

## BuildForSDG #Single-Participant

### Documentation and Coding

<b>Team-Name:</b>	<b>Team-Kemicky</b>
<b>Participant Name:</b>	<b>Oluwakemi Omoshoro</b>
<b>Project Title:</b>	<b>Front-End Documentation and Coding for Book Management System in C#</b>
<b>Submission Date:</b>	<b>23 August 2020.</b>

2.1	INTRODUCTION.....	3
2.2	PROTOTYPING .....	3
2.3	DESIGNING .....	3
2.4	CODING.....	3
2.5	CONCLUSION .....	4
2.6	SIGN-OFF .....	4

## 2.1 Introduction:

This document shows the progressive design and development of the proposed Book Management System.

### Why a Book Management System?

Despite the development in Africa in Education Sector, there are still some part of education in High School and Tertiary Institutions that are yet to incorporate IT and Digital Technology in to their day to day routine(s).

Especially in public schools (Government Owned) and some private schools have challenges keeping track and inventory of Books and as well as keeping track of issuance of books to learners in who borrow book from the library.

Especially in some countries in Africa where procurement of internet facilities may be expensive, this project will assist education sectors to set up a **minimal offline digital book management system**.

***I am an IT Educator in a South Africa school, have experienced my school librarian struggling to keep up with inventory taking for newly procured books, old books and the ones issued to learners. Then I thought being an IT personnel and developer in my leisure time, I can create a Simple Book Management System that may help reduce the load and stress of keeping track and catalog of books in the school library.***

### Benefits of Book Management System:

The benefit includes:

- Time Saving to Catalogue books.
- Easy tracking of issued books to learners.
- Easy to take inventory of newly purchased books, old books and books that are yet to be procured.
- Better Storage of data.
- Installation and Maintenance cost is relatively low.
- Loss of Books in the school library will be reduced to minimal.

### Development of the Book Management System:

In this document, there will be a clear picture of the system and the types of coding used by the developer for the stakeholders (the client) in this case **BFSDG**, test and analyse if the System meets the minimum requirement(s) expected.

The system contains several sections of interactive components which is run by an engine code called **C# - programming language** and some which enables some of the static codes such as pictures to be animated to allow smooth user experience.

Furthermore, beauty is added to the project by using different types of fonts, styling mark-up languages to give the window form application an aesthetic look.

And Microsoft **Access database system** is used since it is a prototype project but any a database engine run on SQL server may be used.

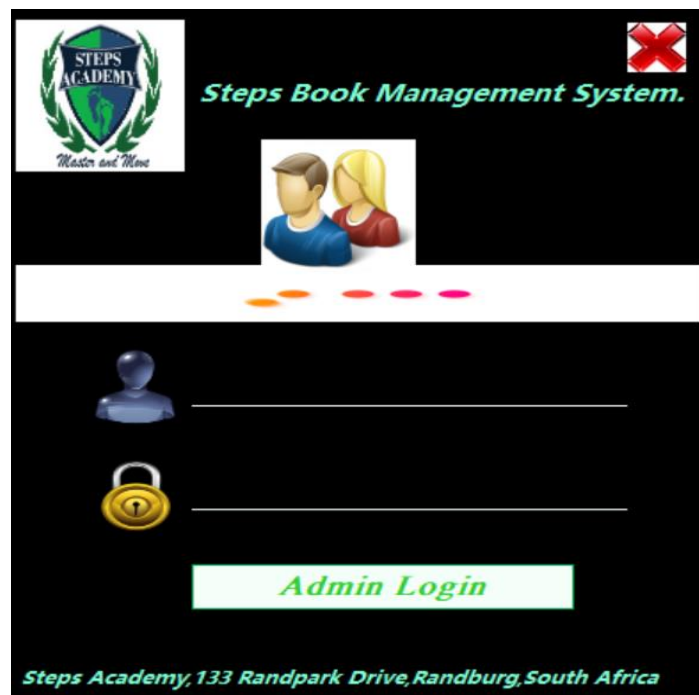
Keeping the client in mind, I have developed this designed the system with the following prototyped look, they may subject to change as the project progress

## 2.2 Prototyping:

### a. Prototype (Front-End Look of the System):



### Prototype (Finished Front-End Look of the System):



### Prototyping (minimal form for the system):

- Login
- Update/ Insert book purchase or issued.
- Number of books issued.
- Cataloging of book according to classes or subjects.

## Prototype 2: The Database in Access:

ID	username	password	Click to Add
1	admin	admin133	
2	shanel	shan211	
(New)			

After careful perusal, Prototype1 finished color was chosen because it has a clear beautiful soft well blended color and it more interactive.

## 2.3 Designing the codes (IDE: Visual Studio 2019):

Sample C# Code to create the windows app:

```

1  using System;
2  using System.Collections.Generic;
3  using System.ComponentModel;
4  using System.Data;
5  using System.Drawing;
6  using System.Linq;
7  using System.Text;
8  using System.Threading.Tasks;
9  using System.Windows.Forms;
10
11 namespace Book_Management_System
12 {
13     public partial class FrmBookManager : Form
14     {
15         public FrmBookManager()
16         {
17             InitializeComponent();
18         }
19
20         //coding the close button.
21         private void btnClose_Click(object sender, EventArgs e)
22         {
23             this.Close();
24         }
25     }
26 }

```

## 2.4 Conclusion:

Finally, this system is still in its initial stage of development, its final look may differ from the prototype.

## 2.5 Sign-off:

**BuildForSDG**

[Name], Project Client

OluwaKemi. Mary. Omoshoro

[Name], Project developer and participant

Date: \_\_\_\_\_

Date: 23/08/2020