

**LOCKMINDS COMPANY LTD**

Ref No: 000001/LM/TZ/DSM/MBEZI\_BEACH

Head Office: Mbezi Beach\_Dare es Salaam, Tanzania

Tel: (+255)222627166 | Email:

info@lockminds.com | Web:www.lockminds.com

## SOFTWARE TECHNICAL DOCUMENTATION

**PROJECT NAME:** HISAZANGU  
**AUTHOR:** LOCKMINDS COMPANY LIMITED  
**DATE:** 15<sup>TH</sup> JANUARY, 2020

### Document Modification History

Version	Date	Description
1.0	6/06/2019	Initial Version
1.1	12/12/2019	Added changes from stakeholders
1.2	15/01/2020	Added technical documentation details



## LOCKMINDS COMPANY LTD

Ref No: 000001/LM/TZ/DSM/MBEZI\_BEACH

Head Office: Mbezi Beach\_Dare es Salaam, Tanzania

Tel: (+255)222627166 | Email:

info@lockminds.com | Web:www.lockminds.com

### Table of Content

INTRODUCTION.....	3
PURPOSE.....	3
INTENDED AUDIENCE AND PERTINENT SECTIONS.....	3
PROJECT SCOPE.....	3
DOCUMENT CONVENTIONS.....	3
REFERENCES.....	4
DESCRIPTION.....	4
PRODUCT PERSPECTIVE .....	4
FEATURES.....	4
USER OVERVIEW .....	5
OPERATING ENVIRONMENT .....	5
CONSTRAINTS: IMPLEMENTATION / DESIGN .....	5
DOCUMENTATION.....	6
ASSUMPTIONS / DEPENDENCIES.....	6
SYSTEM FEATURES .....	7
SYSTEM FEATURE 1 .....	7
SYSTEM FEATURE 2 .....	7
SYSTEM FEATURE 3 .....	8
REQUIREMENTS OF EXTERNAL INTERFACE.....	8
ADDITIONAL NONFUNCTIONAL REQUIREMENTS .....	8
PERFORMANCE.....	8
SAFETY.....	9
SECURITY .....	9
SOFTWARE QUALITY.....	9
APPENDICES .....	10
APPENDIX A: GLOSSARY OF TERMS.....	10
APPENDIX B: ANALYSIS DOCUMENTATION.....	Error! Bookmark not defined.



## LOCKMINDS COMPANY LTD

Ref No: 000001/LM/TZ/DSM/MBEZI\_BEACH

Head Office: Mbezi Beach\_Dare es Salaam, Tanzania

Tel: (+255)222627166 | Email:

info@lockminds.com | Web:www.lockminds.com

## INTRODUCTION

### PURPOSE

All software development products, whether created by a small team or a large corporation, require some related documentation. This HISAZANGU documentation exists to explain product functionality, technologies, processes, linking ideas with people who need to understand or use the products in an "audience-friendly" way and allow for discussing all significant questions arising between stakeholders and developers.

### INTENDED AUDIENCE AND PERTINENT SECTIONS

Developers, testers, marketing, and users of Hisazangu app, are involved to this documentation. Developers are concerning with the Scope of the product(app) and how it has been generally created, Tester deals with the system test (features & functionalities) and/or how it works and security & safety, while Users concentrate with features & functions, quality of the system, and outcomes from usefulness, the Marketing involves all portion touched by developers, Tester and User to convey the strength and importance of the app.

### PROJECT SCOPE

The actual benefit of this project (Hisazangu) is to assembly Investors at one point where they can query for the company which need to sell their shares, through the standard broker (owner of the system) who knows well and accurate information concerning to shares market. Through this, Investors will benefit since they access a cross cutting of searching with wasting of time and suffering from acquiring irrelevant information.

### DOCUMENT CONVENTIONS

There was a technical convention held by developer side for the issue of adding some sub modules and features like currency. From this, reader can benefit since there are addition of descriptions regarding to new features and sub modules.



## LOCKMINDS COMPANY LTD

Ref No: 000001/LM/TZ/DSM/MBEZI\_BEACH

Head Office: Mbezi Beach\_Dare es Salaam, Tanzania

Tel: (+255)222627166 | Email:

info@lockminds.com | Web:www.lockminds.com

## REFERENCES

Dar Es salaam Stock Exchange (DSE), Ministry of Finance and Planning, The Intelligent Investor" (1949) by Benjamin Graham, stocks for The Long Run" (1994) by Jeremy Siegel, How To Make Money In Stocks" (2009, 4th ed.) by William J. O'Neil, COMMON STOCKS AND UNCOMMON PROFITS" (1958) by Philip A. Fisher.

## DESCRIPTION

### PRODUCT PERSPECTIVE

#### TECHNOLOGY USED:

Web development side – made using PHP, Javascript, Html and CSS.

Framework used – Codeigniter Version 3

Android side – made using JAVA and XML.

Database – made using MySQL DBMS.

#### SERVER:

The system/app is launched through Venders Server (Lockminds Server supported by In Motion).

#### USERABILITY:

The system/app is user friend and easy to use through both Web (browser) and Android.

#### MAIN FUNCTIONALITIES:

Investor registration.

Placing order.

Transactions (deposit & withdraw).

Calculating shares.

## FEATURES

The following are the main features of the app:-

- (1) ORDERS – shows the Investor who place the order with shares & company name, Status (pending or completed) and Type of the order, also it shows the action & date for the particular order.
- (2) TRANSACTION – shows the Investor who made a transaction, date, amount and type of particular transaction, method used, status and action.



## LOCKMINDS COMPANY LTD

Ref No: 000001/LM/TZ/DSM/MBEZI\_BEACH

Head Office: Mbezi Beach\_Dare es Salaam, Tanzania

Tel: (+255)222627166 | Email:

info@lockminds.com | Web:www.lockminds.com

- (3) INVESTOR – shows the Investors who have been registered, registration date with other details, status (active or blocked).
- (4) COMPANY – show the registered companies with their share particulars, and also here is where you can register a new company.

## USER OVERVIEW

### Groups:

- Broker – is the owner of the system, receive information and the links Investors to the registered company for executing shares.
- Investor – get registered to the system then linking with the broker so as to be connected with the company for executing shares.

## OPERATING ENVIRONMENT

- This software will function/accessed by the brokers and Investors then get connected with share companies so as to allow registered customers (Investors) to place order or do transaction and view the status of their shares.
- Hardware platform; normal workstations or personal computers and android smart devices with normal storage capacity, processing speed and memory.
- Operating systems; windows OS and Android.
- Other software; adobe pdf files reader and ms office applications.

## CONSTRAINTS: IMPLEMENTATION / DESIGN

1<sup>st</sup> During the design stage; there were required to separate Android and Web which made by different languages and at the same time to join them in one database and server as well.

2<sup>nd</sup> During the design stage; there were required to give role for the owner of the system (Broker) to stand intermediate and linking Companies & Investors, then not to allow them to have a direct connection without passing to the Broker (since an Investor get company connection from the broker).

3<sup>rd</sup> During the implementation; there were a need of Integrating the system with DSE for retrieving share details/information.

**LOCKMINDS COMPANY LTD**

Ref No: 000001/LM/TZ/DSM/MBEZI\_BEACH

Head Office: Mbezi Beach\_Dare es Salaam, Tanzania

Tel: (+255)222627166 | Email:

info@lockminds.com | Web:www.lockminds.com

## DOCUMENTATION

The designed and printed Hardcopy of this Technical documentation will be distributed to the users who buy the Hisazangu software, a soft copy of such documentation in proper storage devices will also be generated. Sell agreement will include provision of this documentation and delivery will be made in such a good standard.

## ASSUMPTIONS / DEPENDENCIES

Lack of knowledge, adoption of using Technology, self-awareness and software interact experiences will potentially impact technical specifications set forth. On other way, unavailability of Android devices & Personal computer plus the accessibility of internet will led to lowering performance of the system (low number of users).



Lockminds



## LOCKMINDS COMPANY LTD

Ref No: 000001/LM/TZ/DSM/MBEZI\_BEACH

Head Office: Mbezi Beach\_Dare es Salaam, Tanzania

Tel: (+255)222627166 | Email:

info@lockminds.com | Web:www.lockminds.com

## SYSTEM FEATURES

### SYSTEM FEATURE 1

DESCRIPTION AND PRIORITY	Shows the Investor who place the order with shares & company name, Status (pending or completed) and Type of the order, also it shows the action & date for the particular order.
FUNCTIONAL REQUIREMENTS	Register Investor and Company, Placing the order and order related details.

### SYSTEM FEATURE 2

DESCRIPTION AND PRIORITY	Shows the Investor who made a transaction, date, amount and type of particular transaction, method used, status and action.
FUNCTIONAL REQUIREMENTS	Locate the Investor and assign Transactions, transaction details.



## LOCKMINDS COMPANY LTD

Ref No: 000001/LM/TZ/DSM/MBEZI\_BEACH

Head Office: Mbezi Beach\_Dare es Salaam, Tanzania

Tel: (+255)222627166 | Email:

info@lockminds.com | Web:www.lockminds.com

### SYSTEM FEATURE 3

DESCRIPTION AND PRIORITY	Shows the registered User (Investor) and registered Company with their status and other details.
FUNCTIONAL REQUIREMENTS	Register Investor, Register Company, Show their status & details.

### REQUIREMENTS OF EXTERNAL INTERFACE

Currently, there is no need of External Interfaces (User, Hardware, Software and/or Communication Interfaces).

### ADDITIONAL NONFUNCTIONAL REQUIREMENTS

#### PERFORMANCE

If there are proper devices and other requirements (like additional software eg. Ms office application and internet) all user groups can login and get access with a system at any time under standard and desired performance.



**LOCKMINDS COMPANY LTD**

Ref No: 000001/LM/TZ/DSM/MBEZI\_BEACH

Head Office: Mbezi Beach\_Dare es Salaam, Tanzania

Tel: (+255)222627166 | Email:

info@lockminds.com | Web:www.lockminds.com

### SAFETY

The use of encryptions, authentications (login credentials), proper devices, access roles/access controls (Broker & Investor), user friend and knowledgeable interfaces & features, resulting to a safe such system.

### SECURITY

Introduction of huge, updated, smooth & fast Server, Capable hardware devices set to users, Restrictions/Avoid unauthorized access or use, Standard technology, resulting to a secured system.

### SOFTWARE QUALITY

Accessed & Handled software; User can access this system at anywhere in any timing using support devices, internet and allowed conditions. There is attracted interfaces, menus and hyperlinks, with a proper traffic control.



Lockminds

**LOCKMINDS COMPANY LTD**

Ref No: 000001/LM/TZ/DSM/MBEZI\_BEACH

Head Office: Mbezi Beach\_Dare es Salaam, Tanzania

Tel: (+255)222627166 | Email:

info@lockminds.com | Web:www.lockminds.com

## APPENDICES

### APPENDIX A: GLOSSARY OF TERMS

TERM / ACRONYM	DEFINITION (MEANING)
DSE	Dar es salaam Stock Exchange
CSV	For downloading resulted table data
PDF	Portable Document Format (file format)
TZS	Tanzania Shillings (currency)
USD	United States Dollar (currency)
APP	Application (software)
MySQL	My Structured Query Language
DBMS	Database Management System
OS	Operating System
PHP	Hypertext Preprocessor, earlier called Personal Home Page (language)
XML	Extensible Markup Language
CSS	Cascading Style Sheets
Ed.	Edition