

Michael Enyinnaya Onyenma

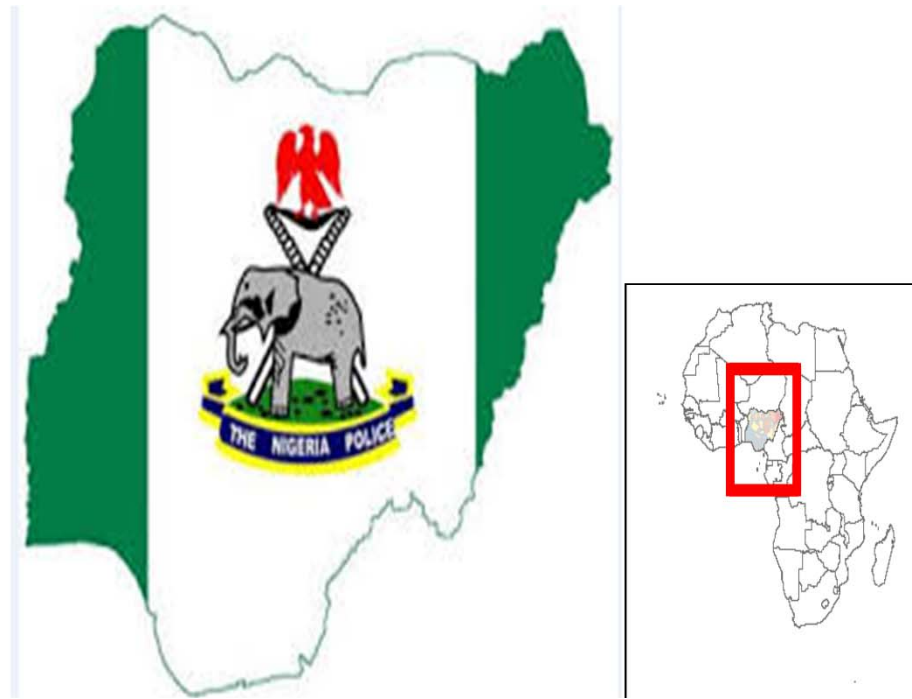
Local Police Records System in Nigeria
(Standalone Prototype)

Acknowledgment

- ▶ Special thanks to Dr. Terhemmen Aboiyar for taking time to guide me through this work, and thanks to Prof. Alfred Schultz for his support and useful information on methods and approach, not forgetting Mehrdad Nezamdoost, Michel Lanz, Odugbesan Abayomi, Omololu (CADs Consulting), David Omonibeke and Dr. Sylvester, Ani's ,Mama and Ifeoma for all their support.

Contents

- ▶ Introduction and Abstract
- ▶ Workflow (Software Development Life Cycle)
- ▶ Discursion and conclusion
- ▶ Questions

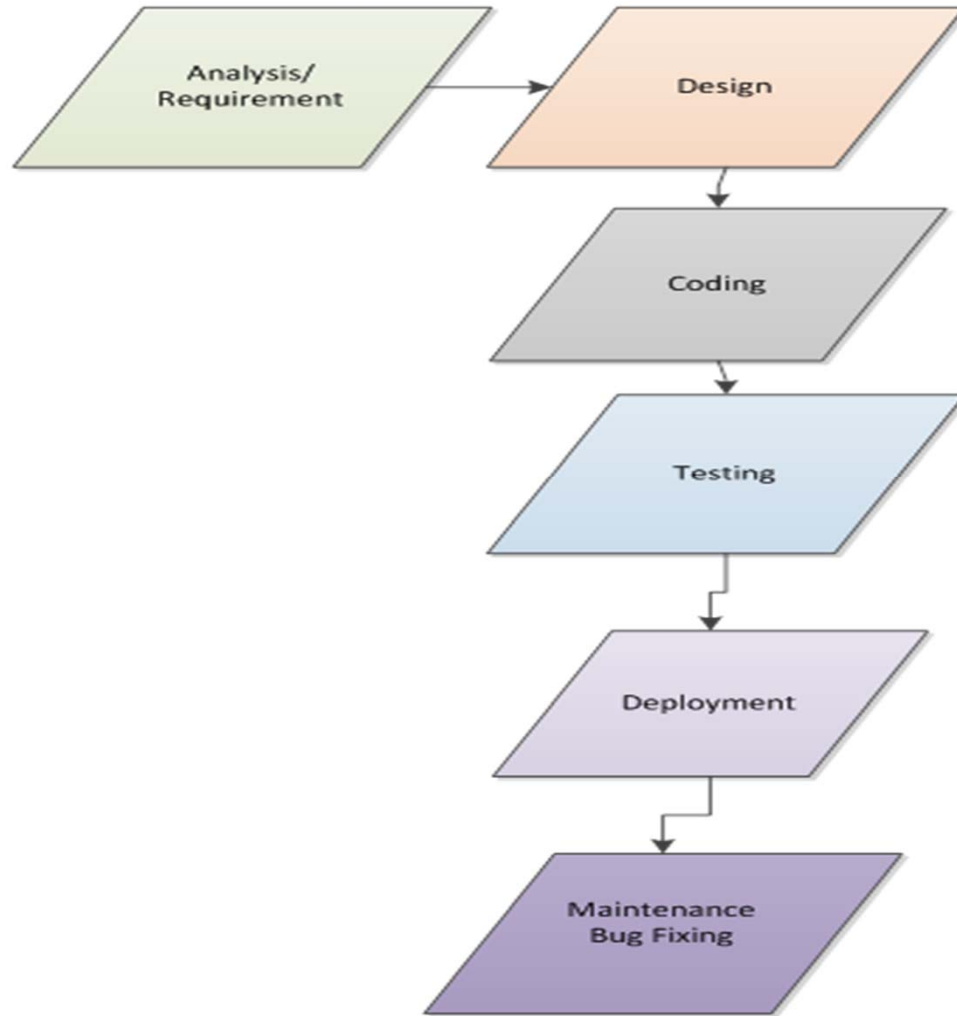


Introduction

- ▶ A simplified tool for the collection and storage of data in remote police post.
- ▶ The big shift from policing by the use of force to policing by Intelligence gathering (which comes from analyzing data in most cases)
- ▶ The output is a **Prototype Standalone** Microsoft windows application

Work flow

Software Development Life Cycle (SDLC)

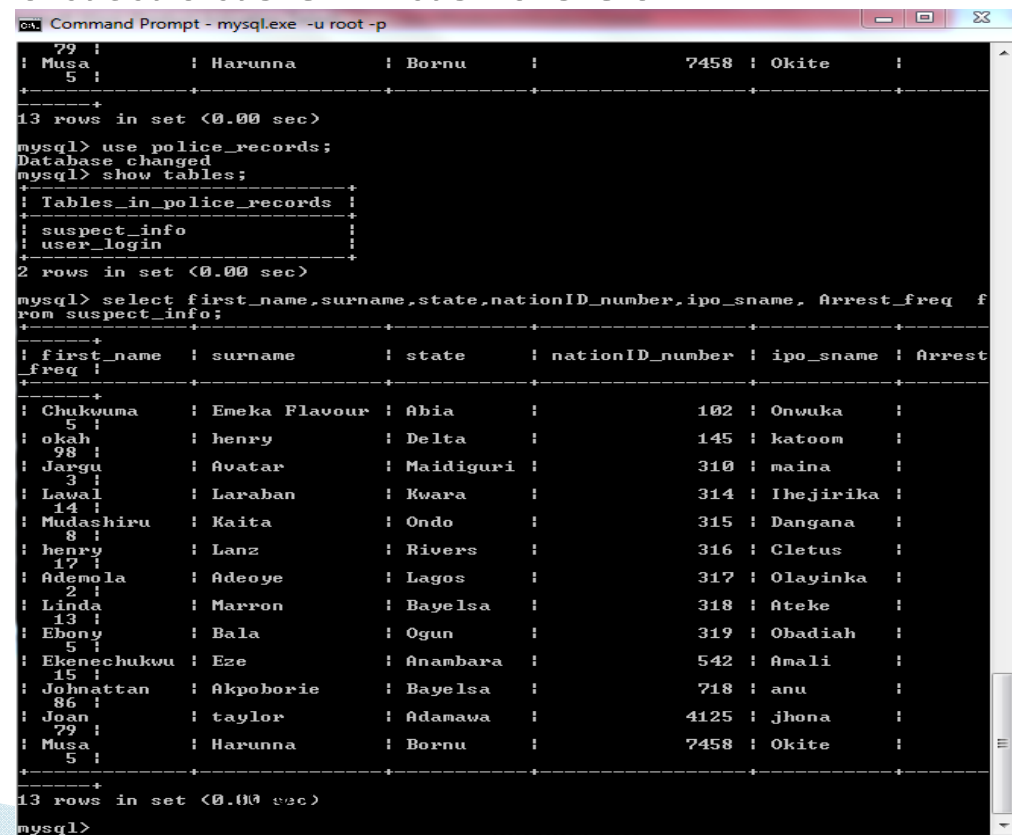


- ▶ **Analysis:** During the Analysis stage we try to ascertain the minimum requirement necessary to initiate design of the desired application system
- ▶ **Design :** From the analysis made in the phase above, the different components or what could be called model of the Application was drawn out; Login Interface, Data entry Interface, Customized Query interface, Report Interface and Chart interface.

- ▶ **Development/Coding;** The design phase above provided the direct input to this phase. As soon as the various components were made coding was relatively easier to achieve.
- ▶ **Testing/Deployment:** Product has been tested with some pseudo data and so far everything functions. An independent evaluation is also been expected from one of our lecturers here.

Materials/Tools

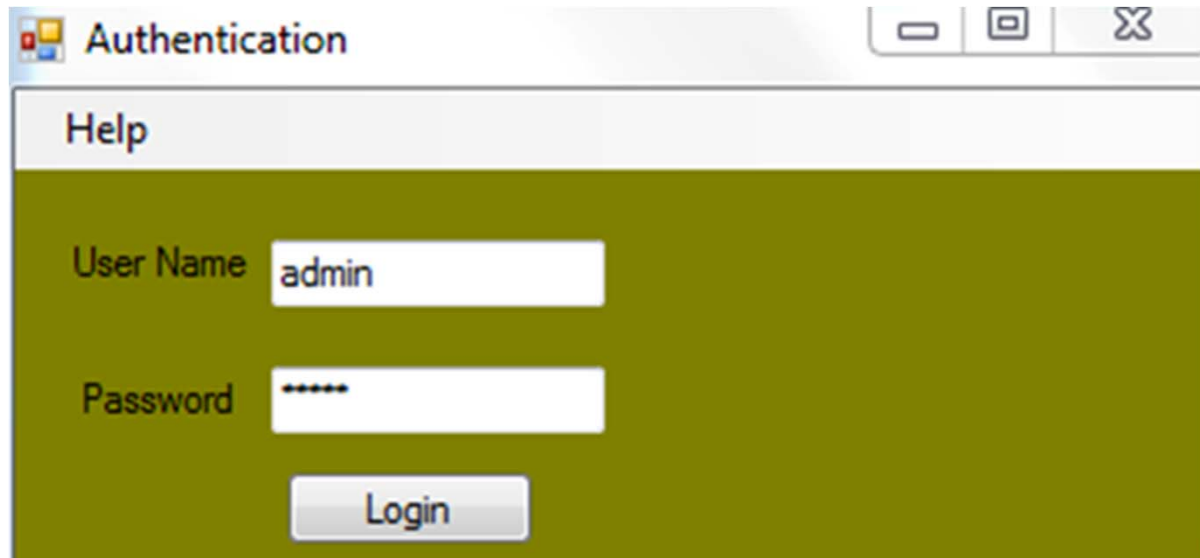
- ▶ Microsoft Visual Studio 2010 was used in designing GUI interface,
- ▶ MySQL backend database was used



```
Command Prompt - mysql.exe -u root -p
79 |
| Musa | Harunna | Bornu | 7458 | Okite |
5 |
+-----+
13 rows in set (0.00 sec)
mysql> use police_records;
Database changed
mysql> show tables;
+-----+
| Tables_in_police_records |
+-----+
| suspect_info |
| user_login |
+-----+
2 rows in set (0.00 sec)
mysql> select first_name,surname,state,nationID_number,ipo_sname, Arrest_freq f
rom suspect_info;
+-----+-----+-----+-----+-----+-----+
| first_name | surname | state | nationID_number | ipo_sname | Arrest
freq |
+-----+-----+-----+-----+-----+-----+
| Chukwuma | Emeka Flavour | Abia | 102 | Onwuka |
5 |
| okah | henry | Delta | 145 | katoom |
98 |
| Jargu | Avatar | Maidiguri | 310 | maina |
3 |
| Laval | Laraban | Kwara | 314 | Ihejirika |
14 |
| Mudashiru | Kaita | Ondo | 315 | Dangana |
8 |
| henry | Lanz | Rivers | 316 | Cletus |
17 |
| Ademola | Adeoye | Lagos | 317 | Olayinka |
2 |
| Linda | Marron | Bayelsa | 318 | Ateke |
13 |
| Ebony | Bala | Ogun | 319 | Obadiah |
5 |
| Ekenechukwu | Eze | Anambara | 542 | Amali |
15 |
| Johnattan | Akpoborie | Bayelsa | 718 | anu |
86 |
| Joan | taylor | Adamawa | 4125 | jhona |
79 |
| Musa | Harunna | Bornu | 7458 | Okite |
5 |
+-----+-----+-----+-----+-----+-----+
13 rows in set (0.00 sec)
mysql>
```

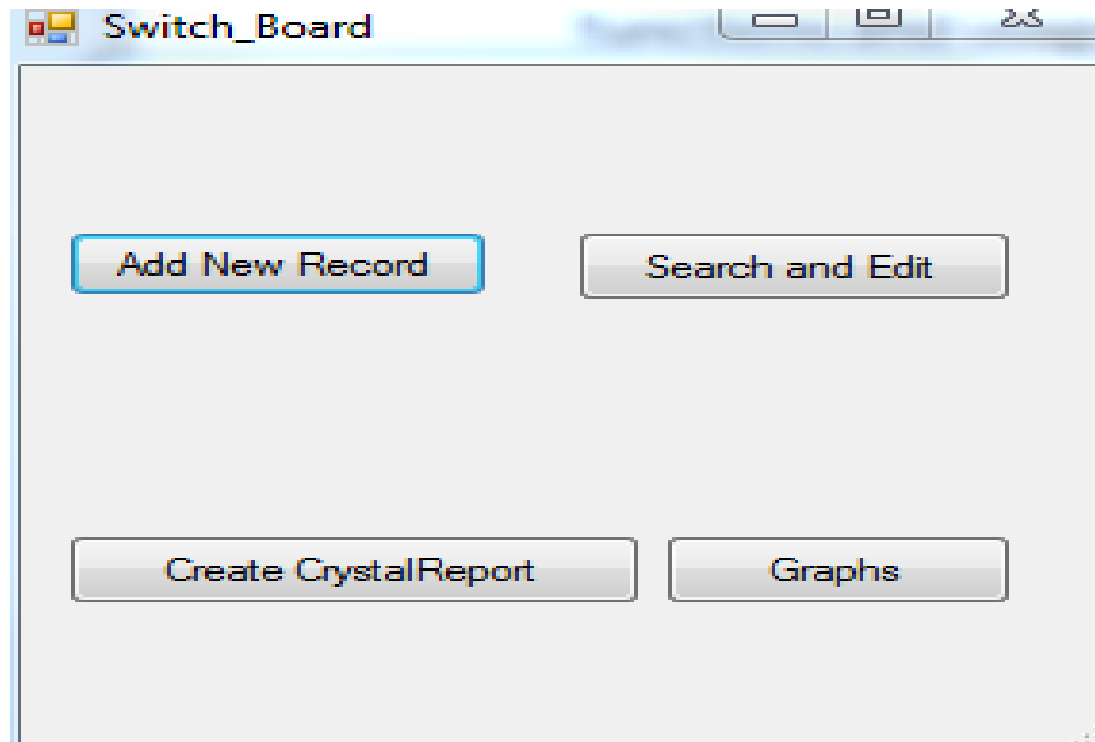

- ▶ SAP (Crystal reporting) was integrated into the application
- ▶ ArcGis was used for visualization.

Login Interface



The image shows a browser window titled "Authentication" with a light blue header bar containing standard window controls (minimize, maximize, close). Below the header is a "Help" section. The main content area has a dark olive green background. It contains two input fields: "User Name" with the text "admin" and "Password" with six dots. A "Login" button is positioned below the password field.

Switchboard



Data Entry Form



The screenshot shows a web browser window titled "suspect_info" with a data entry form. The form is organized into several sections:

- Personal Information:** First name, surname, sex, Height, State, Phone, Address (with a note: "(only alphabet and numbers)"), Ipo First Name, and Ipo Surname.
- Identification:** National ID.
- Crime Scene Details:** Crime Scene, Crime GeoZone, Case Status, Picture Path, and FingerPrint Path.
- Dates:** Birthday (2/ 8/2013), Arrest Date (2/ 6/2013), and Bail Date (2/ 6/2013).

Buttons for file selection are located on the right side: "Select Pix" and "Select FingerPrint". An "Add Record" button is at the bottom left. The browser's address bar shows "suspect_info". The logo for "KokopelliConsults" is visible in the bottom left corner of the browser window.

Customized Query module

The screenshot shows a web application window titled "select_Form". It features several search and navigation controls:

- AllRecords**: A button to view all records.
- Search Special**: A button with instructions: "(For 'Search Special' Enter first 3 letters of Sumameand ''%'' in the Search- Box e.g. Orny%)".
- Search and Update**: A section containing **SearchByNationID** and **SearchBySumame** buttons.
- SearchBox**: A text input field with instructions: "Enter Sumame OR First 3 Letters of Sumame and % OR NationID)".
- SearchBy GeoLocation**: A button with instructions: "(enter North/south/east/west, into searchBox)".
- Birthday Search**: A button next to a date input field containing "2/10/2013" and a calendar icon.

Below the controls is a table with the following data:

ID	first_name	sumame	sex	height	State	phone	Address
1	Joan	taylor	Female	7	Adamawa	857885	leki phase 1
2	Chukwuma	Emeka Flavour	male	5	Abia	807124566	park road aba
4	Ekenechukwu	Eze	male	6	Anambara	80145785	103 Atilli Street Jos
5	Lawal	Laraban	male	6	Kwara	802145789	17 Birini Kebe str...
6	Mudashiru	Kaita	male	6	Ondo	17896534	17 Akure Road
7	henry	Lanz	Male	6	Rivers	80796321	17 ogbunabali Po...
8	Ademola	Adeoye	Male	5	Lagos	70123654	12 Punch Estate ...
9	Linda	Marron	Female	6	Bayelsa	4586978	58 Abuloma stret ...

Query applying geo-zone

select_Form

AllRecords

Search and Update

Search Special

(For "Search Special" Enter first 3 letters of Sumameand "%" in the Search- Box e.g. Ony%)

SearchByNationID

SearchBySumame

SearchBox west

Enter Sumame OR First 3 Letters of Sumame and % OR NationID)

SearchBy GeoLocation



(enter North/south/east/west, into searchBox)


BirthDay Search 2/10/2013

	ipo_fname	ipo_sname	NationID_number	crime_scene	crime_geozone	case_status	bail_date	picture	
▶	dam ex...	Nda	Obadiah	319	27 Lagos Inadan ...	West	in cort	10/1/2012	C:\Prog3_CAD
	ita road	Salihu	maina	310	58 tarsha Damatru	West	in court	10/11/2011	C:\Prog3_CAD
*									

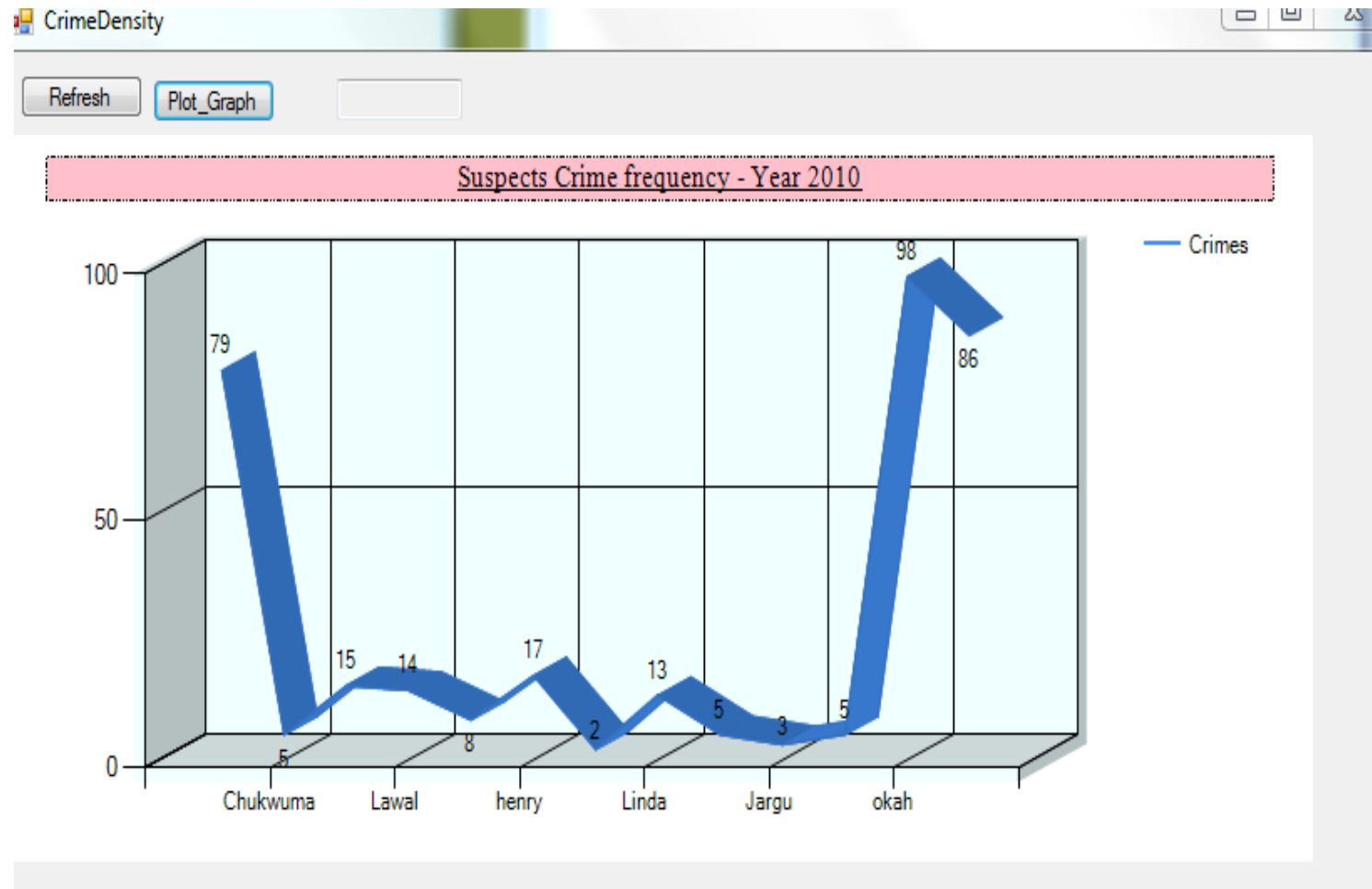
Query Output

suspect_info

First name	Lawal *	National ID	314 *	
sumame	Laraban *	Crime Scene	In court	
sex	male	Crime GeoZone		
Height	6	Case Status		
State	Kwara	Picture Path	C:\Prog3_CADS_Assist\	Update
Phone	802145789	FingerPrint Path	C:\Prog3_CADS_Assist\	
Address (only atphabet and numbers)	17 Birini Kebe street Jigawa	Charges	Child Abuse	
Ipo First Name	Smauel	Birthday	2/ 8/1988	
Ipo Sumame	Ihejirika	Arrest Date	2/ 6/2011	
Arrest Frequency	14	Bail Date	1/ 1/2013	

 **KokopelliConsults**

Graphing tool



Reporting Module

- ▶ Handles export of query result as excel, pdf. and other formats

The screenshot displays the SAP Crystal Reports interface. At the top, there are several search and filter buttons: 'All_Records', 'Unique_IDsearch' (with a subtext '(Search and generate Unique record using "NationID_number")'), 'Geo_Search' (with a subtext 'Crime Search By Geo Location e.g. East/West/South/ North'), and 'Birthday_Search' (with a date input '2/11/2013'). A search box labeled 'SearchBos' is also present. Below these are navigation icons and a page indicator showing '1 / 1'. The main report area is titled 'Main Report' and displays a table of records for the date '4/2/2013'. The table has columns for ID, first_name, surname, sex, height, State, phone, Address, ipo_fname, and ipo_snam. The data is as follows:

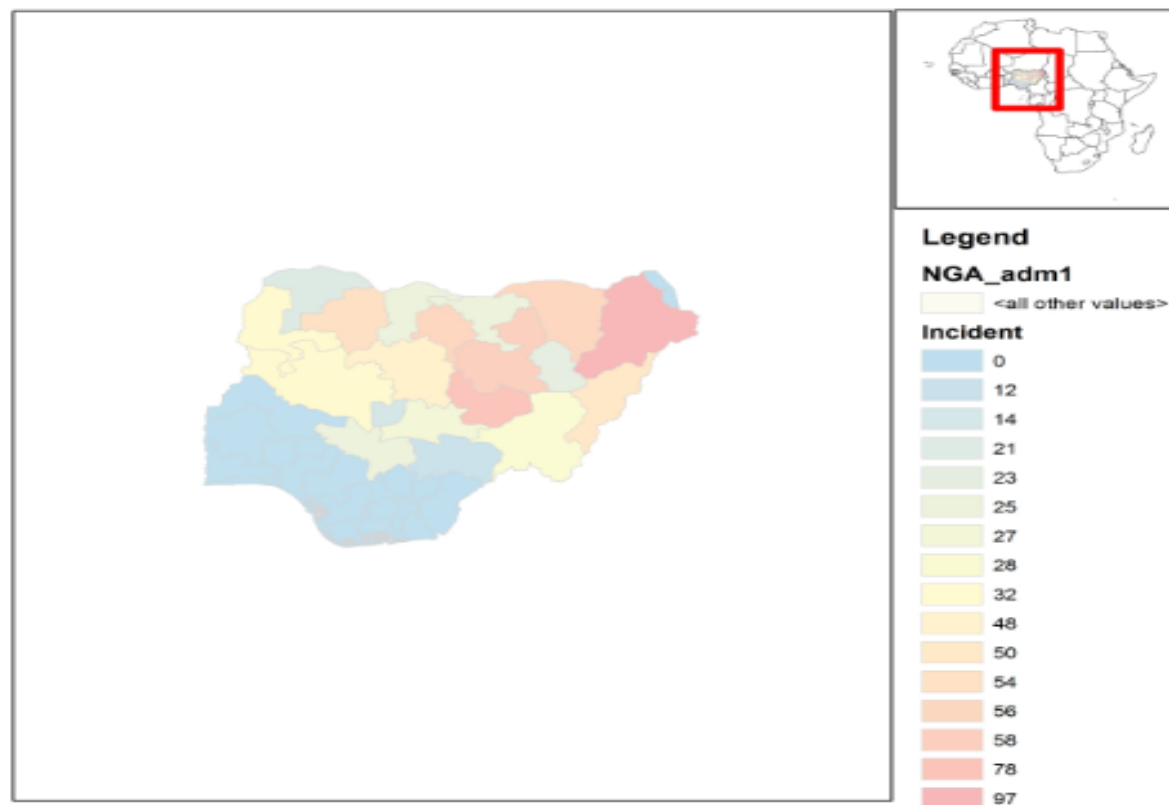
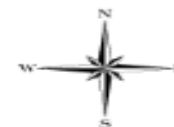
ID	first_name	surname	sex	height	State	phone	Address	ipo_fname	ipo_snam
1	Joan	taylor	Female	7	Adamawa	857885	leki phase 1	khantoom	jhona
2	Chukwuma	Emeka Flav	male	5	Abia	807124566	park road aba	Reginald	Onwuka
4	Ekenechukwu	Eze	male	6	Anambara	80145785	103 Atilli Street Jos	Lawrence	Amali
5	Lawal	Laraban	male	6	Kwara	802145789	17 Birini Kebe street	Smauel	Ihejirika
6	Mudashiru	Kaita	male	6	Ondo	17896534	17 Akure Road	Daliop	Dangana
7	henry	Lant	Male	6	Rivers	80796321	17 ochunghali Port Har	Ehikofe	Clatus

Prototype Nig. Police Records by
Michael E.O

Visualization of exported report



Incidents of extremist Attacks in Nigeria



Prototype Nig. Police Records by
Michael E.O

1 cm = 154 km

Conclusion and Recommendation

- ▶ Establishment of a central database system where remote stations connect via intranet
- ▶ Expanding the existing solution into a client server based solution

Works Cited

- ▶ "Application Development (AppDev) Defined and Explained." n.d.
<http://www.pelicaneng.com/DevDocs/sdlc.pdf> (accessed August 05, 2012).
- ▶ Hohmann, Luke. "Beyond Software Architecture: Creating and Sustaining Winning Solutions." 2003. Reiss, Steven P. *Consistent Software Evolution Mandatory*. Department of Computer Science Brown University, 2001.
- ▶
- ▶ Wikimedia Foundation. *Software Development* . n.d.
http://en.wikipedia.org/wiki/Software_development (accessed 3 25, 2013).
- ▶
- ▶ Wysocki, Robert K. *Effective Software Project Management*. 2006.

Thank you!