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Development of an Enhanced Online Pension Management System

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ABSTRACT

In Nigeria, the delay in payment of pension and gratuities has brought untold hardship and death to many retirees, thereby making retirement something that is dreaded by workers. This problem is further compounded by lack of planning and management of post-retirement epoch and conditions. In most cases the following one or more problems are encountered such as non enrolment of eligible pensioners into the payroll, irregular payment of pension, non- payment of pensions, omissions and short payment of monthly pension. Despite the fact that different bodies were created to carry out different activities, still monies of retirees have not been able to get to its rightful destination as at when due. There is therefore the need to develop an online pension management system to take care of the problems and improve on the available scheme. The aim of this work is to develop an online pension management system that will be able to carry out registration and verification exercise online, thereby reducing stress and ensuring that monies get to its destination as at when due, with provision of an enhanced security system in the database to prevent an insider and outsider from manipulating data in the system, This will build a common interactive database where the user, the Admin and Super Admin share common information in the database and to some extent making it transparent. The methodology adopted is Object Oriented Analysis and Design Methodology (OOADM). The language used for coding this work is a combination of ASP.NET, which uses C Sharp at the back end and HTML, Java Script and Cascading Style Sheet (CSS) at the front end. Performance evaluation was carried out in all the testing process including unit and general testing. The performance of this software is justifiable because all the actual results were achieved. For sustainable development of the Nigerian Public and

Civil Servants, this work will be very significant to the National Pension Commission (PENCOM) and Pension Fund Administrators of other establishments because it will help to reduce cost and stress during verification exercises because retirees do not need to travel to and fro for verification.

1.1 Background of Study

Pension is simply an amount set aside either by employer or employee or both to ensure that at retirement there is something for employees to fall back on as income. Fapohunda (2013) Pension is also the amount paid by government or company to an employee after working for some specific period of time, or considered too old or ill to work or have reached the statutory age of retirement(Odia &Okoye 2012). It is equally seen as the monthly sum paid to a retired officer until death because the officer has worked with the organization paying the sum (Adams, 2005).

Pension consists of lump sum of payment paid to an employee upon his disengagement from active service. According to him payment are usually in monthly installments. He further stated that pension plans may be contributory or non-contributory; fixed or variable benefits; group or individual; insured or trustee; private or public, and single or multi-employer (Ozor, 2006). Nafisat (2014) discussed the two patterns of reforms which have been observed in both Eurpean Union and European Union Accession countries. These are: the ‘parametric’ and ‘paradigmatic’ styles.The Parametric reform, happening in several countries including, the Czech Republic, France, Germany, Greece and Slovenia, is an attempt to rationalize the pension system by seeking more revenues and reducing expenditure while expanding voluntary private pension provisions. The paradigmatic reform which is often called a ‘three-pillar reform, is an attempt to move away from the monopoly of a PAYG pillar within the mandatory social security system. A paradigmatic reform is also a deep change in the fundamentals of pension provision typically caused by the introduction of a mandatory funded pension pillar, along with a seriously reformed PAYG pillar and the expansion of opportunities for voluntary retirement savings. This is ongoing in Bulgaria, Croatia, Denmark, Hungary, Latvia, the Netherlands, Poland, Sweden and Chili. However, the Nigerian pension reform does not encourage increased pool of pension funds through tax advantages by encouraging voluntary pension contribution as indicated by the elements of parametric reform. Rather, the Pension Reform Act puts ‘voluntary contribution’ above the statutory rates of contribution to taxation at the point of withdrawal.

There had been traditional ways of protecting and caring for those who have given meritorious service to the country. This was as a result of the extended family system, whereby the younger ones whom they have assisted, in return takes care of them in respect to food, clothing and health. However, as a result of modernization and so-called Western civilization, the system broke down. The government introduced a pension scheme in the early 1970s, which was fully implemented in the year 1979. This decree provided for a pension scheme that was funded and non-contributory. Its benefits were largely related to earnings and relied on the replacement ratio. This meant that the pension benefits and gratuities were functions of the number of pensionable years and the income earned while in service. The government paid pension benefits from the consolidated revenue fund. The 1979 Pension Decree increased the retirement age to 60 years or 35 years in service, subject to 3 months' notice in writing or payment of 3 months' salary in lieu of notice. Here, consideration is given to those in the higher institutions of learning, as their retirement age was increased to 65 years or 35 years of service.

The structure of this pension scheme is pay as you go (PAYG) with defined benefit, indicating that it is mainly funded, given the fact that the benefits that were paid during a certain period were financed by the government from the consolidated fund and not the employees.

The 1979 pension scheme covers professions and bodies such as the police, Federal and State Ministries and Departments, National University Commission, University Teaching Hospitals, Public Teaching Service, Local Governments and other Parastatals of the government. However, despite the laudable objectives for which the pension scheme was put in place, it has not had a significantly positive impact on the welfare of pensioners. This was as a result of problems such as the inflation rate, which has depleted the real value of the benefits; the high dependency ratio in the country; fraudulent activities of the Pension Board, inadequate Pension coverage, erratic budgetary allocation and so on. Owing to these problems, pensioners continuously protested to the authorities against their poor conditions and welfare, and thus called for a reform in the pension scheme. As a result of the continuous pressure on the government to review the current pension scheme, the Federal Government of Nigeria introduced a reform to the pension scheme called the '2004 Pension Scheme', backed by an Act of the parliament called 'The New Pension Reform Act 2004' of the Federal Republic of Nigeria which established a funded system based upon personal accounts.

The general objective of the 2004 Pension scheme is to ensure that every person who worked in either the public service of the federation, federal capital territory or private sector receives his/her retirement benefits as at when due. It seeks to introduce a pension system that is 'financially sustainable, simple and transparent, less cumbersome and cost effective' (Demaki & Dedekuma, 2006).

Ahmed, Abayomi & Nureni (2016). See's the new Pension scheme as a fully funded Pension scheme that generates adequate funds through certain percentage of contributions from monthly earnings by both employee and employer through a form of savings. Another purpose of the new Pension scheme is to de-emphasize the lump-sum payment of gratuities, removes pension administration from the public sector and places it squarely in the hands of financial institutions. Efficient pension administration now depends on the efficiency of the Nigerian financial institutions, which calls for well-managed banks, insurance companies, pension fund administrators and custodians and an effective regulatory framework in the money and capital markets. (Moses and Okoroafor, 2014).

Alicia, Jean-Pierre & Caroline (2015) in their study finds out that participants are responsible for their own investment strategy. The supposition is that individuals are not very good at investing their own money and face high fees. The question is whether this supposition is borne out by facts. After research, they concluded that base on investment returns, defined benefits versus contribution plans, defined benefit out-performed contribution plans. The fundamental question that still needs to be addressed is whether the provisions of the 2004 pension reform Act has integrated adequate safety nets against the observed inadequacies of previous pension schemes and what are the challenges that are negatively affecting the scheme?

After much research, some of the challenges in the 2004 pension scheme are: incomplete data capturing, fraudulent activities of Pension Board, non-enrolment of eligible pensioners into the payroll, irregular payment of pension, non-payment of pensions and omissions and short payment of monthly pension. Inorder to facilitate the payment of retirees and making sure these monies gets to its rightful destination as at when due, an enhanced Pension scheme management system will be designed that should be capable of enrolling and verifying Pensioners online, storing of adequate and correct data in the database, creation of a common database where the user (employee/retiree)admin (PFA) and super admin (Pencom) share

common information, alongside is the user trail which stores all activities in database making it transparent and can only be seen by the super admin (Pencom) but cannot be modified by anyone. This will go a long way to streamline fraudulent activities in the inner house or from an outsider.

The system will be capable to forward the site for verification to retirees who with their user ID and password log in and be verified with fingerprint authentication irrespective of wherever they are. The success of the new scheme will to a large extent depend on the regulatory and supervisory capacity of the Commission as part of the major reasons for the failure of previous schemes in both public and private sectors which was as a result of lack of comprehensive regulatory framework for the pension industry.

1.2 Aim and objectives of the Study

The aim of this study is to design and implement an enhanced Pension scheme Management System that will:

a. Enrol employees and capture data of retirees online using data from personnel department
b. Verify employee/retiree using their unique User Personal Identification Number and Biometric
c. Allow retirees to be verified online at their base location
d. Provide improved security features that will block out manipulation and corruption.

1.3 Analysis of the Existing System

The old pension scheme was introduced by the government early 1970s and was implemented in the year 1979. The structure of this pension scheme is pay as you go (PAYG) with defined benefit, indicating that it is mainly funded, given the fact that the benefits that were paid during a certain period were financed by the government from the consolidated fund and not the employees. For decades, pension and other social benefit matters have received significant attention in many countries. The challenges associated with the existing pensions in these countries led to changes in the ways pension assets and benefits were managed and distributed to the target groups, especially retirees and ‘senior citizens’. One of the challenges of the defined benefit was its dependence on budgetary provisions from government for funding. The scheme became largely unsustainable due to lack of adequate and timely budgetary provisions. Secondly pension administration was largely weak, inefficient and cumbersome due to poor staffing and equipping that led to poor record keeping as a result, pensioners had to spend years before their retirements benefits were paid (Smart, 2012). Furthermore Omoni (2013) observed that the Private sector schemes were

characterized by very low compliance ratio due to lack of effective regulations and supervision of the system. Thus, many private sector employees were not covered by any form of pension scheme

Due to lack of reliable records of pensioners, huge amount of resources on what became yearly verification exercises were expended which did not result into the timely and efficient payment of pension.In the private sector, on the other hand, many employees were not covered by the pension schemes put in place by their employers and many of these schemes were not funded. Besides, where the schemes were funded, the management of the pension funds was full of malpractices between the fund managers and the trustees of the pension funds. In view of the fact that the past pension schemes in the country were bedevilled by multifarious problems, this sad scenario necessitated a re-think of pension administration in Nigeria by the administration of former President Olusegun Obasanjo (Eme et.al, 2014). Therefore, Nigeria joined the reformist countries in 2004 to adopt the Direct Contributory scheme. Prior to this, the country had practiced the Direct Benefit Scheme in the public sector in which the government at all levels shouldered the full cost of pension and gratuity payment of workers.

It will be recalled that afterwards The New Pension Reform scheme was also adopted in Nigeria. The Senate on the 23rd March 2004 passed the Pension Reform Bill and the President signed it into law on the 25th of June 2004. In July 2004, Nigerian government introduced Contributory Pension System (CPS) in order to replace the old Defined Benefit (Pay-As-You-Go) system Tsado & Gunu (2011) evaluates investment decisions in Nigerian PFAS'based on both qualitative and quantitative factors. The result of the study indicates that three factors were considered by PFA managers when making investment decisions. They include economic, risk and security of real estate factors. The study concluded that national pension commission should be flexible in its regulatory restriction of investment areas of PFAs to enhance a better investment decision making process. According to Edogbanya (2013) the Pension Reform Act 2004 was also established to address the manifested loopholes in the old defined benefit pension scheme and provide adequate resources to retirees after retirement from the service

The implementation of the Act began on 1st July 2004. The Act has brought about fundamental changes to the structure of leaving service benefits and the way they are

provided for. The Act in section 1 establishes a contributory Pension Scheme for any employment in the Federal Republic of Nigeria. The objective of the scheme is to ensure that every worker (public or private) receives his retirement benefit as at when due, assist improvident individuals save for their old age and establish a uniform set of rules for administration and payment of retirement benefits. Every employee will choose any Pension Fund Administrator (PFA) of his choice, maintain a Retirement Savings Account (RSA) and each employee shall neither have access to the account nor have any dealings with the custodian with respect to the Retirement Saving Account except through the Pension Fund Administrator. The employer shall deduct at source the monthly contribution of the employee and remit an amount comprising the employees' contribution and the employers' contribution to the custodian, specified by the Pension Fund Administrator of the employee to the exclusive order of such Pension Fund Administrator not later than 7 working days from the day the employee is paid. The custodian shall notify the Pension Fund Administrator who shall cause the Retirement Saving Account of such employee to be credited.

The 2004 Pension Reform Act streamlines and unifies the two aspects of pensions and retirement policies that have dominated the two sectors. It also promises a radical change that would revolutionalize pension administration in the country. It is a fully funded contributory scheme for both the public and private sector employees. Within the private sector, it covers employees of all organizations in which there are five or more employees. The general objective of the new pension reform is to ensure that every person who worked in either the public service of the federation, federal capital territory or private sector receives his/her retirement benefits as at when due. It seeks to introduce a pension system that is 'financially sustainable, simple and transparent, less cumbersome and cost effective'(Demaki and Dedekuma 2006). Despite the promises of the reform, the nagging question has remained whether the contributory scheme has effectively removed the potentiality of failed pension plan in the country? To what extent has it addressed the key problems of the past plans such as poor administration, bankruptcy, delivery a poverty pension and corrupt practices, to mention a few. (Oscar 2012).

Mausibau (2012) in his study evaluates the impact of the contributory pension on employee savings in Nigeria 2010 using Oyo state public workers as a case study. It seeks to determine the level of awareness of the public sector workers towards Contributory Pension Scheme and the impact of Contributory Pension Scheme on workers' savings. Empirical analysis

revealed a significant relationship between the level of awareness of respondents and their savings. However, there is no significant relationship between Contributory Pension Scheme and savings. Both the way a record of pensioners in the public sector is kept and the procedure for payment of pension create avoidable problems. In some establishments no accurate record of actual pensioners exists. Corruption breeds more in the absence of facts and figures. This claim was dramatized in bold relief when verification of military pension account led to the discovery of 23,000 fake pensioners on the Army pension roll. Another weakness found in the public sector system concerns the less than dignifying manner with which the senior citizens are treated. One observes how weak and frail-looking elderly citizens are compulsorily required to travel long distances to the point of pension payment. Worse still, they are left, under inclement weather for long hours and sometimes for days, before collecting their stipends. Some pensioners were claimed to have died while standing in a queue waiting to receive pension money.

1.4 Methodology Adopted

The methodology adopted for the design of the new system is Object Oriented Analysis and Design Methodology (OOADM). Object Oriented Analysis is a technique used to study existing objects to see if they can be reused or adopted for new use and define new or modified objects that will be combined with existing objects into useful computing application. Object Modeling (OM) is used to identify objects within the system environment and the relationship between those objects.

1.5 Analysis of the existing system

In the existing system, employee are expected to fill their data into the Retirement savings account form (RSA),which is classified into Personal Information, Employment History , Employment Details , Monthly Contribution , and Primary Next of Kin. Passport is affix to the form together with the capturing of finger prints.

- Personal Information : Retiree is expected to fill in his/her Names , State of Origin , Local Government Area, Date of birth , Residential Address, Permanent Home address Phone Number, email.
- Employment History: This comprises of Entry grade level, Current grade level, Date of first appointment.
- Employment Details: Name of Current employer, Employer Phone, employer email address, employer Head office address, Town , Department,

- Monthly contribution: Salary Structure, Annual basis salary, employer Contribution, Other pensionable allowance , Total contribution
- Primary Next of kin: Names, Date of Birth, Residential Address, Town, State, Phone number, email.

After filling the form, Pension fund Administrators collect the data and forward it to Pension Commission (PENCOM) who processes the data and forward PIN number to employees after six weeks.

During verification exercise, retirees are expected to go to their various zones for verification which last for weeks and days depending on the population of the retirees. Most retirees spend money going to their various zones for verification without achieving their aim.

1.6 Data flow Diagram of the Existing System

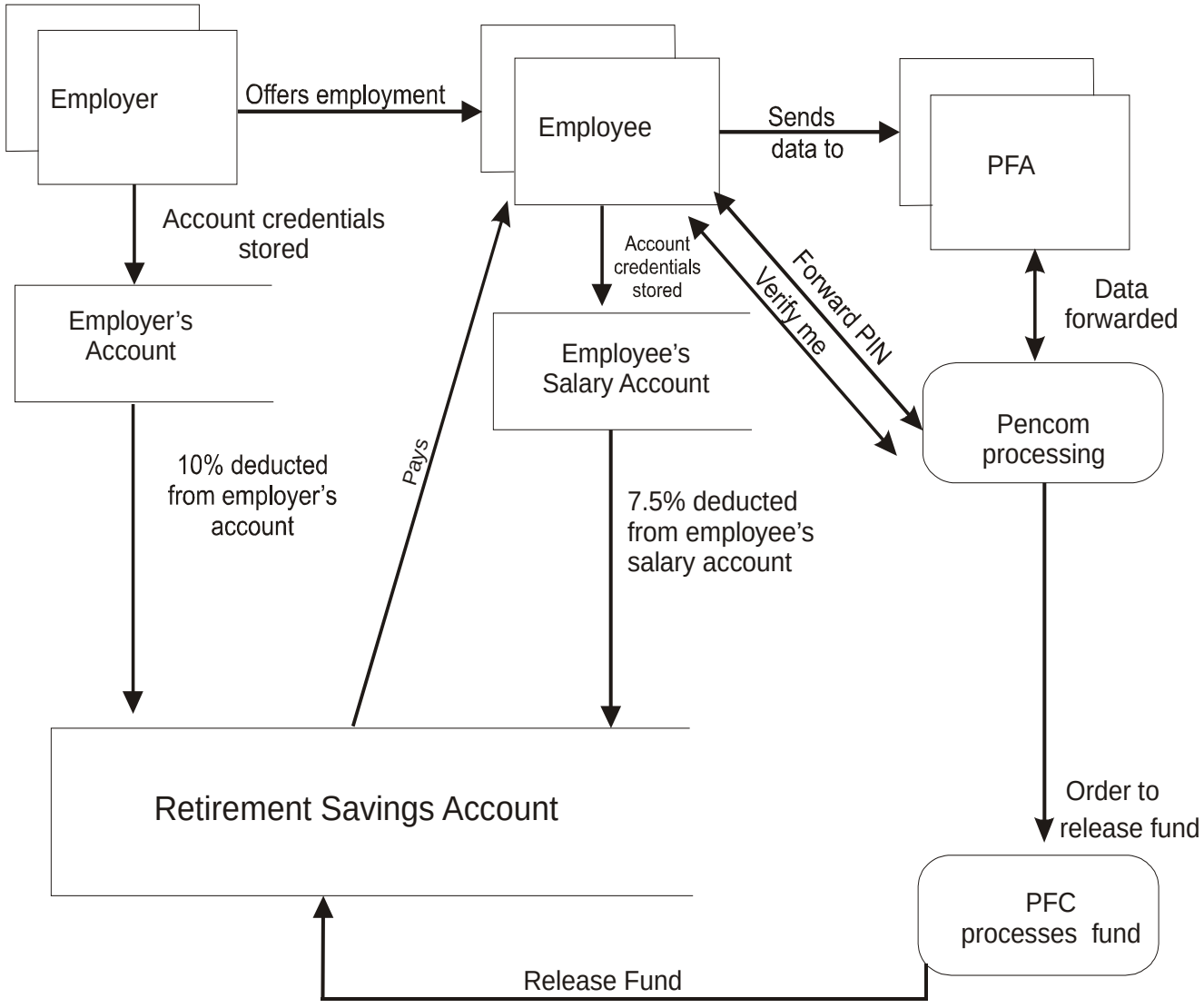

Figure 1: Dataflow Diagram of the existing System

1.7 Analysis of the Proposed System

As a result of the problems encountered in the existing system, in the proposed system, the institution or personnel departments forwards the data of his employees to PFAs, who enter the data online by themselves with employees passport attached to his data. Employee are expected to login with his user name created by Pencom, requesting for PIN.

The PIN is then forwarded to employee's phone, which he uses to check whether his data is correct. If his data is not correct he forward query which calls for immediate attention. As the PFAs worked with the given information in the system, the retiree is expected to login using his initial PIN of registration to verify his/herself. If the retiree is cleared, the PFA notifies Pencom who then send messenge across to Pension Fund Custodians to release Fund to Retirees Retirement Savings Account

2.2 Data flow Diagram of The New System

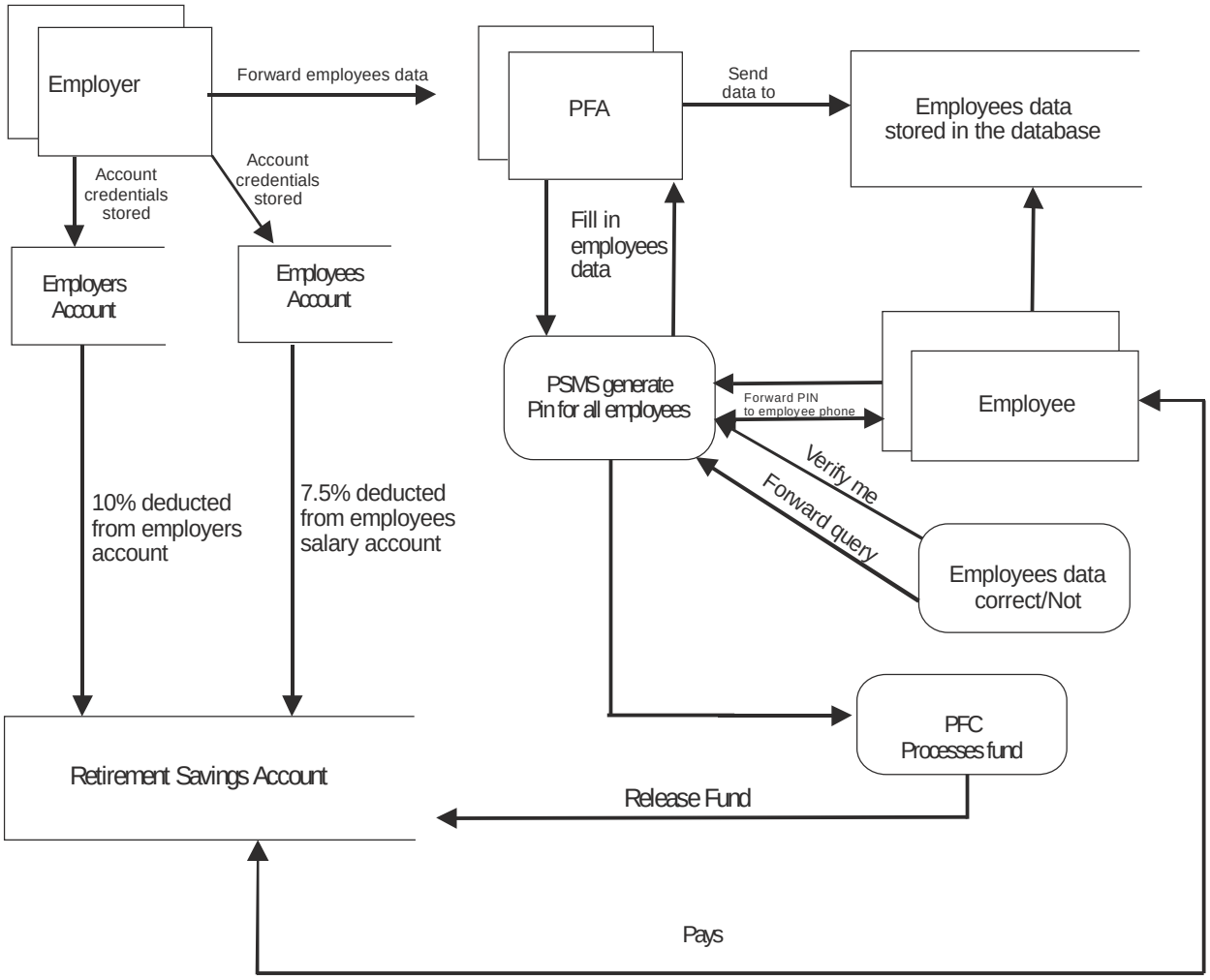

Figure 2: Dataflow Diagram of the Proposed System

1.8 Content Model Diagram of the New System

Content model diagram is a representation of the types of content and their inter-relationship. It appear to be the black sheep of information architecture, in addition it is the process of creating content models that describe structured content.

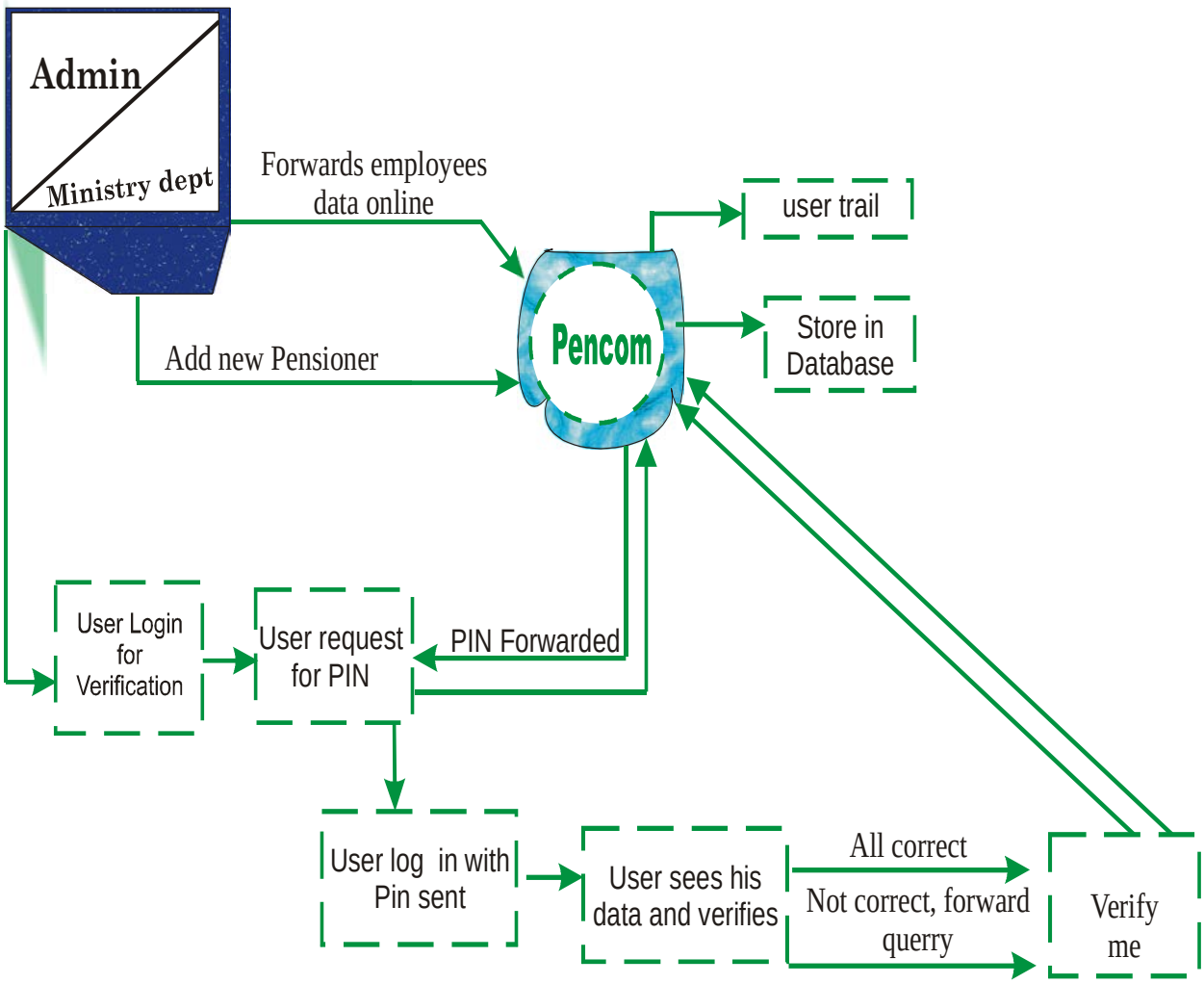

Figure 3: Content Model Diagram of the Proposed System

1.9 High level Model of the Proposed System

High–level model describe the architecture that would be used for developing a software product. The architecture diagram provides an overview of an entire system, identifying the main components that would be developed for the product and their interfaces.

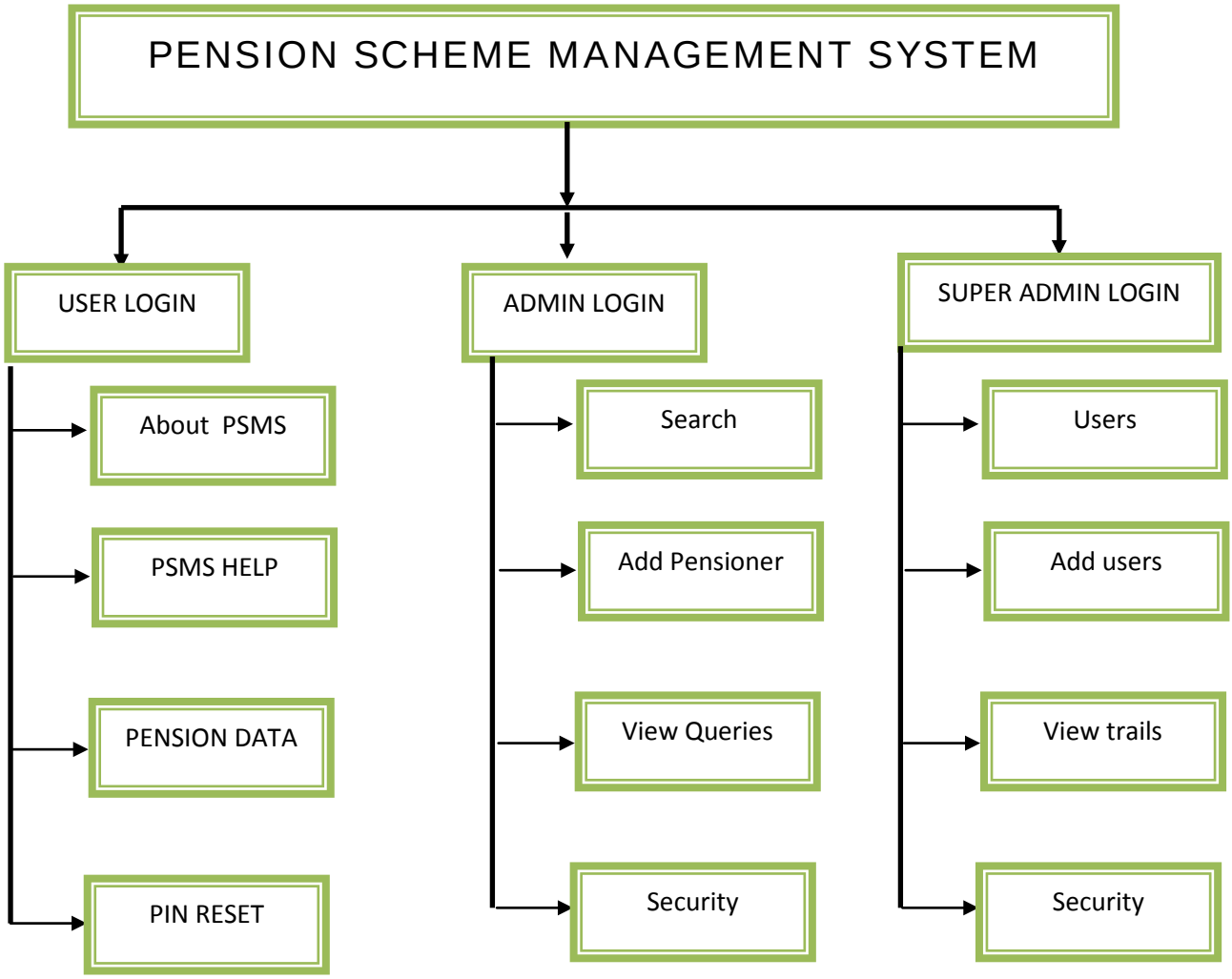

Figure 4: High Level Model of the Proposed System

2.0 Sample of Database Design and Structure

Table 1: Members_Official Table

S/N	Field Name	Field Type	Default
1	Idx	int(11)	AUTO_INCREMENT
2	Penid	varchar(100)	*None*
3	Ministry	varchar(100)	*None*
4	Department	varchar(100)	*None*
5	Rank	varchar(100)	*None*
6	Worklga	varchar(100)	*None*
7	Gl	int(2)	*None*
8	Step	int(2)	*None*

9	Bankname	varchar(100)	*None*
10	Bankac	varchar(100)	*None*
11	Bvn	varchar(100)	*None*
12	Lastpromotion	Date	*None*
13	Retirement	Date	*None*
14	Employed	Date	*None*
15	Pay_state	Float(10,2)	*None*
16	Pay_fed	Float(10,2)	*None*
17	Pay_gratuity	Float(10,2)	*None*

2.1 Program Modules Specification

Table 2: Program Module

Modules	Description
User Module	The function of this module is to enable the pensioner view his/her records and communicate with the pension admin officers directly.
Admin Module	The admin module is used by the pension staff to add and edit pensioners' information as well as communicating with the pensioners and answering queries.
Super Admin Module	The super admin module is the only one that can access the User Trail and view Admin activities. This helps mitigate internal fraud and unauthorized alterations. The super admin also creates and edit Admin accounts
User Trailer	This is a module that runs in the background and not directly tied to any module. It logs every activity carried out by the Admin users and stores them in a read-only database.

a) Input Specification

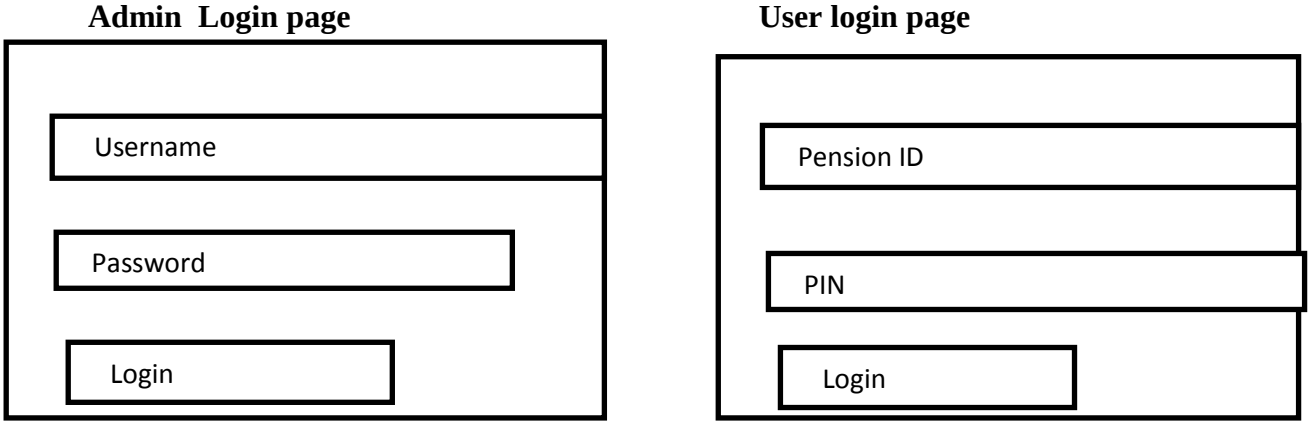

Figure 5: Admin/User Login

2.2 Output Specification

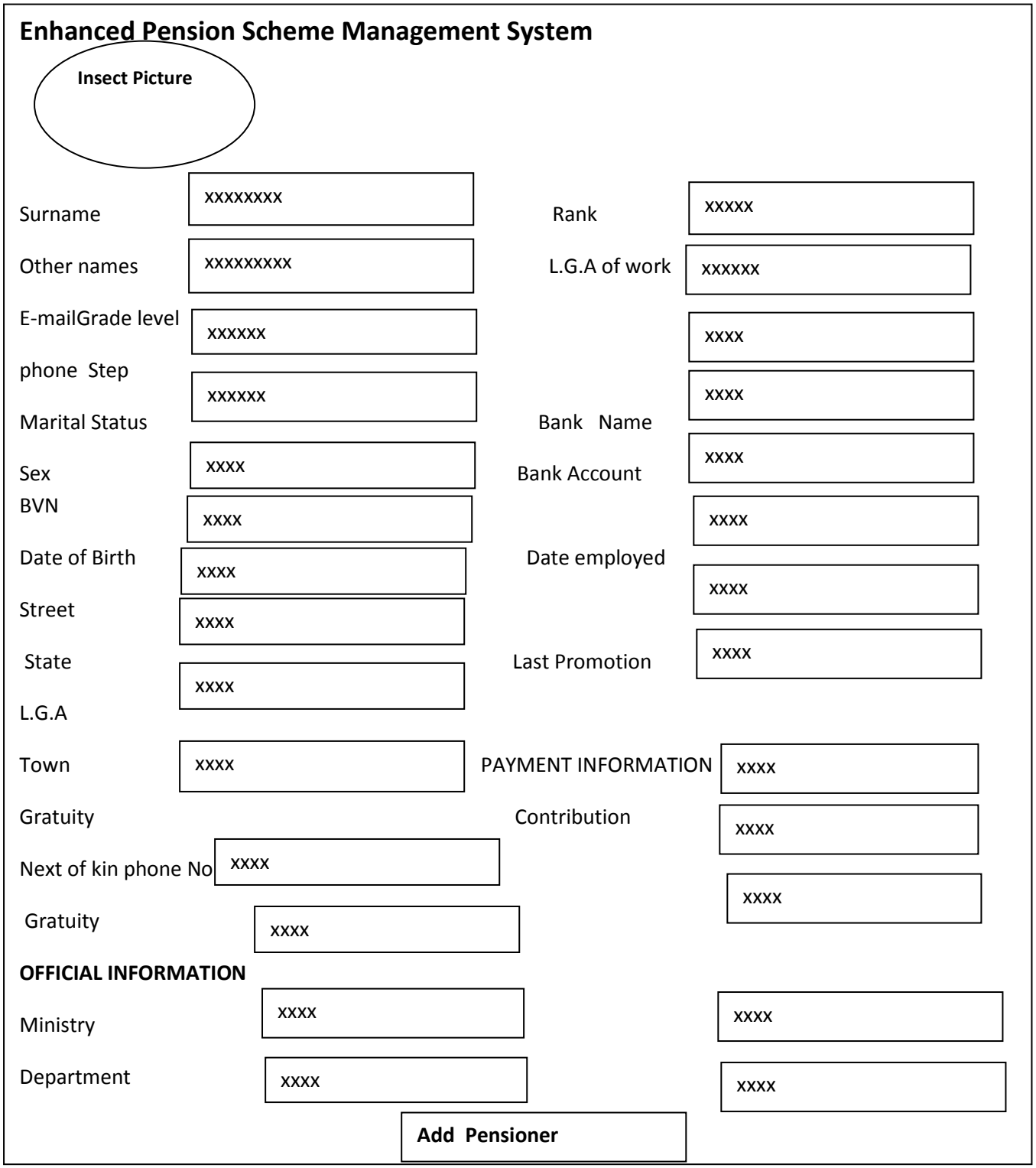

Figure 6: Output Specification

2.3 Overall object diagram of the new system

a. Use Case Analysis

This is a technique used to identify the requirements of a system. It is a collection of actors

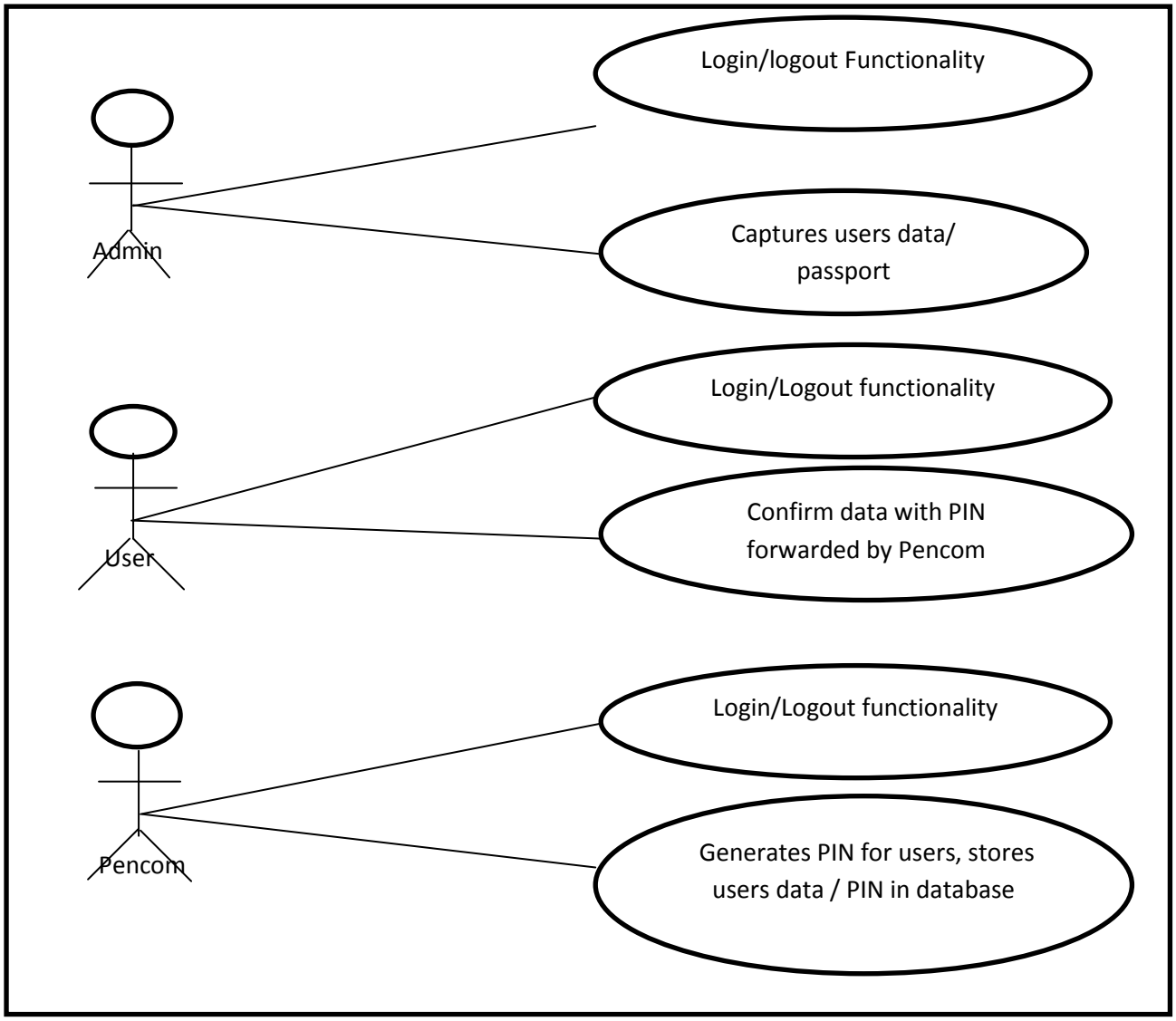

Figure 7: Overall object diagram of the new system

2.4 Activity Diagram of the System

This is another important diagram in Unified Markup Language (UML) to describe thedynamic aspects of the system. It is basically a flowchart to represent the flow from one activity to another activity. This activity can be described as an operation of the system.

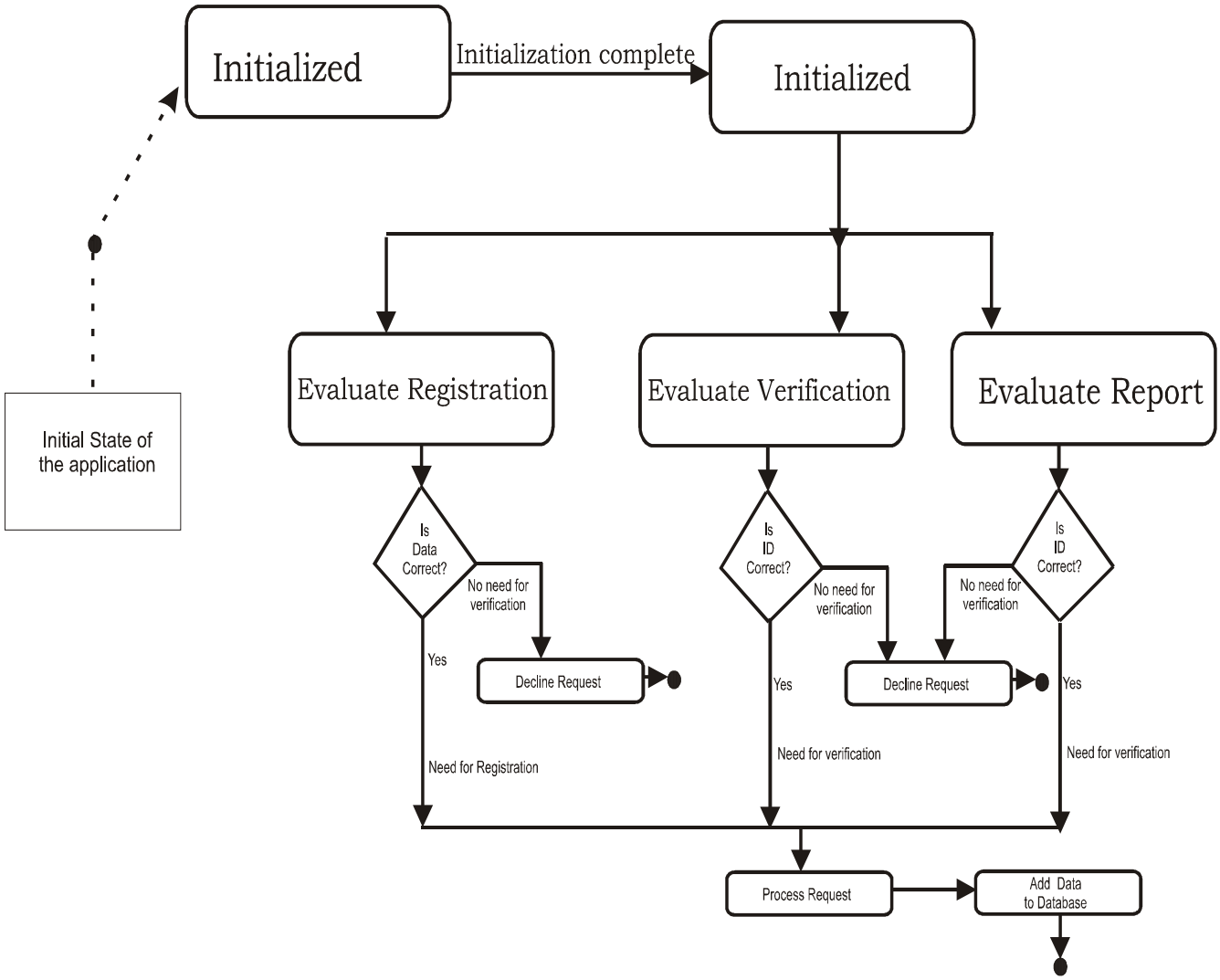

Figure 8: Activity Diagram of the System

2.5 Activity Diagram of Registration in the Proposed System

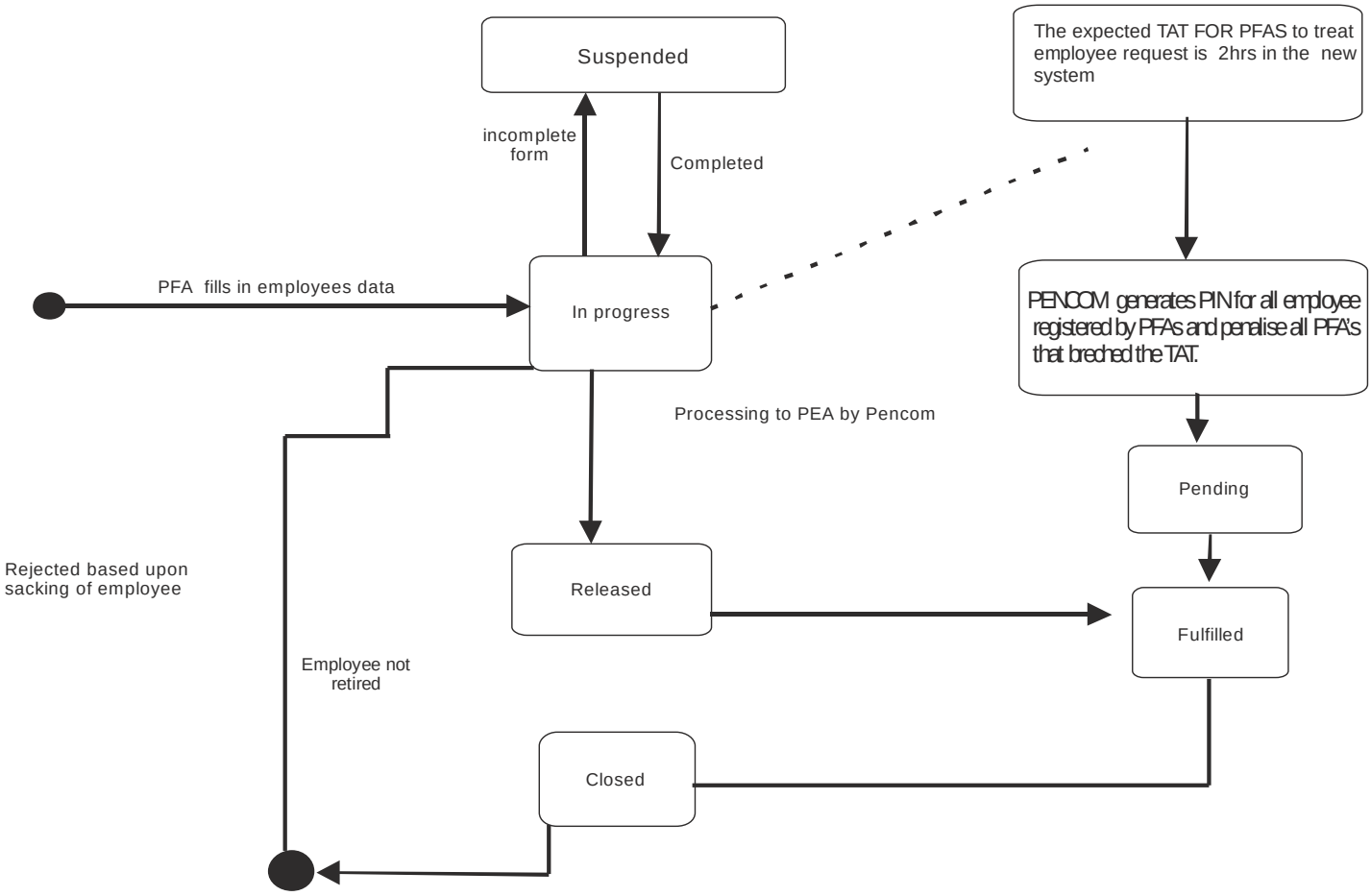

Figure 9: Activity Diagram of Registration in the Proposed System

2.6 Activity Diagram of Verification in the Proposed System

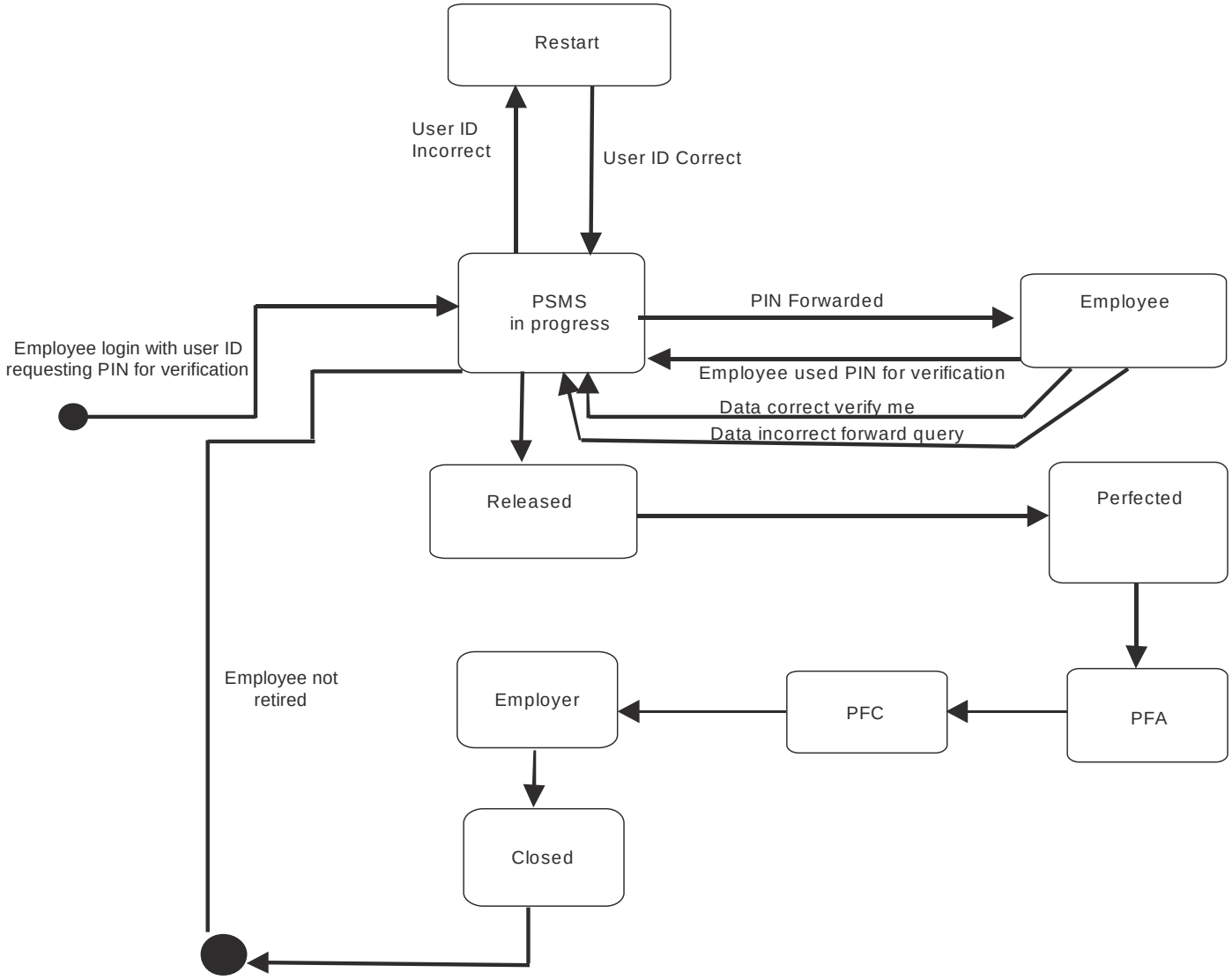

Figure 10: Activity Diagram of Verification in the Proposed System

2.7 The Class Diagram for the Proposed Online System.

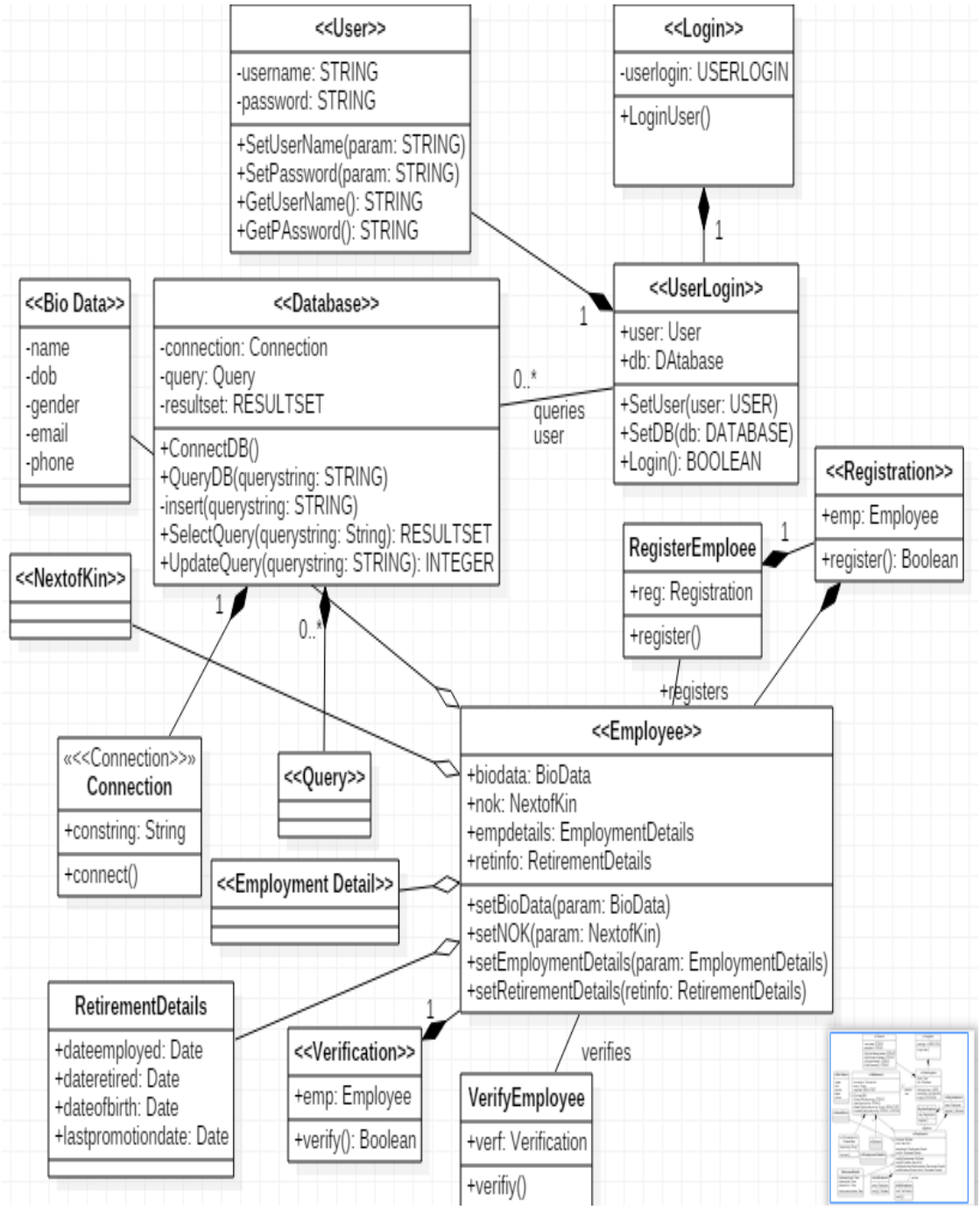

Figure 11: The Class Diagram for the Proposed Online System..

2.8 Sequence Diagram of the Registration Process

A sequence diagram is an interaction diagram that shows how objcets operate with one another and in what order. In other word, a sequence diagram shows interactions arranged in time sequence. This is a sequence diagram illustrating registration process.

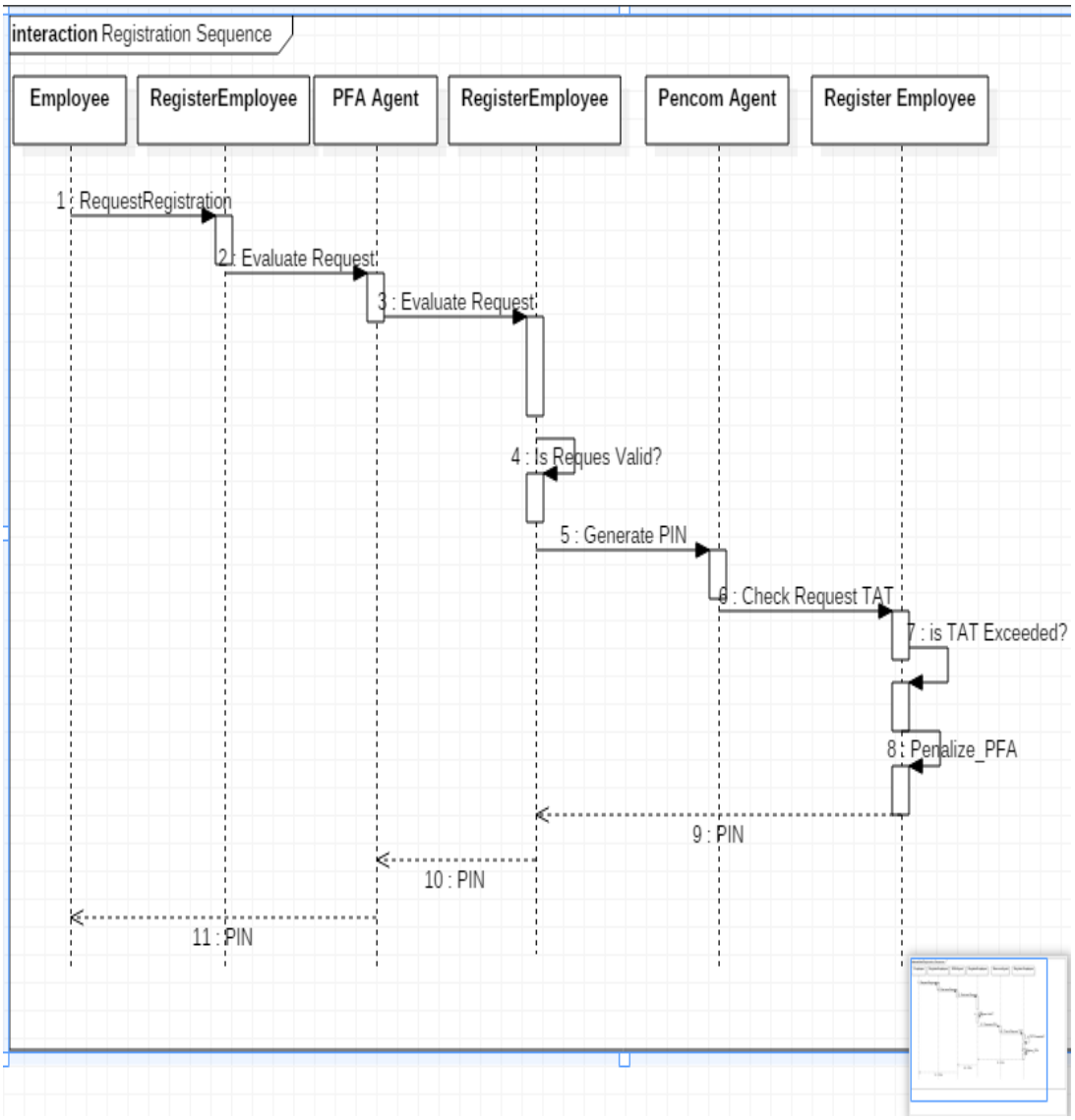

Figure 12: Sequence Diagram of the Registration Process

2.9 Algorithm

An algorithm is a step by step procedure for solving a given problem or accomplishing some end .It can be represented in a pseudo code or flowchart.

A pseudo code is an informal language way of programming description that does not require any strict programming language syntax.

Admin Login Module Pseudo Code

1. Prompt admin to enter username and password

2. If username and password in database THEN

a. Grant access into the admin dashboard

b. Prompt admin to add new pensioner

3. Else

b.Return to step 1

User login Module Pseudo Code.

1. Prompt user to enter pension ID and PIN

2. If user pension ID and PIN is in database THEN

a. Grant access into *user dashboard*

3. Else

b. Return to step 1

Super Admin Login Module Pseudo Code

1. *Prompt super admin to enter username and password*
2. *If username and password in database THEN*

a. Grant access to add new admin and view all trails

3. *Else*

b. Return to sstep 1

3.0 Data Dictionary

Table 3: Data Dictionary for Members_Official Table

Short name	Long name	Description
Idx	Identity	Stores the unique identification for the rows in the database table. It is auto generated to avoid repetition.
Penid	Pension ID	Stores the pensioners' identification number from existing records.

Ministry	Ministry	Stores the pensioners' last ministry of work
Department	Department	Stores the pensioners' last department of work
Rank	Rank	Stores the pensioners' last rank before retirement
Worklga	Last Local Government of Work	Stores the pensioners' last local government of work before retirement
Gl	Grade Level	Stores the pensioners' last grade level
Step	Step	Stores the pensioners' last step
Bankname	Name of Bank	Stores the pensioners' bank name
Bankac	Bank Account Number	Stores the pensioners' bank account number
Bvn	Bank Verification Number	Stores the pensioners' bank verification number
Lastpromotion	Last Promotion Date	Stores the pensioners' last promotion date
Retirement	Retirement Date	Stores the pensioners' retirement date
Employed	Employment Date	Stores the pensioners' employment date
pay_state	State Pension Contbnribution	Stores the pensioners' state contribution
pay_fed	Federal Pension Contribution	Stores the pensioners' federal contribution
pay_gratuity	Gratuity	Stores the pensioners' gratuity

3.1 Hardware Requirements

The hardware requirements for designing an enhanced pension scheme management system are as follow:

i. Server CORE i,7
ii. Client system
iii. Network to upload the server
iv. 250mb of hard disk
v. 2GB memory to run on the client side
vi. 8GB memory to run on the server side

3.2 Software Requirements

The software requirements of a system tell us the needed software resources for effective installation and running of the application. The following are the needed software (client and server) for the implementation.

i. ASP.NET Programming Language
ii. JAVA Programming Language
iii. HTML(Hypertext transfer markup language .
iv. CSS Programming language (Cascading Style Sheets)

Windows Operating System

3.3 Program Development

The language used for coding this work is ASP.NET, with a combination of HTML, because of the following reasons:

a) Enhanced Pension scheme management system(EPSMS) is designed to be used on the web , so it is only normal to use a web programming language
b) ASP.NET is an open source server–side web application framework designed for webdevelopment to produce dynamic web pageswhich is part of why it is considered the most secure web programming language
c) It is an object oriented programming language, making code management less cumbersome and generally easy to learn and use.

3.4 Choice of Programming Environment

Web browsers are used to access web applications, and web applications are coded with HTML. Since enhanced pension scheme management system (EPSMS) the titled software is an online application, the use of HTML for the coding of this system is inevitable. Hypertext Markup Language (HTML) is the standard markup language used to create web pages. In other word it is a programming language that powers the web, along with CSS, and JavaScript, as well as to create user interfaces for mobile and web applications. Web browsers are usually used to read HTML files and render them into visible or audible web pages. HTML describes the structure of a website semantically and, before the advent of Cascading Style Sheets (CSS), included cues for the presentation or appearance of the document (web page), making it a markup language, rather than a programming language.

HTML in brackets: <html> and </html>. These tags tell the Web browser that the content between the tags should be assembled into an HTML document. There are programs such as

Dreamweaver designed to help you create HTML code for a webpage. The application provides a graphical user interface that enables one to click, drag and copy parts of the webpage. The application generates the HTML code for the user

3.5 Sample Program codes

```
<asp:Content ID="Content1" ContentPlaceHolderID="head" Runat="Server">
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="ContentPlaceHolder1"
Runat="Server">
        <!-- Page Content -->
        <div class="content-section-a">
                <div class="container">
                        <div class="row" style="padding:50px 0px;">
                                <div class="col-md-12" style="background:rgba(255, 255, 255,
0.52); border:1px solid #CCC; border-top: 8px solid #069; border-radius: 5px;  margin-
bottom:20px">
                                        <h2 class="section-heading">User's Info</h2>
                                        <div class="col-md-8" style="margin-bottom:20px">
                                                <div class="form-inline">
                                                        <asp:Literal ID="litPasswordUpdate"
runat="server"></asp:Literal>
                                                </div>
                                                <div class="form-horizontal">
                                                        <div class="form-group">
                                                                <label for="inputEmail3"
class="col-sm-3 control-label">Username</label>
                                                                <div class="col-sm-5">
                                                                        <asp:TextBox
ID="txtUsername" runat="server" Enabled="False" CssClass="form-
control"></asp:TextBox>
                                                                </div>
                                                        </div>

                                                        <div class="form-group">
                                                                <label for="inputEmail3"
class="col-sm-3 control-label">New Password</label>
                                                                <div class="col-sm-5">
                                                                        <asp:TextBox
ID="txtPassword" runat="server" CssClass="form-control" placeholder="New Password"
TextMode="Password"></asp:TextBox>
                                                                </div>
                                                        </div>

                                                        <div class="form-group">
                                                                <label for="inputEmail3"
class="col-sm-3 control-label">New Password Again</label>
                                                                <div class="col-sm-5">
```

```
                                                    <asp:TextBox
ID="txtPasswordAgain" runat="server" CssClass="form-control" placeholder="New
Password Again" TextMode="Password"></asp:TextBox>
                                                </div>
                                            </div>

                                            <div class="form-group">
                                                <div class="col-sm-offset-4">
                                                    <asp:Button
ID="btnUpdate" runat="server" Text="Change Password" CssClass="btn btn-default"
OnClick="btnUpdate_Click" />
                                                </div>
                                            </div>
                                        </div>
                                    </div>
                                    <asp:Panel ID="panContainer" runat="server"
CssClass="col-md-4" style="margin-bottom:20px; color:black;">
                                        <h3><asp:Literal ID="litUsername"
runat="server"></asp:Literal>'s User Trail</h3>

                                    </asp:Panel>
                                    </div>
                                        </div>
                                    <!-- /.col-md -->
                                </div>
                                <!-- /.row -->

                            </div>
                            <!-- /.container -->

</asp:Content>
Page Title="" Language="C#" MasterPageFile="~/admin/MasterPageBack1.master"
AutoEventWireup="true" CodeFile="Nupensioner.aspx.cs" Inherits="admin_Nupensioner"
%>

<asp:Content ID="Content1" ContentPlaceHolderID="head" Runat="Server">
    <title>Add New Pensioner</title>
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="ContentPlaceHolder1"
Runat="Server">
    <!-- Page Content -->

    <div class="content-section-a">

        <div class="container">

            <div class="row" style="padding:50px 0px;">
```

```
                    <div class="col-md-12" style="background:rgba(255, 255, 255, 0.52); border:1px solid #CCC; border-top: 8px solid #069; border-radius: 5px;  margin-bottom:20px">
                        <h2 class="section-heading">Add New Pensioner</h2>

                        <div class="col-md-4 text-center" style="margin-bottom:20px">
                            <div>
                                <asp:FileUpload ID="imageFile" runat="server" name="imageFile" style="display:none" />
                                <div id="imageError" class="red">
                                <asp:Literal ID="litPicMsg" runat="server"></asp:Literal></div>
                                <div class="" id="" >
                                </div>
                                <asp:Button ID="btnUpload" runat="server" Text="Upload" OnClick="btnUpload_Click"  style="display:none"/>
                                <asp:Panel ID="imageID" runat="server" CssClass="profilepic" style="background-size: contain"></asp:Panel>
                            </div>
                            Click box to add picture
```

3.6 Sample Output

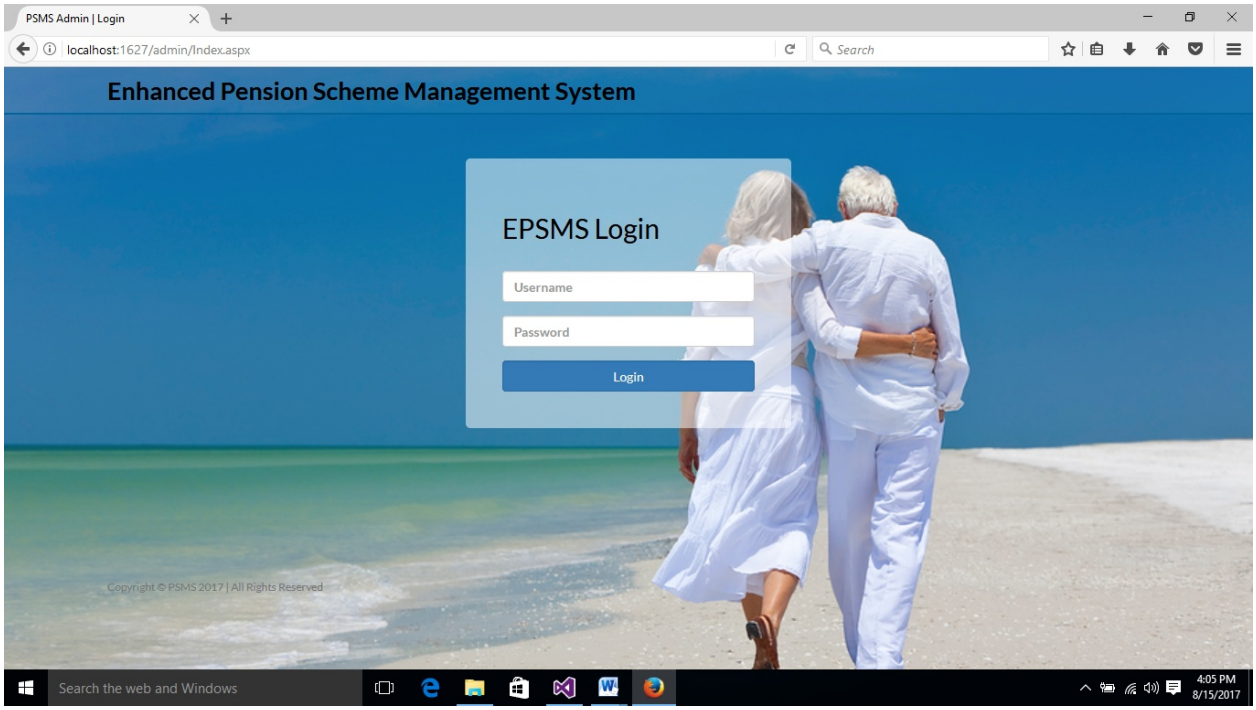

Figure 13: Sample Output of Login

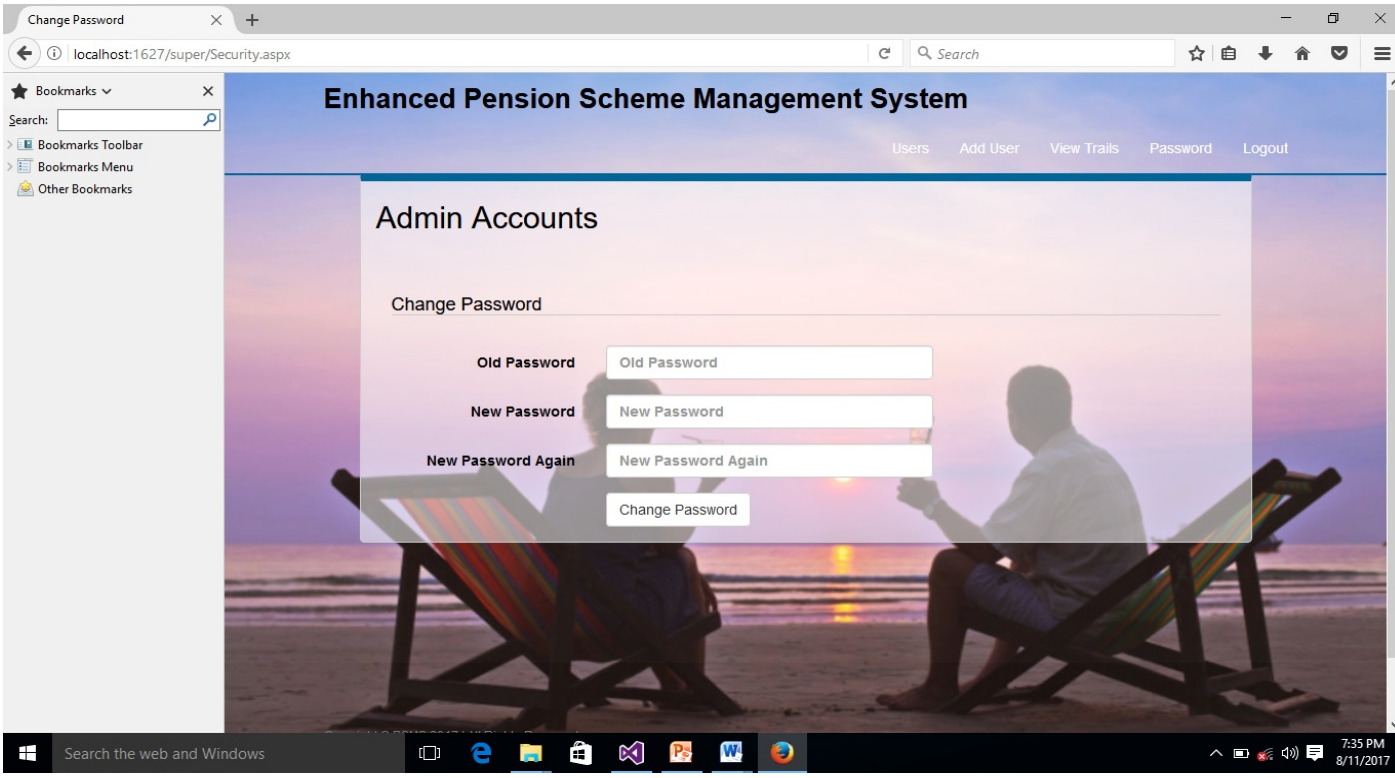

Figure 14: Sample Output of Admin Accounts

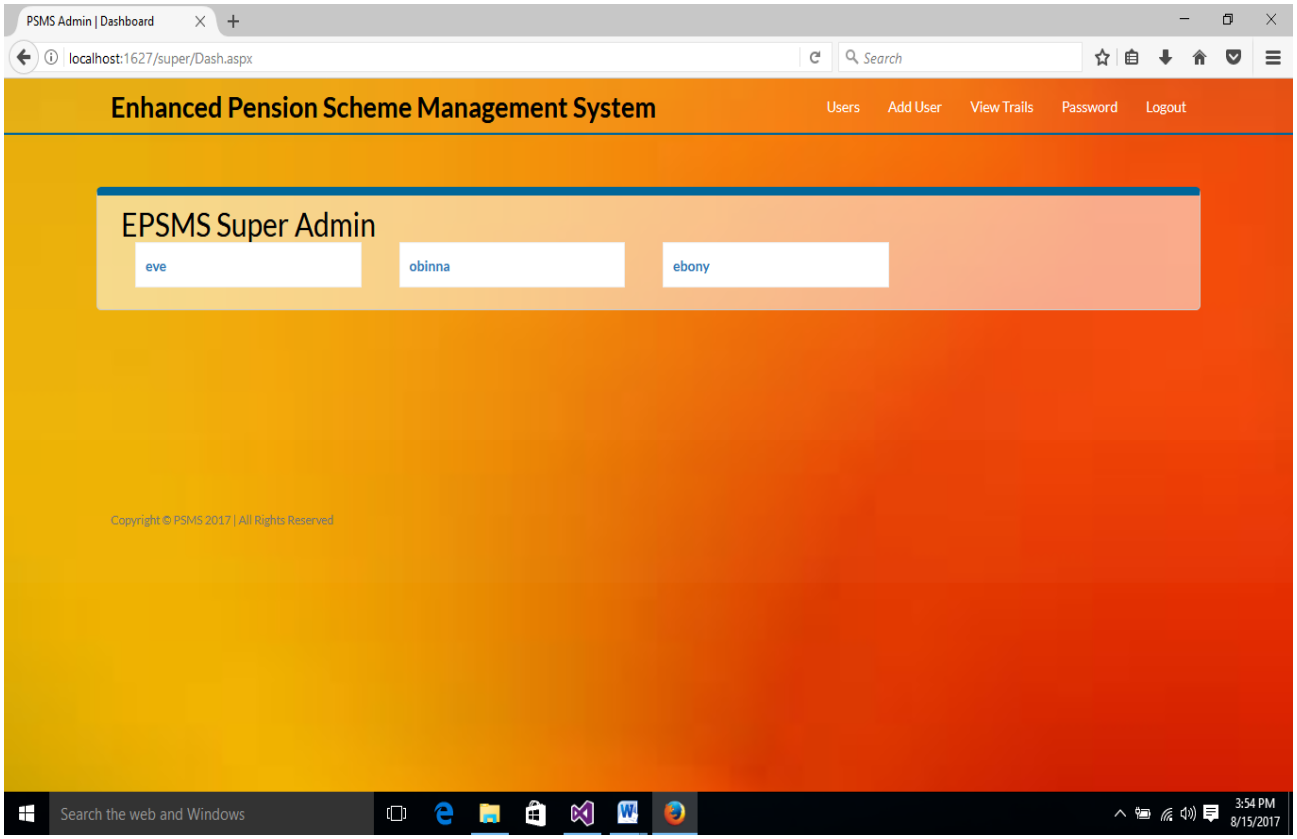

Figure 15: Sample Output of EPSMS Super Admin

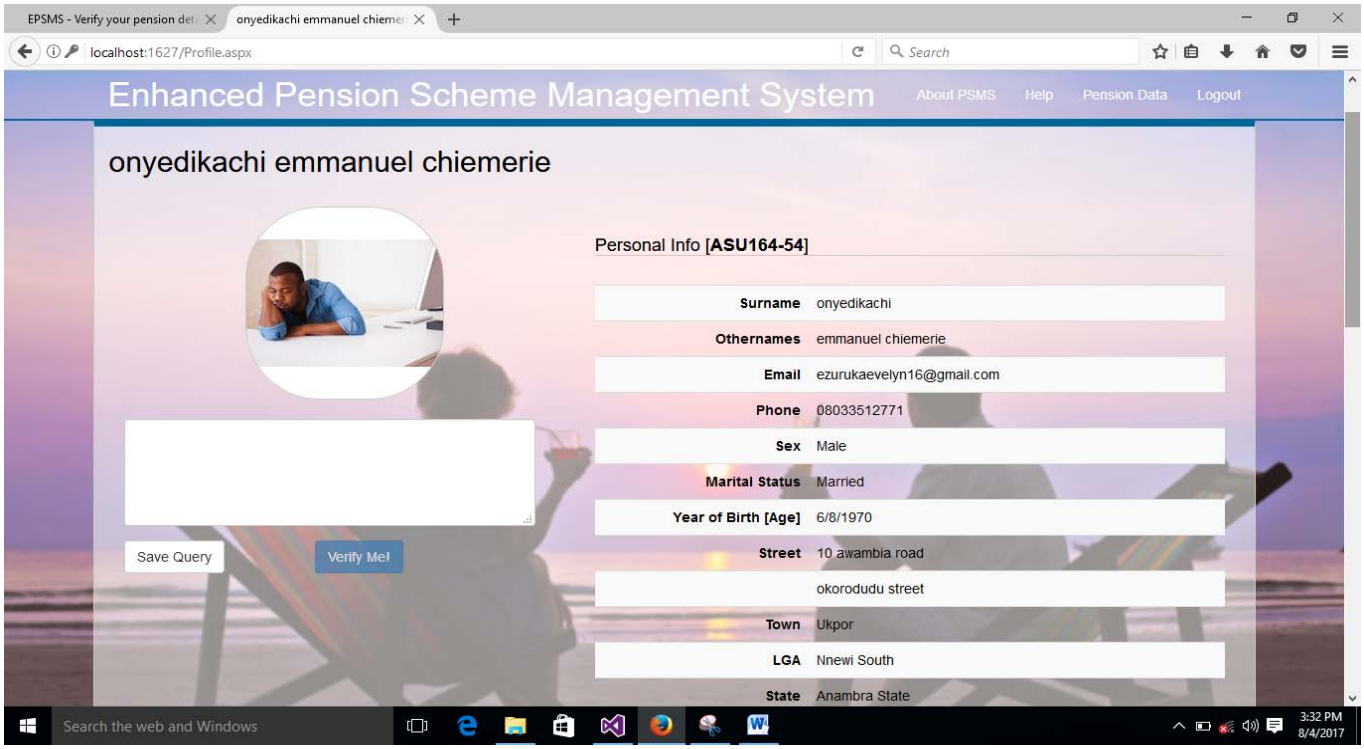

Figure 16: Sample Output of Individual Pensioner

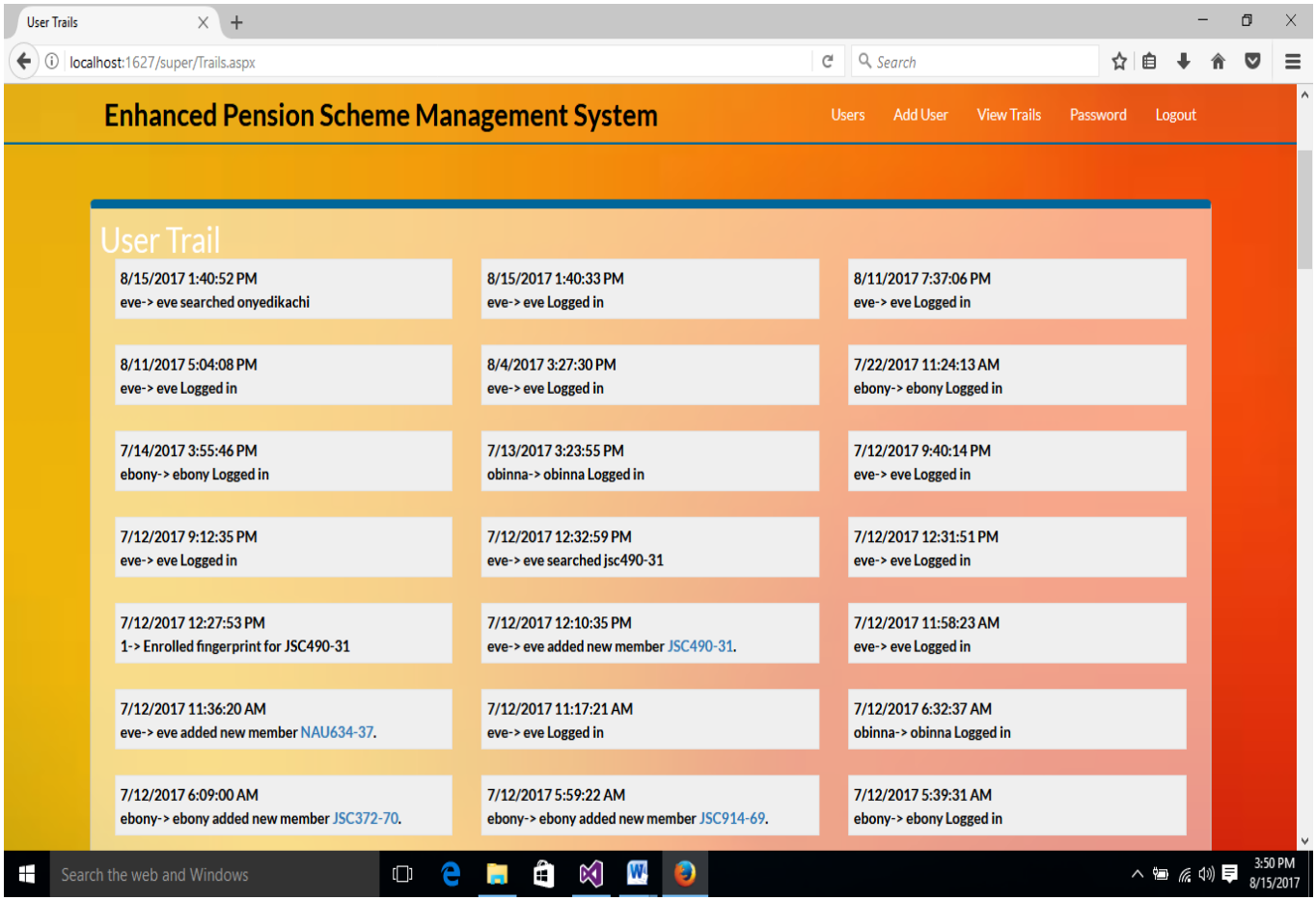

Figure 17: Sample Output of User Trail

3.7 Conclusion

Conclusively Enhanced Pension Scheme Management System is designed to be able to carry out registration and verification exercise online, thereby reducing stress and enabling monies getting to its destination as at when due, provision of security in the database that will block out manipulation and corruption. Allow retirees will be verified online at their base location.

3.8 REFERENCES

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