MY SIWEST REPORT

Research · December 2015

DOI: 10.13140/RG.2.1.4452.6169

1 author:

Zaharaddeen Isa
Kaduna State University
26 PUBLICATIONS **109** CITATIONS

SEE PROFILE

TECHNICAL REPORT

ON

STUDENT INDUSTRIAL WORK EXPERIENCE SCHEME (SIWES)

AT

DIGIS 360 LOCATED AT GROUND FLOOR A2 UMMUL KHAIRI PLAZA BENUE STREET BY AHMADU BELLO WAY, KADUNA STATE.

BY

ZAHARADDEEN ISAH

KASU/06/GEO/1029

THIS TEXT IS SUBMITTEDTO THE DEPARTMENT OF GEOGRAPHY KADUNA STATE UNIVERSITY IN PARTIAL FULFILMENT FOR THE AWARD OF THE DEGREE OF BACHELOR OF SCIENCE

(BS.C) (HONS) GEOGRAPHY.

DEPARTMENT OF GEOGRAPHY

KADUNA STATE UNIVERSITY

JULY, 2010.

DECLARATION

I here by declare that this student industrial work experience scheme (SIWES) technical report was solely written by me under the guidance of my industry base supervisor Mr. Samuel john Ayo.

---------- ----------

Student's Name *Date & Sign*

---------- ----------

Supervisor's Name *Date & Sign*

DEDICATION

This report is dedication to Almighty Allah, for his mercies and blessing shown on me before, during and after my SIWES program. I will also like to dedicate this report to my parents who stood by me and also help me in many ways during this period of preparing this report.

ACKNOWLEDGEMENT

Thank be to Almighty Allah for his blessing, guidance, protection, the courage and the opportunity given to me to the successful completion of my SIWES program, may hiss protection and blessing continue to be with us (Amen). May the peace and blessing of Allah be upon our beloved prophet Muhammad (S.A.W.), his family, companions and all those who follow the right path till the Day of Judgment Amen.

I wish to express my thanks to my beloved parents for their moral and support toward the completion of this program.

My last acknowledge the effort of my supervisors Dr. Adewuyi and the entire staff of geography department for their relevant suggestion and contribution toward the completion of this program and I also thank the staff and management of DIGIS 360 for their understanding and opportunity given to me to work in their organization.

TABLE OF COINTENTS

Title page

Declaration *i*

Dedication *ii*

Acknowledgement *iii*

Table of contents *iv-vi*

CHAPTER ONE *1-2*

INTRODUCTION *1*

Meaning of SIWES *1*

Purpose of SIWES *1*

Objective of SCHEME *1*

Brief History of the Organizational chart. *1-2*

CHAPTER TWO *3-6*

Theoretical Aspect of the Exercise *3-6*

Raster Model *3*

Vector Model *3-4*

Global Positioning System *4-5*

AutoCAD Software *5-6*

Arc View Software *6*

CHAPTER THREE *7-17*

AutoCAD Software *7-8*

Lunching Into AutoCAD Software *7*

How to Insert Raster Image *7*

To Open Project *7*

Drawings *7*

How to Geo-Reference *8*

Layer *8*

Digitizing *8*

Arc View Software *8-17*

Lunching Arc View software *9*

Importing *9*

Open or Create a Project *9*

Create a New View *10*

Theme *10-14*

Table *10-16*

Map Projection *12-13*

To Align Your Raster and Vector Data *13*

Scale *13-14*

Text *14*

Labeling *14*

Layout *15*

Save Your Work *17*

How to Geo-Processing *17*

CHAPTER FOUR *18*

Summary *18*

Conclusion *18*

Recommendation *18*

Reference *18*

CHAPTER ONE

1.0 INTRODUCTION

The student industrial training is the training programme which forms part of the academic standards in the various degree programmes for all Nigeria Tertiary Institutions. It seeks to bridge the gap existing between technology and other professional education programmes in Nigerian Tertiary Institutions.

1.1 MEANING OF SIWES

The student industrial work experience scheme (SIWES) is the skills training program, which form part of the approved minimum academic standard in the various degree program for all tertiary institution in Nigeria.
It is the gap between practical aspect and theory aspect of either engineering and science technology and other professional educational programs in Nigerian tertiary institution.

1.2 PURPOSE OF SIWES

The objective of student industrial work experience scheme (SIWES) is to enable every student who passed through university or other institution to acquire a practical knowledge of what he/she has learned. Therefore it is compulsory for every student to satisfy the requirement in his/her academic pursuit.

1.3 AIMS AND OBJECTIVE OF SIWES

i. *To provide an avenue for students in the university to acquire industrial skill and experience in their course of study.*
ii. *To prepare students for the work situation they are likely to meet after graduation.*
iii. *To expose students to work methods and techniques in handling equipment and machinery that may not be available in the university / Institute.*
iv. *Provide student an opportunity to apply their bridging the gap between Higher Education and actual practice.*
v. *Make transition from the university to the world of work easier and thus enhance students contact for later job placement after graduation.*
vi. *Enlist and strengthen employer's involvement in the entire educational process of preparing university graduates for employment in industry.*

1.4 BRIEF HISTORY OF THE ORGANIZATION

Digis 360 is a dynamic up and coming company poised to providing GIS services to round the clock. The company was started 1st December 2009 and has its office at Ummulkhairi house no V6 Benue Road/Ahmadu Bello way Kaduna.

DIGIS 360 as the name goes is a coinage of two words digital as well GIS which stands for geographic information system, the figure 360 sums up the whole angles in circle signifying completeness, precision and accuracy, it also depicts geometry which is a basic in Geodesy and land surveying.

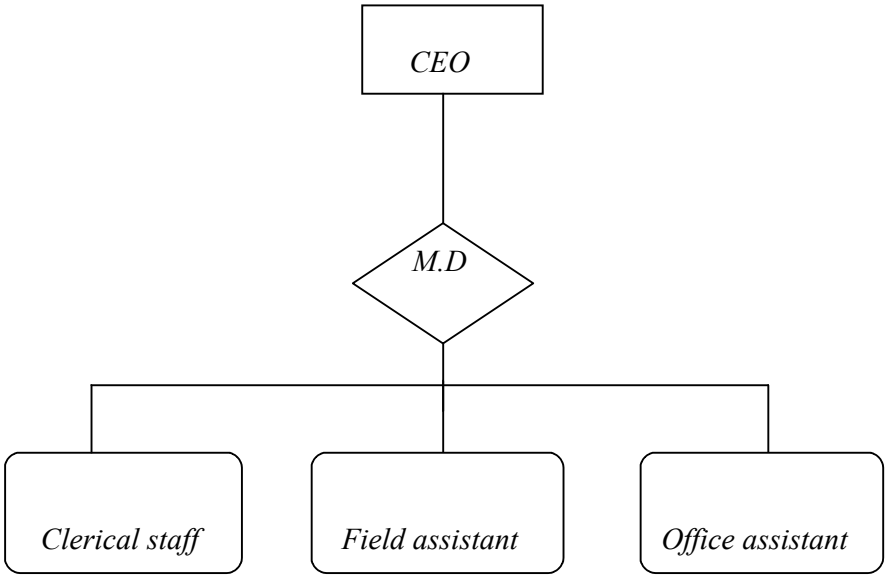
The company presently has a staff strength of 5 persons, two executive and management staff, a clerical and 2 field assistant,

Yakubu Yunus Yakub – chief executive officer
Samuel Ajodele J. - Managing director
Victoria Irele - clerical staff
Samson Falade - field assistant
Muhammad Bashir Yakub – office assistant

Services provided by the company include: -

- *GIS service,*
- *Mapping and Design*
- *Project management*

ORGANIZATION CHART



CHAPTER TWO

2.0 THEORETICAL ASPECT OF THE EXERCISE

2.1 RASTER MODEL

A raster data structure consists of a grid or network of cells or pixels (picture elements), which could be regular or irregular in shape. The regular matrix of grid cells may be in form of a square, triangular or hexagonal pattern. The cells in a regular raster structure are usually of equal size. The grid cells are arranged in numbered columns and rows. Thus each cell has a column number and a row number with which it is spatially referenced. (Figure 2.1)

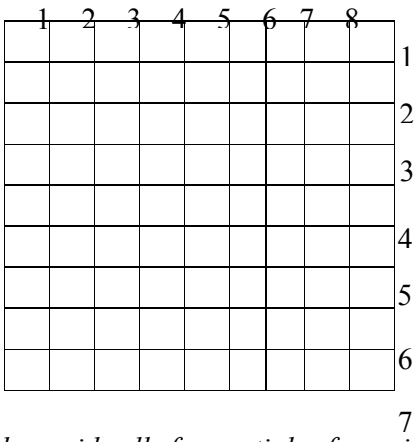


Figure 1.1 number grid cells for spatial referencing

In raster- based spatial modelling each cell is usually occupied by a single feature. In other word, no cell may be used at the same time to encode two or more spatial features, either partly or in full. Each cell contains the value of the feature it represents; the feature value may be indicated by a code, which may be a number, graphic pattern, or an alphabet.

2.2 VECTOR MODEL

A typical vector data model tries as much as possible to represent feature the Way they are in reality. Thus, in vector modelling , the spatial characteristics of objects such as position (location), size (area), perimeter, shape, and spatial relationships like distance, proximity, contiguity, and known alike are largely maintained. In the main, vector representation of geographical entities is very much like the way analogue maps would represent the same entities.

In vector data modelling spatial entities are usually defined in terms of coordinates (Jones, 1997). Based on their geometric composition, spatial objects can be classified as point, line, area, surface, and volume. The vector model deals mostly wit the first three categories – point, line and area. Hence, in vector data modelling object are often represented in 2-D form.

Figure 2.2 shows how the locations of point, line and area features are defined in a vector data structure. The geographical location of a point feature is usually represented by a single Cartesian

x, y coordinates. On the other hand, the location of a line entity is defined by a series of x, y coordinates. The locational and geometric characteristics of an area feature are usually defined by a series of closed x, y coordinates, wit the starting node and the ending node sharing the same coordinate value.

Feature category	*Typical graphic form*	*2-D vector representation (plane coordinates)*
Point	•	*X, Y.*
Line		$X_1\ Y_1, X_2\ Y_2, \ldots\ldots X_n\ Y_n$
Area		$X_1\ Y_1, X_2\ Y_2, \ldots\ldots X_1\ Y_1$

Figure 1.2 Defining the locations of geographic features in vector modelling

2.3 GLOBAL POSITIONING SYSTEM (GPS)

The GPS is the acronym of global positioning system. Technological innovations have improved the method by which we can obtain positioning information, especially for large portion of the earth. GPS receiver is increasingly become an important device for acquiring spatial data for GIS operations. GPS is a worldwide satellite-based navigation and positioning system. It was developed by the united state department of defence. Hence, the GPS was originally developed for military purposes. However, in the early 1980's the GPS made its debut in civil use, first in the field of geodesy. The system is based on a constellation of twenty-four satellites, called NAVASTAR, which

are orbiting the earth at an altitude of about 20,000km. A complete orbit of the earth takes 12 hours. The satellites act as reference points whose positions in space relative to the earth's surface are precisely known.

By determining the actual locations of three or four of the satellites, and the exact distance from each of those satellites, the GPS receiver can precisely determine its own position by calculating its latitude, longitude, altitude, course and speed (Hurn, 1993). Good quality GPS receiver Can calculate their position anywhere on earth to better than a hundred metres, and do it faster once a second. In fact, differential GPS receivers provide relative positional accuracy of 3-5m, with reference to a control point, the location of which must have been determined independently (Jones, 1998).

In a sense, the GPS receiver can actually be considered as a digitizing system, which is used to capture the locational information of physical (real world) objects. The handheld GPS gives coordinates of positions in geodetic systems or rectangular system in three dimensions (i.e. x, y, z or latitude, longitude, and altitude); and it is possible to get these coordinates in UTM projection (Igbokwe and Ono, 2002). The positional data recorded using a GPS receiver can, therefore, be downloaded directly into a GIS through a software module similar to a digitizer controller (Ramadan, URL). However, where it is not possible to establish a direct link between GPS and GIS,

an indirect method could be adopted. In indirect link between GPS and GIS, the GPS receiver captures and stores geographical data using its own format. This data is later rendered GIS-compatible by translating it to any GIS data formats. Subsequently, the translated data can then be transferred to GIS software and stored as a GIS file.

GPS receiver are used by a number of people and for different purposes such as surveying and mapping, aircraft navigation, transportation and fleet management, coast guard, agriculture, natural resources management, public safety, utility management, forestry, shipping, offshore exploration, and so on.

2.4 AUTOCAD SOFTWARE

AutoCAD software is a family of cads or drawing cad that simply [save (DWG) file as a DXF format (data exchange format) is a standard exchange format.] cad system is not GIS software because it has no capability to support topological structuring of the graphic data captured. However, reversed standards like AutoCAD land enabled and AutoCAD land development have capabilities and functionalities of GIS.

However, software was developed in U.S.A by a company known as Autodesk initially for engineering and graphic fields. The software has many capabilities and functionalities and a definite path of operation and navigation in the workspace of a computer that represents or models the geographic space of real of the real world. This is work-friendly tool and environment that has made things easy and accessible to all requirements just at a workstation. The AutoCAD is a software that has many versions among them are AutoCAD map 2000i (GIS version), and AutoCAD land development.

AutoCAD Map 2000i (GIS version) is the premier solution for creating, maintaining, analyzing, and producing mapping information in a CAD environment. AutoCAD Map 2000i contains the object-oriented capabilities of AutoCAD software as well as its own unique spatial data management and multiple drawing access strengths. With AutoCAD Map 2000i, you can digitize, maintain, analyze, and plot your own maps and map sets, and create thematic maps and legends. You can work with multiple drawings and use information from external data sources for all your mapping tasks.

AutoCAD Map is a powerful AutoCAD 2000i toolset for developing and managing complex design projects. AutoCAD Map increases project team efficiency by creating a comprehensive cost-effective project database. AutoCAD Map integrates multiple drawings into one seamless environment providing access, editing, and reporting of drawing, attribute, and related database information within a single AutoCAD Map session.

Some important of AutoCAD map 2000i

- *Manage, retrieve, and store both graphic and non-graphic data.*
- *Add data to maps and make them more intelligent.*
- *Clean up maps.*
- *Build node, network, and polygon topologies for analysis.*
- *Produce thematic maps with legends.*

- *Import data from other CAD and GIS systems.*
- *Export data to other formats.*
- *Plot maps and map books easily and efficiently.*

2.5 ARC VIEW SOFTWARE

Arc view is one of the contemporary software that is easy and facilitates geographic system operation design, map production, analysis and result computation possibility in any spatial project. The software was designed on window users' interactive, hence making its usage flexible and user friendly.

The software was written by ESRI in various versions ranging from 2.0, 3.0, 3.1, 3.2, 3.2a, 8.5 and 9.0 subject to upgrading and improvement to meet new discovery and challenges of our environment and its application.

Arc view environment is divided into two major parts and this shown in the welcome dialogue box (figure1.3).

2.5.1 SAMPLE (EXISTING) PROJECT

This is for demonstration of what can be done by using the software and it is based on the world map and its projection systems. On this, various operations can be performed and ways of navigating into files and environment is possible. The project available here are defaults of sample designed by software developer, e.g. Atlanta, united state and world map. Further discussion on this shall be given later.

2.5.2 NEW VIEW

This is an environment where individual users can supply their data and carry out their personal operation according to desired needs.

CHAPTER THREE

3.0 EXPERIENCE ACQUIRED DURING THE EXERCISE

During six month of the SIWES training I was able to acquire much software among them are AutoCAD and Arc View which I will touch in this chapter.

3.1 AUTOCAD SOFTWARE

3.1.1 LUNCHING INTO AUTOCAD SOFTWARE ENVIRONMENT INVOLVES THE FOLLOWING STEPS:

Click the start and through the program to locate the Auto CAD software
OR
Double click on desktop icon of Auto CAD and wait for a while, for a processing to bring you to this window. (figure1.4)

3.1.2 HOW TO INSERT RASTER IMAGE

1. *From the Map menu, choose Image ▸Insert.*
2. *In the Insert Image dialog box, select the drive and folder that contains the image(s).*
3. *In the Files Of Type box, select the file format of the image(s) that you want to insert.*
4. *In the list of images, select the image(s) that you want to insert. You can use standard Windows selection methods to select more than one image at a time. The image(s) that you select are listed in the File Name box.*
5. *Click Ok.*

3.1.3 TO OPEN A PROJECT

1. *From the File menu, choose Open.*
2. *Select the project drawing.*

3.1.4 TO SAVE CHANGES TO SOURCE DRAWINGS

1. *Be sure the items you want to save have been added to the save set.*
2. *From the Map menu, choose Save Back ▸Save To Source Drawings.*

3.1.5 TO SAVE CHANGES TO THE CURRENT PROJECT DRAWING

1. *From the File menu, choose Save.*

   Objects are saved to the active project. Source drawings are not changed.

3.1.6 HOW TO GEO-REFERENCE

1. *Click map on the standard tool bar and scroll down to tools then go to rubber sheet and click.*
2. *Immediately you click rubber sheet the command section of the computer will indicate the word "Base Point"*
3. *Click the corner of the map, (intersection of the coordinates) reference point 1- enter the coordinate (first longitude, then latitude) and press enter.*
4. *Click to the next corner, reference point 2- enter the coordinate and press enter.*
5. *Click to the next corner, reference point 3- enter the coordinate and press enter.*
6. *Click to the next corner, i.e last corner, enter the coordinate and press enter, press enter again and type "s" and press enter.*
7. *Click on any edge of the map and right click to accept.*

Note: from the moment you start entering the coordinates, you are going to follow it clock wise. You can start geo-referencing with any corner.

3.1.7 HOW TO CREATE LAYER

1. *On the format menu bar click layer*
2. *On the dialog box opened click new*
3. *Type the name of the layer e.g. roads according to appropriate choice of the user*
4. *Select the color from the color dialog box according to the square box of each layer*
5. *Click ok.*

3.1.8 HOW TO MAKE LAYER CURRENT

1. *On the format menu bar click layer*
2. *Click on the layer according to your choice*
3. *Click on current bar*
4. *Click ok.*

3.1.9 ON-SCREEN DIGITIZING

1. *This is done after the insertion of raster image to the view window, geo-reference, creation of layer and make it current is successful*
2. *Click polyline and zoom in the image to appear well*
3. *Start tracing on the screen.*

3.2 ARC VIEW SOFTWARE

3.2.1 HOW TO LUNCH INTO ARC VIEW ENVIRONMENT

1. *Click the start and scroll through the program to locate the arc view software*

   OR

   Double click on arc view icon on the desktop window

2. *Click OK.*

3.2.2 TO IMPORT ANOTHER PROJECT INTO THE PROJECT YOU ARE CURRENTLY WORKING ON

1 *Make the Project window active.*

2 *From the Project menu, choose Import.*

3 *From the File Type list, choose Project.*

4 *Navigate to the directory that contains the project you want to import.*

5 *Choose the project you want to import.*

6 *Double-click the project you want to import or choose the project*

7 *press OK.*

3.2.3 TO IMPORT A VIEW

1 *Open a project or make the Project window active for the open project.*

2 *From the Project menu, choose Import.*

3 *In the List Files of Type box, choose View.*

4 *Navigate to the directory that contains the view file you want to import.*

5 *Choose the view file you want to import.*

6 *Double-click the view you want to import or choose the view and press OK. ArcView creates a view named after the file you selected.*

3.2.4 OPEN OR CREATE A PROJECT

1 *choose Open Project*

OR

New Project from the File menu.

3.2.5 CREATE A NEW VIEW

1 click the Views button

2 then press the New button. A new, empty view will appear in your project.

3.2.6 SPECIFY WHICH COLORS AND SYMBOLS THEMES WILL BE DRAWN WITH

1 Click the Edit Legend button

OR

Double click on a theme's legend in the Table of Contents to change how it is displayed.

3.2.7 ADDING DATA AS A THEME

1 click add theme button on the standard bar
OR
On menu bar, go to view, scroll and click on add theme.
2 navigate to the folder containing the file where the data is
3 select the data source in the data source type (whether feature or image data)
4 click the file name
5 click OK

3.2.8 CREATING NEW THEME

1 on the view menu bar click new theme
2 select the data type in the dialogue box appeared
3 save in the appropriate folder
4 highlight theme to be created
5 start editing on the theme menu bar
6 highlight the represented icon on the menu bar icons
7 start the drawing (the same step for the point insertion)
8 For line and polygon, double click at the end of the drawing.

3.2.9 TO ADD A TABLE OF XY COORDINATES

1 From the View menu choose Add Event Theme. (If this menu choice is dimmed, you'll need to add the table to your project first.)

2 Choose the XY button .

3 In the Table list, select the table that contains the XY coordinates. Choose the appropriate fields containing the coordinate information.

4 Press OK. ArcView adds a theme where each location in the table is represented by a point.

3.2.10 TO ADD A TABLE OF STREET ADDRESSES

1 *From the View menu choose Geocode Addresses to display the dialog.*

2 *In the Reference theme list, select the theme that you can match your addresses to.*

3 *(Optional) Choose a field from the address theme's attribute table that can be joined to the output geocoded theme.*

4 *In the Table list, select the name of the table that you want to geocode. Select the field that contains the address from the Address field drop-down list.*

5 *(Optional) Select an additional field such as the name of customer or business that can help you identify the address you want to geocode easily. This field will be displayed in the Geocoding Editor.*

6 *(Optional) Select a place name alias table if your events contain place name aliases. See Working with place name aliases.*

7 *(Optional) Specify an offset distance to determine where to place the point location in relation to the street segment.*

8 *Press Batch Match or Interactive Match.*

3.2.11 TO ADD A TABLE OF EVENTS OCCURRING AT POINT FEATURES

1 *From the View menu choose Add Event Theme. (If this menu choice is dimmed, you'll need to add the table to your project first.)*

2 *Choose the Routes button .*

3 *Choose the route theme from the Route theme list.*

4 *Click the Points button.*

5 *Choose the field that contains the route key from the Route field list.*

6 *In the Table list, select the table that contains the point events. ArcView will read the table's field names to find likely defaults, if any, for the fields it needs in order to add the theme.*

7 *Press OK. ArcView adds a theme where each event in the table is represented by a point.*

3.2.12 TO ADD A TABLE OF EVENTS OCCURRING ALONG LINE FEATURES

1 *From the View menu choose Add Event Theme. (If this menu choice is dimmed, you'll need to add the table to your project first.)*

2 *Choose the Routes button .*

3 *Choose the route theme from the Route theme list.*

4 *Choose the field that contains the route key from the Route field list.*

5 *Click the Lines button.*

6 *In the Table list, select the table that contains the line events. ArcView will read the table's field names to find likely defaults, if any, for the fields it needs in order to add the theme.*

7 *Press OK. ArcView adds a theme where each event in the table is represented by a line.*

3.2.13 TO REMOVE ONE OR MORE THEMES FROM A VIEW

1 *Click on the theme(s) in the view's Table of Contents to make them active.*

2 *From the Edit menu*

Either:

Choose Cut Themes to place them into the clipboard so that they can be pasted.

Or:

Choose Delete Themes to remove them without placing them into the clipboard. Deleting themes does not change the current contents of the clipboard, if any.

3.2.14 TO COPY ONE OR MORE THEMES

1 *Click on the theme(s) in the view's Table of Contents to make them active.*

2 *From the Edit menu, choose Copy Themes This copies the theme(s) into the clipboard.*

3 *From the Edit menu, choose Paste. This pastes the theme(s) into the view at the top of the Table of Contents.*

3.2.15 TO REVIEW OR SET A THEME'S PROPERTIES

1 *Click on the theme's name in the Table of Contents to make it active.*

2 *Click the Theme Properties button or from the Theme menu choose Properties.*

3 *In the dialog box that is displayed, choose the icon for the theme properties you wish to review or set. By default, the theme's definition properties are displayed.*

4 *When you have finished, press OK.*

3.2.16 DEFINE THE THEME'S HOT LINK PROPERTIES

Click the Theme Properties button or from the Theme menu choose Properties. The Theme Properties dialog box is displayed. Choose the Hot Links category. Specify the field and the action you will use for this theme's hot links.

3.2.17 TO SET A VIEW'S MAP PROJECTION

1 *From the View menu choose Properties. The View Properties dialog box will be displayed.*

2 *Press the Projection button. ArcView displays the Projection properties dialog box.*

3 *Choose the projection you want to use. If desired, you can also set custom projection parameters.*

4 *Press OK on the Projection Properties dialog box. ArcView sets the Map Units to meters. The name of the projection will be displayed above the Projection button, indicating that the view is projected, and that the map units are meters. If the map units are changed from meters to another unit, for example, feet, then the units of the projection are set to feet. If the map units are changed from meters to unknown or decimal degrees, then the projection is removed.*

5 *Press OK on the View Properties dialog box. ArcView redraws the view using the projection you chose.*

3.2.18 TO ALIGN YOUR RASTER AND VECTOR DATA

1 *Determine the projection parameters used when your image or grid was projected. For grids, this information appears in its prj file.*

2 *Add the image or grid to a view. Also add the vector decimal degree data.*

3 *From View Properties, select Projection to display the Projection Properties dialog box.*

4 *Set the view's map projection to match the parameters of the grid or image. If the parameters of the projection do not match those of ArcView's standard projections, try using a custom projection.*

5 *Click OK on the Projection Properties dialog box.*

6 *From View Properties, set the Map Units of the view to match the projected units of your image or grid. For example, if your image is projected to State Plane feet, set the Map Units to feet.*

7 *Click OK on the View Properties dialog box. ArcView redraws the view using the projection you chose.*

3.2.19 TURNING THEMES ON AND OFF

Use the check boxes next to the theme names in the Table of Contents to control which themes are drawn in your view. These check boxes let you toggle themes on and off in the view.

3.2.20 SETTING VIEW SCALE

A view's scale is displayed on the right hand side of the tool bar. As you zoom in and out on a view or resize the view window, the scale automatically changes to reflect the current scale of the view.

A view's scale is displayed as a scale ratio, like 1:24,000. For more information about scale, see Map scale and accuracy.

In order for ArcView to display the scale of your view correctly, the Map Units of the spatial data in your view must be specified correctly. See Setting map units.

3.2.21 TO SPECIFY SCALE DIRECTLY

1 *Click inside the scale field.*

2 *Type in your desired scale ratio.*

3 *Press ENTER. The view will redraw at the scale you specified, centered on the middle of the view.*

3.2.22 SPECIFYING SCALE FROM AVENUE

You can use a request to the Display class to set the scale of a view. For example, copy the following lines into a script, then compile and run it to set View1's scale to 1:10000.

```
MyView = av.FindDoc("View1")
MyScale = 10000
MyView.GetDisplay.ZoomToScale(MyScale)
```

3.2.23 ADD TEXT TO A VIEW

1 *Choose the text tool .*

2 *Position and click the cursor on your view where you want your text to begin.*

3 *Type your text into the Text Properties dialog and click OK.*

3.2.24 LABELING INDIVIDUAL FEATURES WITH THEIR ATTRIBUTE DATA

1 *Make the theme that contains the features you want to label active by clicking on it in the Table of Contents.*

2 *From the Theme menu choose Properties.*

3 *Choose the Text Labels icon in the Theme Properties dialog.*

4 *Choose the field that contains the values you want to use as labels and then click OK.*

5 *Select the Label tool .*

6 *Click on the feature you want to label. The label appears where you clicked.*

3.2.25 TO AUTO-LABEL STREET THEMES:

1 *From the Window menu choose Show Symbol Window and click the font palette button to show the font palette.*

2 *Set the font, size and style that you would like your labels to be drawn with.*

3 *From the Theme menu choose Auto-label.*

4 *In the Auto-label dialog make sure the label field is correct and then click OK.*

3.2.26 TO SEE WHICH LAYOUTS ARE IN A PROJECT

Click on the Layouts icon on the Project Window. The layouts in the current project are shown in the list.

3.2.27 TO CREATE A NEW LAYOUT

With the Layouts icon selected, click the New button at the top of the Project window. ArcView creates a new layout and its name will appear in the list of layouts in the project. ArcView names new layouts in numerical order: Layout1, Layout2, Layout3, etc. See Overview of creating a layout. You can also double-click the Layouts icon to create a new layout.

3.2.28 TO OPEN A LAYOUT

Double-click the layout's name in the list of layouts in the Project window, or select the layout's name and click the Open button.

3.2.29 TO CLOSE A LAYOUT

From the File menu, choose Close, or click the close option on the layout's window (This option varies according to the GUI you are using).

3.2.30 TO RENAME A LAYOUT

Click once on the layout in the list in the Project window and choose Rename from the Project menu. A layout's name is also a layout property you can edit.

3.2.31 TO SAVE THE WORK YOU DO WITH A LAYOUT

In ArcView, you save the work you do with any project component by saving the project. To save your project, choose Save Project from the File menu or click the Save Project button . See Saving your work.

3.2.32 TO SEE WHICH TABLES ARE IN A PROJECT

Click on the Tables icon in the Project window. The tables in the project are shown in the list.

3.2.33 TO OPEN A TABLE

Double-click the table's name in the list of tables in the Project window, or select the table's name and click the Open button.

3.2.34 TO OPEN A THEME'S TABLE

1 Open the view containing the theme.

2 Click on the theme to make it active.

3 Click the Open Theme Table button in the View button bar.

3.2.35 TO CONNECT TO A DATABASE TO CREATE A TABLE

Use the SQL Connect option in the Project menu. See Connecting to a database to create a table.

3.2.36 TO CREATE A NEW TABLE

With the Tables icon selected, click the New button at the top of the Project window. Then enter a name and a disk location for the dBASE file that ArcView will create to store the source data for the table. ArcView creates a new table and its name will appear in the list of tables in the project. ArcView names new tables in numerical orde.

3.2.37 TO EDIT A TABLE

From the Table menu, choose Start Editing. If you have write access to the data source, you will be allowed to edit the table. You can add or delete fields and records and edit the values in the table. See Overview of editing a table.

3.2.38 TO CLOSE A TABLE

From the File menu, choose Close, or click the close control on the table's window.

3.2.39 TO RENAME A TABLE

Click once on the table in the list in the Project window and choose Rename from the Project menu.

3.2.40 TO MAKE A TABLE EDITABLE

Choose Start Editing from the Table's Table menu. The names of fields in the table that you can edit appear in normal font. The fields that you cannot edit are shown in italics.

3.2.41 TO SAVE YOU EDITS AND CONTINUE EDITING

Choose Save Edits from the Table menu to save all edits made to the table during the current edit session. Once you save the edits, you can continue to edit the table but you are not able to undo or redo any edits that were made prior to choosing Save Edits.

3.2.42 TO STOP EDITING AND COMMIT YOUR EDITS

Choose Stop Editing from the Table menu to disable editing on the table. You will be prompted to save your edits.

3.2.43 OPEN OR CREATE A PROJECT

If you have not yet opened a project, choose Open Project or New Project from the File menu.

3.2.44 CREATE A NEW VIEW

On the Project window, click the Views button and then press the New button. A new, empty view will appear in your project.

3.2.45 SAVE YOUR WORK

To save your work, click the Save Project button . In ArcView you save the work you do with any project component by saving the project.

3.2.46 HOW TO GEO-PROCESSING

1. *on file menu bar click extension*
2. *on dialog box appear tick on geo-processing*
3. *click OK*
4. *on the view menu bar click geo-processing wizard*
5. *on the dialog box appeared choose the geo-processing operation according to the user choice*
6. *Click Next.*

CHAPTER FOUR

4.1 SUMMARY

The six months student industrial work experience scheme in Kaduna state university expose me to know more in practical knowledge of geographic information system (GIS) software such as Arc View and compactable of AutoCAD in geographic research.

It has been observed that a new generation with a new technology has emerged 'New millennium has come'; digital divide which says no matter certificates and degrees accumulated in the analogue education development, the wind of digital technology has come with a driving force of change.

4.2 CONCLUSION

The training experience is very mandatory and important for all students in tertiary institution like science and technology, engineering and school of environmental studies. It school be encourage at any time in all institution of leaning so every student should take it serious for themselves.

4.3 RECOMMENDATION

I recommend that the (I.T) program its continuity in all tertiary institution because it help so many students in practical aspect and academic performance as well as work experience.

In other to make this SIWES training easy, student should look for interested place where gain practical aspect of what they were tough in the classroom.

I also recommended that the government and the school authority should assist the student in securing a good place for their (I.T) program, because some students found it difficult in securing a place.

Reference

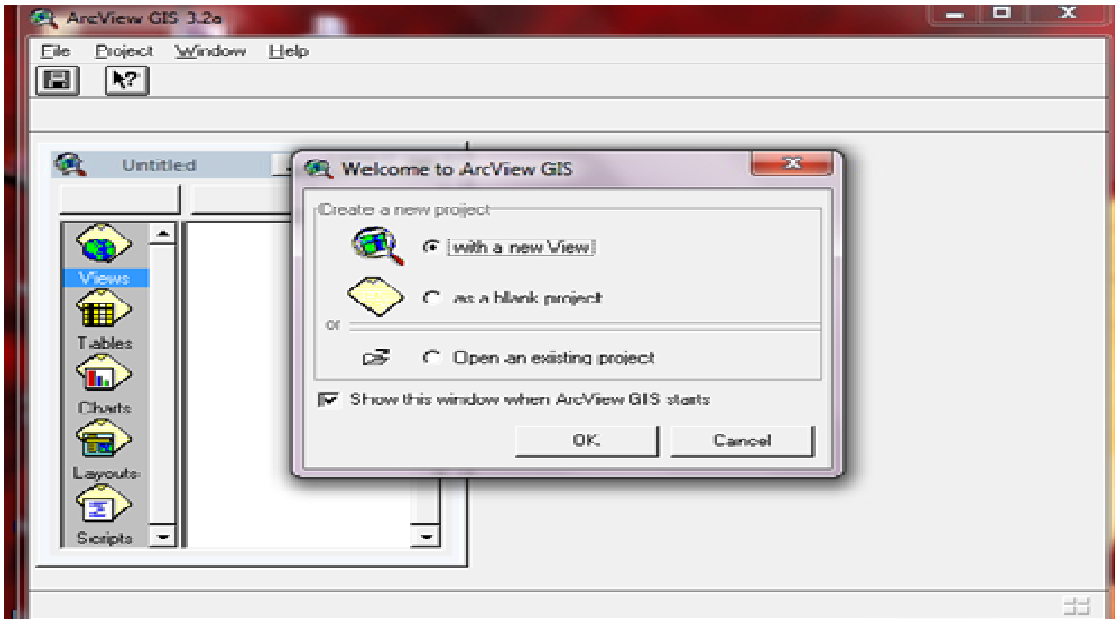
Arc View tutorial manual (2005).

AutoCAD tutorial manual (2003).

Hamawa, E. P. Et'al (2005) G.I.S. A Tool in the and of a digital mapmaker (auto cad and arc view software application), published by oke international ventures, Kaduna.

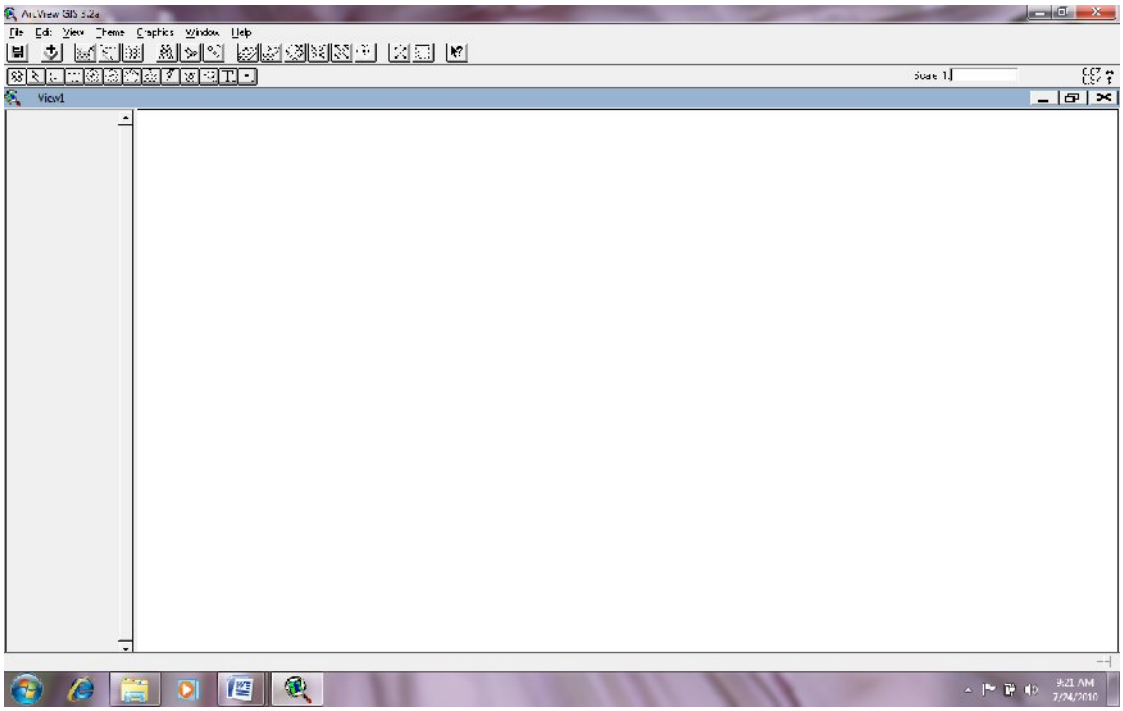
Huxhold, W. E. Et'al (1995). Managing Geographic Information System Projects. New York: Oxford University Press.

Figure 1.3 Welcome Interface



Source: Author

Figure 1.4 User Interface



Source: Author