small businesses, as businesses and households have limited access to credit. Banks appear not only reluctant but virtually unable to cover the credit needs of the markets, due to their own financial challenges.

2.4 Theoretical Framework

Various theories on mobile lending have been proposed and they include; agency problems theory (Mitnick, 1986), bank focused theory (Layman, 2006), innovation diffusion theory Mitchell (1990) and financial intermediation theory (Medoff , 2001).

2.4.1 Agency Theory

Mobile lending is planned and executed by managers who are motivated on maximizing their own interest and do not care about the welfare of the shareholders (Mitnick, 1986). One of the common strategies by the shareholders is to agree on the deciding rules for managers to implement the business policies in the business entities. It is the responsibility of the shareholders to monitor the activities of the managers to ensure their actions are for the benefit of the shareholders. Ross, (1985) criticized the agency theory by arguing that the agent can choose, an action which might negatively affect the business in the long run mobile lending has greatly increased among the commercial banks in Kenya. This is done by managers who want to cater for their own interest.

2.4.2 Bank Focused Theory

Commercial banks can derive more benefits from adopting technologies such as mobile lending in the provision of services to their customers (Lyman2006). Mobile lending is anytime banking since customers are able to transact anytime unlike the traditional normal banking procedures

where customers must avail themselves into the banking halls or through the agency banking which is a waste of time. Although the bank focused theory is more advantageous to the Commercial banks concerned, it has its limitations for example the security of the transactions are exposed to hacking which poses a greater security threat to the financial transactions involved (Gurley 2008).

2.4.3 Innovation Diffusion Theory

Inventions like mobile lending and internet is adapted and becomes successful in the conducting of the business. In Kenya, mobile lending is an innovation which came as a need to continue the provision of financial services like lending through the mobile application. This new technology has increased the number of transactions undertaken by the mobile platform. Commercial banks in Kenya which have adopted mobile lending have posted increased volumes of transactions

2.4.4 Financial Intermediation Theory

This theory asserts that intermediaries are introduced to minimize the costs of transactions costs in mobile lending Medoff (2002). Financial intermediaries are institutions and individual which acts as the middleman in the business financial transactions. They act as institutions which offers the channel for the transfer of funds between the savers and the investors. Financial intermediaries hold direct claims on deficit spending units as financial assets and issue direct claims to surplus spending units as liabilities. The financial intermediation theory is relevant to our study as it points out the significance of intermediation as a value creating economic process. This has been evidenced by the adoption of mobile lending by commercial banks in Kenya for example the adoption of M-shwari by commercial banks of Africa aimed at reducing transaction costs. However, due to the developments in deepening of financial markets, financial intermediation has become useless (Stiglitz, 2003).

2.5 Related Systems

2.5.1 Fuliza M-pesa

Fuliza is an overdraft payment service available to all Safaricom subscribers that enable them to complete their transaction while having insufficient amount in their account. It seeks to meet the urgent financial needs of the Safaricom subscribers. However, the uptake of the Fuliza overdraft service could be a pointer to a credit starved market, with many traditional financial services out

of the reach of many Kenyans (Willberforce Okwiri, Standard). Safaricom customers borrowed Sh81 billion over the first six months of this year on the telecommunication company's Fuliza overdraft facility, new data shows.

With the revenue share split between Safaricom, CBA and KCB Group set at 40 per cent, 40 per cent and 20 per cent respectively, the three entities could have earned as much as Sh2.4 billion over the six months.

2.5.2 M-Shwari

The **M-Shwari** Loan Account is a micro-credit product which allows you to borrow money in times of need or to complement your savings towards an investment or enterprise. A one-time fee of 7.5% is levied for each loan.

2.5.3 Tala

Tala is a lending platform that allows users to access loans through their mobile application platform. The money is disbursed to the borrowers via M-Pesa.

2.5.4 KCB-MPESA

KCB-MPESA is a platform that allows borrowers to access loans through USSD. This service is offered as a collaboration between Kenyan bank KCB and Safaricom – an East African telco operator.

2.5.5 Zopa

Zopa is a UK online personal finance peer-to-peer lending company founded in 2004. It launched in the UK in March 2005. Zopa was the first peer-to-peer lending company. Zopa grew steadily in the years prior to the financial crisis of 2007–2008. It navigated the period with no losses to investors' capital and only a small dip in returns during 2008.

2.6 Limitations of the currents Systems

In the existing mobile lending systems, financial intermediaries and institutions have completely dominated the entire process of lending. The level of interest rates affects the level of borrowing from financial institutions and has continued to make small businesses and individuals to shy away from borrowing.

2.7 Conceptual Framework

This section summarizes the framework or the model of the study in terms of variables relationships.

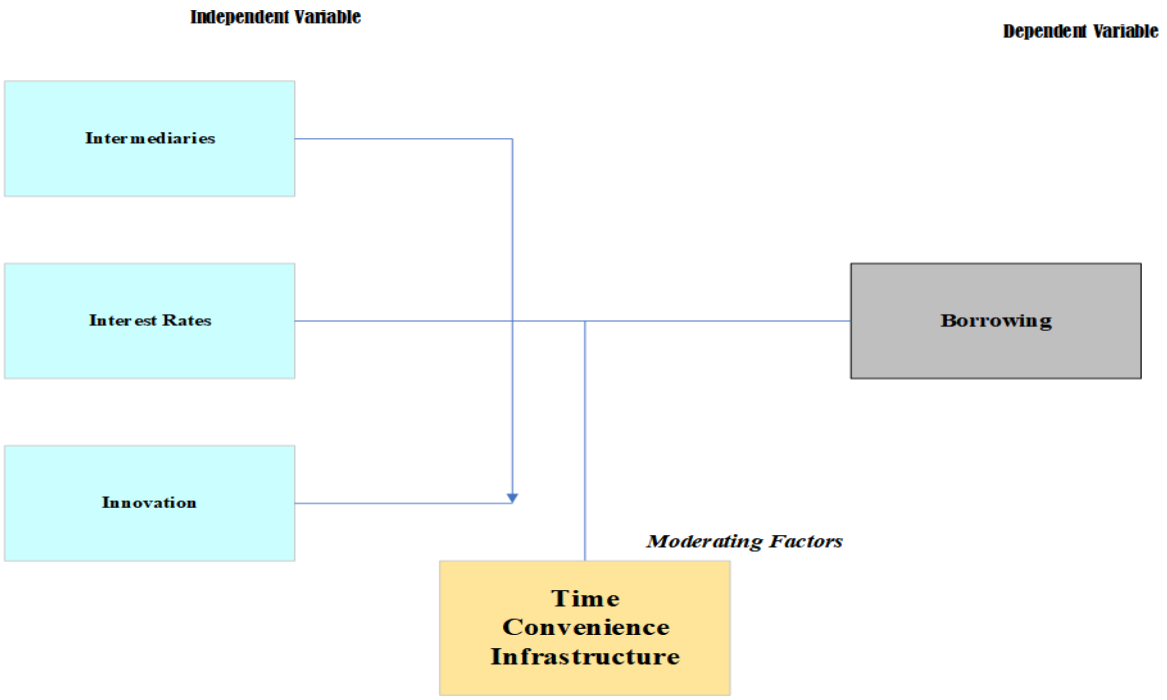

Figure 1: Conceptual Framework of the System

Author, 2019

Intermediaries in the lending process has an effect on borrowing. Innovation and the level of interest rates affects the level of borrowing from financial institutions. Peer-to-peer lending boasts for less financial intermediaries, increased innovation and lower interest rates.

Few intermediaries in the system reduces the time it takes to get loans which in turn increases borrowing. Lower interest rates improve convenience while innovation provides the necessary infrastructure to enable borrowing.

2.8 Research gap

No peer-to-peer platform has been developed in the country. It still remains as a new field in lending and has only been implemented in a few countries globally. Therefore, a research gap exists that need to be filled by doing a thorough survey on the effects of financial woes on bank lending.

2.9Theoretical Model Proposed System

The proposed system is to have a registration and a login page to for identification and authentication purposes. This will ensure that only the intended peers are able to use the system. After successful signup and login, the system is the to take the user to a window with two options, i.e. to specify if they want to invest or borrow.

If the user chooses to borrow, a list of all the fellow peers intending to lend their money pops ups with the little interest they are expecting their money back with. The user should then go through the list of the lenders and then select the one they wish to borrow from. A message is then sent requesting the investor to send the loan to the borrower who requested for it via M-Pesa.

If the user selects to invest, a window requiring him to specify the amount to be invested, the interest and period within which the money should be returned pops up. He then feeds the required information and thereafter post the information to the database so that any user intending to borrow can see the loan listed.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter will deal with the procedure of conducting the research and other factors such as the research design, population, sample size and method of data collection and analysis.

3.2 Scope of the Study

This study will be done within Multimedia University of Kenya specifically the Software Engineering class year four 2019/2020.This is selected because it contains a group of students who are relatively same financial status and almost the same age group hence are "peers" with one another.

The setting is appropriate and sufficiently specific for the examination of the research question.

The research will be conducted for a period of one month. This will be during the month of January 2020.

3.3 Research Methodology

The development of this system follows the Water Model. The waterfall model is the classic SDLC methodology which has been used for many years. Being linear and sequential, it emphasizes on the need for logical progression of the phases involved. One phase must be carried out to completion then its output used as the input for the next. The diagram below shows the stages of the waterfall model;

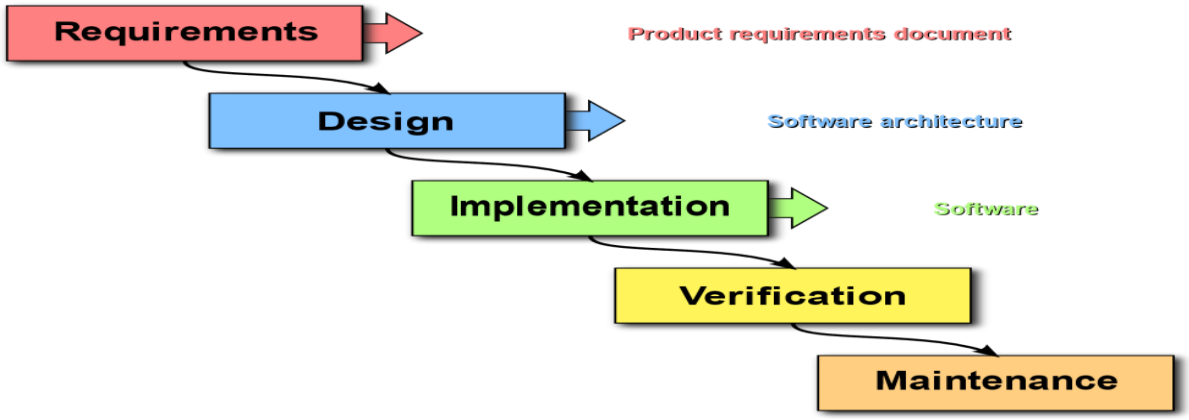

Figure 2: Waterfall Model

Author, 2019

Requirement Gathering and analysis – Here, all possible requirements of the system will be developed are captured and documented in a requirement specification document.

System Design − The requirement specifications from first phase are studied in this phase and the system design is prepared. The system design phase helps in specifying hardware and software requirements for the system and helps in defining the overall system architecture.

Implementation − With inputs from the system design, the system is first developed in small programs called units, which are then integrated in the Integration phase. Each unit is developed and tested for its functionality, which is referred to as Unit Testing.

Integration and Testing − All the units developed in the implementation phase are integrated into a full system after testing each unit. The integrated system is then tested for faults and fixed.

Deployment of system − Once the functional and non-functional testing is done; the system is deployed to customer environment for usage.

Maintenance −This involve fixing errors that may arise while the system is running in production. Also, to enhance the product, some better versions are released. Maintenance is done to deliver these changes in the customer environment and is a continuous process during the lifetime of the system.
The Waterfall model provides an opportunity to have clarity on the project's progress. This is because the stages do not overlap. The project can only be in one stage at a particular time which is more convenient for the system being developed. It also allows for setting timelines for each stage as was done for this project. Since each stage has very specific deliverables, this model makes it easy to manage the project.

3.4 Data Collection

A string of techniques are employed in collecting data for the development of this system. The techniques used were as follows;

Observation- This is the major technique that has provoked the development of this peer-to - peer Android lending System. In observing keenly how fellow peers having complaining from the high interest rates from the current lending companies, the idea that people can borrow without intermediaries came by.

Interview-This will be done to find out the views of various peers concerning their experience with the existing lending companies and how they perceive the proposed peer-to -peer android lending system.

Brain Storming-This is an informal debate with the intended peers to discuss how much important it is to develop a system that can help them borrow and invest small amounts of money among their fellow peers without the intervention of the intermediaries.

Secondary sources of information- Data from existing sources such as the statistical research findings obtained from journals and online sites. The secondary sources will help a great deal in providing information on the history of lending and specifically the peer to peer lending.

3.5 Project Resources

3.5.1 Software Tools

- Firebase-Which is an online database management system for mobile applications. It is to be used for data storage and manipulation of data. It also provides an admin portal that helps the administrator of the system to manage and follow all the activities within the system.
- Android Studio-This is the software platform that provides all the necessary tools required for the development of mobile applications.
- Java-Almost all if not all mobile applications are developed using java which is a programming language for handling the user inputs.

3.5.2 Hardware Tools

- External flash drive for data backup and transfer.
- Computer (4GB RAM and 500GB Hard Disk Storage) installed with Android Studio.
- A mobile phone for testing the application.

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APPENDIX I

Sample Questionnaire

Select one

1. Kindly indicate your gender by checking the appropriate box.
   [ ] Male
   [ ] Female
2. Which age bracket do you belong to? Kindly check the appropriate box.
   [ ] 18-22 years
   [ ] 23-27 years
   [ ] 31-40 years
3. Kindly indicate your level of income by checking the appropriate box.
   [ ] 0 - 10,000Ksh
   [ ] 10,000 - 50,000Ksh
   [ ] Above 50,000

Section Two

1. Have you made use of any mobile banking services? If so, which of the following mobile banking services have you used before?
   [ ] KCB M-PESA [ ] M-Shwari [ ] Tala [ ] Branch [ ] Other_____

2. Given a scale of one to ten, how would you rate the mobile money lending service you selected above?
   [ ] 1 [ ]2 [ ]3 [ ]4 [ ]5 [ ]6 [ ]7 [ ]8 [ ]9 [ ]10

3. How convenient is the mobile money service you chose above?
   [ ] Excellent
   [ ] Very good
   [ ] Good
   [ ] Fair
   [ ] Poor

4. For what reason did you consider a mobile loan over a loan from a banking facility? (You are allowed to tick more than one choice)

Reason	**Check**
Too many financial intermediaries	
Not convenient	
High interest rates	
Poor technology	
Other: _____	

Table 1: The proposed project budget

5. How positive are you that mobile money lending and peer-to-peer lending in particular will make an impact on the financial space in the next 10 years?

   [ ] Very sure

   [ ] Sure

   [ ] Not sure

   [ ] No impact

6. How often do you access financial lending in a year?

   [ ] Never

   [ ] 0 – 10 times

   [ ] 10 – 20 times

   [ ] More than 20 times

7. Which platforms do you use to access these loans?

   [ ] Banks

   [ ] Mobile platforms

   [ ] Peer-to-peer lending platforms

   [ ] Saccos

   [ ] Other:_____

APPENDIX II

Project Duration

Weeks	1	2	3	4	5	6	7	7	8	9	10	12	Deliverables
Requirements gathering and Specification													1
System Design													2
Implementation and coding													3
Deployment and testing													4
Documentation													5

Table 2: The project Gannt Chat

Deliverables

1. Software Requirements Document
2. System Design and Specification Document
3. Complete System
4. Test data results.

APPENDIX III

Proposed Budget

ITEM	**COST(KSH)**
printing	1,000
Binding	200
Miscellaneous	500
TOTAL	**1,700**