

VERSION 1.0

31.10.2018

**LIBRARY SYSTEM**

Egehan Doğan

Tugay Direk

Sercan Gül

Necati Atamer Şahin

Mustafa Ozan Güney

Anıl Berk Güreli

Submitted in partial fulfillment  
Of the requirements of  
SE302 Software Engineering

## TABLE OF CONTENTS

Table of Contents.....	i
List of Figures.....	ii
0.0. Preface.....	
0.1. Purpose of This Document.....	
0.2. Definitions Acronyms and Abbreviations.....	
1.0. Introduction.....	
1.1. Purpose.....	
1.2. Scope of Project.....	
1.3. Glossary.....	
1.4. References.....	
2.0. Overall Description.....	
2.1. Use-Case Model Survey.....	
2.2. Context Diagram.....	
2.3. User Requirements Definition.....	
2.3.1 Functional User Requirements.....	
2.3.2 Non-functional User Requirements.....	
2.4. System Architecture.....	
3.0. Specific Requirements.....	
3.1. System Requirements Specification.....	
3.1.1 Non-functional System Requirements.....	
3.1.2 Functional System Requirements.....	
3.2. System Model.....	

# 0. PREFACE

## 0.1. Purpose of This Document

This document is a generic document for use by IDA projects. It provides guidance and template material which is intended to assist the relevant management or technical staff, whether client or supplier, in producing a project specific document.

## 0.2. Definitions Acronyms and Abbreviations

**Context Diagram:** A diagram showing how this system fits with its external interfaces.

**System Architecture:** Set of conventions, rules and standards employed in a computer system's technical framework, plus customer requirements and specifications, that the system's manufacturer follows in designing the system's various components.

**Use-Case Model:** A diagram is a graphic depiction of the interactions among the elements of a system.

# 1. INTRODUCTION

## 1.1. Purpose

To develop a fully functional and user interactive desktop tool which can create an own library and help various data's to manage and compile efficiently.

## 1.2. Scope of Project

- ➡ Create own library
- ➡ Add different data types to their library
- ➡ Manage all stored data's
- ➡ Update their library

## 1.3. Glossary

DB - Database

Doc – Document

Msg – Message

GUI – Graphical User Interface

Interface - A device or program enabling a user to communicate with a computer.

System - A set of things working together as parts of a mechanism.

Stored - Keep or accumulate (something) for future use.

## 1.4. References

[PP]:        **Project Proposal**

[SPMP]:    **Software Project Management Plan**

[SRS]:     **Software Requirements Specification**

[www.wikipedia.org](http://www.wikipedia.org)

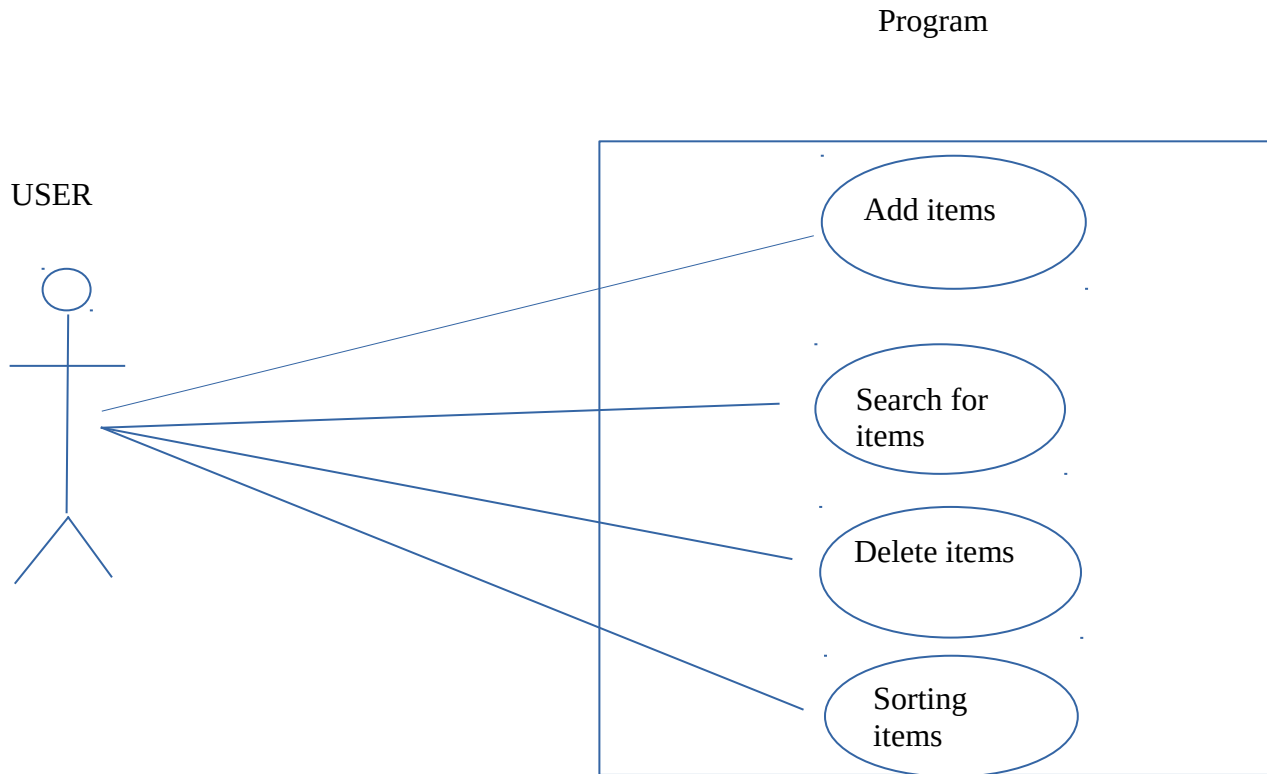


## **1.5. Overview of Document**

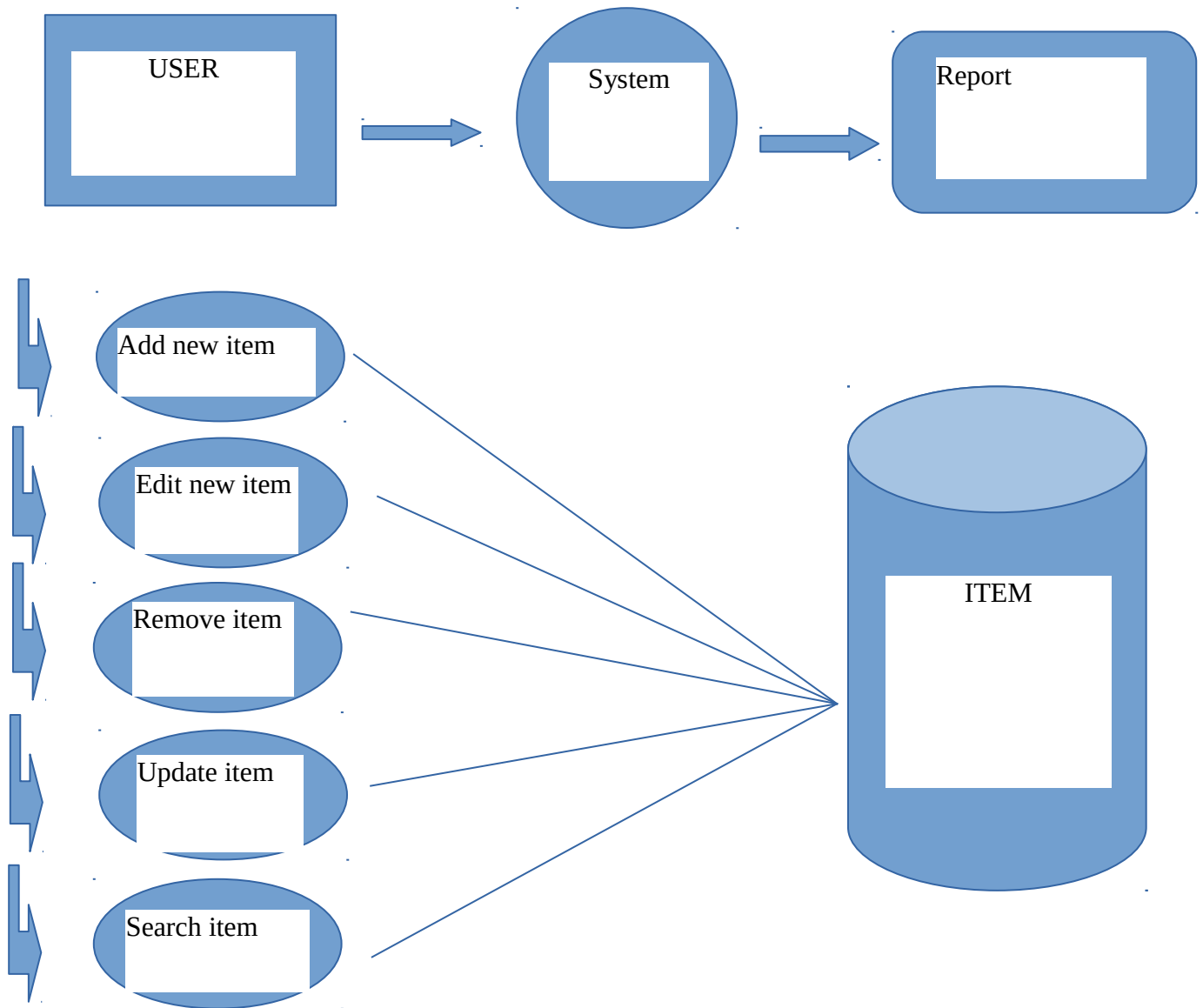
The overall system design objective is to provide an efficient, modular design that will reduce the system's complexity, facilitate change, and result in an easy implementation. This will be accomplished by designing a strongly cohesion system with minimal coupling. In addition, this document will provide interface design models that are consistent, user friendly, and will provide straightforward transitions through the various system functions.

## 2. Overall Description

### 2.1. Use-Case Model Survey



## 2.2. Context Diagram





## **2.3. User Requirements Definition**

The user requirement(s) document (URD) or user requirement(s) specification (URS) is a document usually used in software engineering that specifies what the user expects the software to be able to do.

### **2.3.1. Functional User Requirements**

User can create the content what they wants to. (Book, film, music etc.)

User can edit the content that they create.

User can sort their archives.

User can delete contents.

User can search the any content in their archives.

### **2.3.2. Non-functional User Requirements**

Our software is personal desktop application for user.

This software usable only one user each computer.

There is only one type of user and it is who want to make collections.

Software has not any login or sign page.

User have not any unique identity number and password.

The user can use the program without knowing the software.

Developers of software should introduce software.

User can make collection easily in software.

Software has basic interface for user.

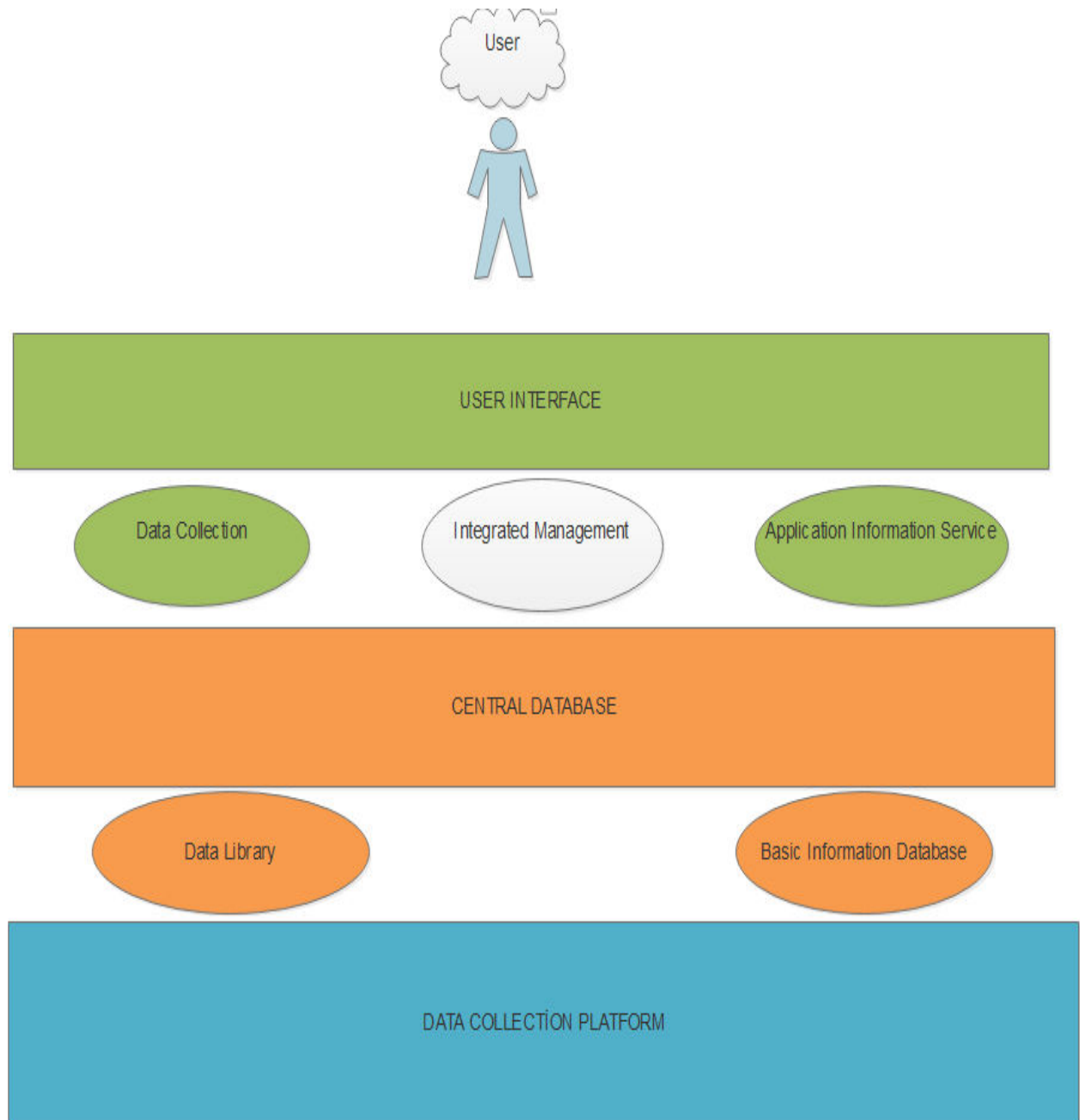
The software has a few work button and user can access only a few button.

User cannot use this software for bad purpose.

Program should show all available wanted query results for users to see anytime.

Program interface should be clear and understandable when a user wants to enter even many fields, meaning that should be usable.

## 2.4. System Architecture



## **3. SPECIFIC REQUIREMENTS**

### **3.1. System Requirements Specification**

#### **3.1.1. Non-functional System Requirements**

Non-functional system requirements describe how the system works. The definition for a non-functional system requirement is that it essentially specifies how the system should behave and that it is a constraint upon the systems behavior. One could also think of non-functional system requirements as quality attributes for of a system. They specify criteria that judge the operation of a system.

**Non-functional system requirements for this project are:**

- Program should make all available stored data possible to be shown immediately when user wants, meaning that response time should be fast.
- Database should be updated according to the user's desire without causing any error to the program or database, meaning that the program should be reliable.
- Load time must be no more than 2 seconds for users.
- The database update process must roll back all related updates when any update fails, meaning that should be recoverable.
- Database should accept all possible user entries, meaning that should be flexible.
- Program should show all available wanted query results for users to see anytime.
- Program should adjust itself for users to enter any wanted entry easily meaning it should be scalable.
- Program interface should be clear and understandable when a user wants to enter even many fields, meaning that should be usable.

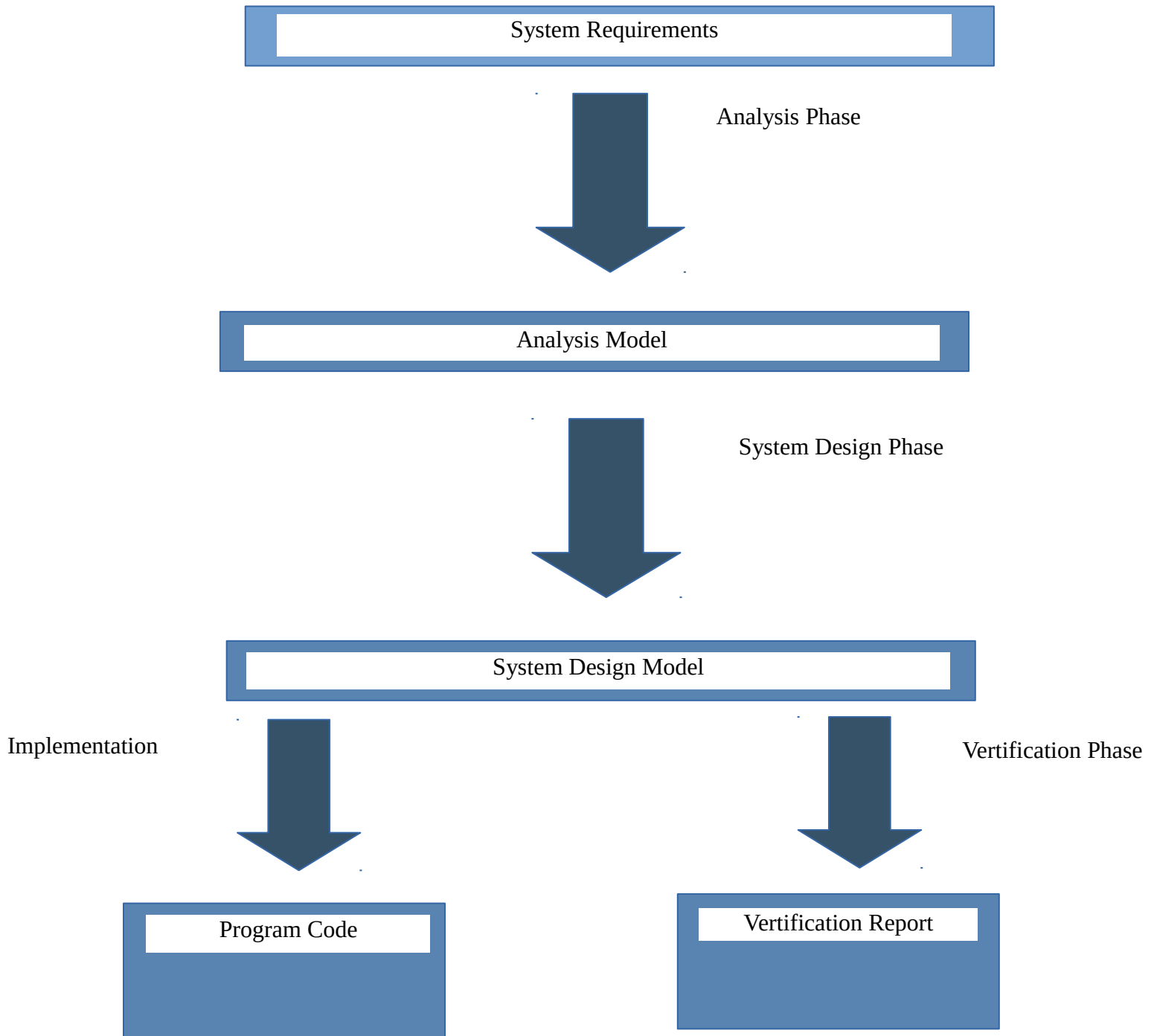
### **3.1.2. Functional System Requirements**

Functional requirements are the desired operations of a program, or system as defined in software development and systems engineering.

#### **Functional system requirements for this project are:**

- When user clicks on the 'new library' button, can create the item archive as wishes.
- When user clicks on the 'sort' button that made sorting the different types of archives.
- When user clicks on the 'delete' button program can delete immediately that user wishes.
- When user clicks on the 'edit' button user can change the items information.
- When user clicks on the 'search' button, user can search with the name of that item.

### 3.2. System Model



- ➡ **There are buttons for the access in user interface model.**
- ➡ **Project GUI part is creating by JavaFX.**