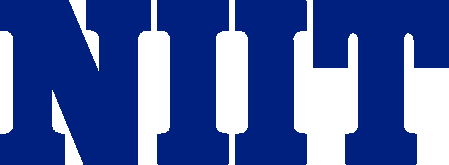
**PROJECT ON**

**Micro Finance Banking System**



**Programming in Java the Solution**



: Eke Ferdinand

: May 7, 2019

Name of Developer

Date of Submission

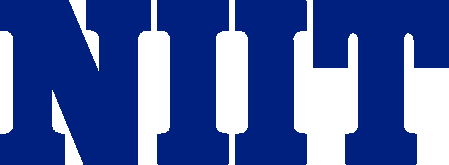
Name of the Coordinator: Mr. Agbola

: May 17, 2019

: June 7, 2019

Start Date End Date

**Micro Finance Banking System**



**CERTIFICATE**

This is to certify that this report titled *New Project ltd Database Management System* embodies the original work done by **Eke Ferdinand & Habib Hassan**in partial fulfillment of their course requirement at NIIT.

Coordinator:

*Mr. Agbola Matthew.*

**ACKNOWLEDGEMENT**

I would love to thank Mrs. Immaculata, Hon. Mrs. Maureen Tamuno, Miss Ebere Eke, Dr. Mrs. Genevive Eke, Mrs. Benadeth Eke for their ever dear morale and support all through the journey of this program. Also I would love to thank Mr. Mr. Agbola Matthew and other faculty members for each and every suggestion given to us in driving this project to the finish and above all God Almighty for making this program a success so far.

**System Summary:** The Micro Finance Banking System is a simulation of the day to day operations of a typical micro finance bank using a Nguruweke of Aboh Mbaise in Imo State as an implementation arena

The Micro Finance Banking System involves operations at admin and staff levels, with different capabilities designated to these two roles.

**SYSTEM ANALYSIS**

**DATABASE DESIGN**

**Database Name**: *fx\_banking\_niit*

**Number of tables**: *2*

**Table Names**:

1. *accounts*
2. *staff*

**PROJECT REQUIREMENTS**

**Admin**: should be able to create Users assigning either admin or staff role to them. Admin should be able to have data visualization of database data regarding accounts and staff. The admin is also poised with ability to delete an existing user in the case of dismissal or resignation of a particular user. The Admin can as well perform day to day account operations.

**User**: The User can only login to perform day to day account operations.

**FEATURES**

Based on the above project requirements, the desktop-app was built comprising of an admin portal where each admin can perform administrative tasks in the micro finance bank.

The basic administrative tasks include, creating and managing staff details, creating and managing accounts, performing account transactions and presenting visualization of data in charts to present at a glance statistical analysis of the database.

A second solution implementation to the project as required was the staff portal scene. In this scene, a staff with a user role can only login and be presented an environment where he/she can perform the day to day banking activities ranging from deposits to withdrawal as well as account to account transfer transactions.

**TABLE DESIGN**

|  |  |  |  |
| --- | --- | --- | --- |
| ***Field Name*** | ***Data type*** | ***Width*** | ***Description*** |
| *Acct\_id* | *int* | 11 (PK) | *Holder’s Account id* |
| *a\_fname* | *varchar* | *30* | *Holder’s Account First Name* |
| *a\_lname* | *varchar* | *30* | *Holder’s Account Last Name* |
| *a\_phone* | *varchar* | *25* | *Holder’s Account Phone* |
| *a\_email* | *varchar* | *30* | *Holder’s Account Email* |
| *a\_dob* | *varchar* | *10* | *Holder’s Account Date of Birth* |
| *a\_city* | *varchar* | *30* | *Holder’s Account City* |
| *a\_address* | *varchar* | *100* | *Holder’s Account Address* |
| *a\_gender* | *varchar* | *10* | *Holder’s Account Gender* |
| *a\_national* | *varchar* | *30* | *Holder’s Account Nationality* |
| *a\_acctNo* | *Int* | *11* | *Holder’s Account Number* |
| *a\_acctBal* | *float* |  | *Holder’s Account Balance* |

Accounts table

|  |  |  |  |
| --- | --- | --- | --- |
| ***Field Name*** | ***Data type*** | ***Width*** | ***Description*** |
| *sid* | *int* |  | *Staff id* |
| *S\_fname* | *varchar* | *20* | *Staff first name* |
| *S\_lname* | *varchar* | *20* | *Staff last name* |
| *S\_phone* | *varchar* | *20* | *Staff Phone number* |
| *S\_dob* | *varchar* | *20* | *Staff Date of Birth* |
| *S\_email* | *varchar* | *30* | *Staff Email* |
| *S\_pass* | *varchar* | 30 | *Staff Password* |
| *S\_address* | *varchar* | 100 | *Staff Address* |
| *S\_role* | *varchar* | 20 | *Staff Role* |

staff table

**VALIDATIONS PERFORMED**

|  |  |
| --- | --- |
| ***Validation Required*** | ***Method(s) Used For Validation*** |
| *Acct\_id should be auto generated & must be unique.* | *Auto Increment, Primary key constraint* |
| *a\_fname,a\_lname,a\_phone,a\_email,a\_dob,a\_city,a\_address,a\_gender,a\_national,a\_acctBal* | *NOT NULL clause in the CREATE TABLE statement* |
| *a\_acctNo* | *UNIQUE constraint* |

|  |  |
| --- | --- |
| ***Validation Required*** | ***Method(s) Used For Validation*** |
| *sid should be auto generated.* | *Auto Increment, Primary key constraint* |
| *S\_fname,S\_lname,S\_phone,S\_dob, S\_pass,S\_address,S\_role* | *NOT NULL clause in the CREATE TABLE statement* |
| *S\_email,* | *UNIQUE constraint* |
|  |  |
|  |  |
|  |  |

*Details of the Generated Report(s)*

**REPORTS OUTLINE**

|  |  |  |  |
| --- | --- | --- | --- |
| ***Report Name*** | ***Report Type*** | ***Description*** | ***Tables/Queries Used*** |
| *Accounts and Staff details report* | *Query Output* | *This report displays the staff,*  *Account details for a given account holder & account number.* | *account,*  *Staff.* |

**CONFIGURATION**

|  |  |  |
| --- | --- | --- |
| **Hardware: HP** *PC compatible with Core-i5 processor, 8-GB RAM, and 640GB of Hard disk*  **Operating System:** *Microsoft Windows 10 with Service Pack 2* | | |
| **Software:** *MySQL, Java 8, Netbeans 8.2* | | |
| **PROJECT FILE DETAILS** | | |
| **S.No** | **File Name** | **Remarks** |
| *1* | *Fx\_banking\_niit.sql FX\_BankingNIIT* | *SQL Server database that contains tables constraints, and queries.*  *Netbeans IDE contains the Model View Controller architecture of the project.* |