Geegstack
ACADEMY
RC-1995047

Data Analysis Curriculum

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Course Objective.

The goal of the data analysis course is to give you the skill sets needed to become a job ready data analyst, data scientist, business analyst or financial analyst.

Technologies.

- Excel & Spread Sheets
- Charts & Graphs
- Power Bi
- SQL & MySQL
- Python

Key Benefits.

At the end of the course, you will master the following;

- Data Cleaning
- Data Visualization
- LinkedIn and GitHub Optimization
- 7 Portfolio Projects
- Soft Skills: Report Writing and Project Presentation

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Duration: 16 weeks.

Time:

- Week days: 9:30am - 1:00pm (3 days a week)
- Weekend: 10am - 4pm (Saturday & Sunday)

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Curriculum

Section 1: Introduction to Data Analysis & EXCEL Deep Drive.

First Week: Introduction to Data Analysis & Excel

- Introduction to data, its type and its source
- Overview of data literacy, data ethics and privacy
- Difference between data analytics and data analysis
- Types of data analysis
- Overview of what data analyst does
- Tools used in data analysis
- INRODUCTION TO EXCEL
  - Overview of spreadsheet, its type and it uses
  - Why Excel?
  - The Excel Interface
- SPREADSHEET FUNDAMENTAL
  - Data entry / Flash fill
  - Data types
  - Data validation
  - Removing Duplicates
  - Conditional Formatting
  - Sorting and Filtering
  - Find and Replace

Second Week: Formulars and Functions

- Function Syntax
- References Type
- Error Type
- Statistical Functions
- Counting Functions
- Logical Functions
- Lookup Functions
- Date and Time Functions
- Text Functions

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Third Week: Data Cleaning & Pivot Table

- Data cleaning with Excel
  - Application of the functions and formulas learned
- PIVOT TABLE
  - Data Structure
  - Creating Pivot Table
  - Calculations Options
  - Sorting and Filtering
  - Calculated Fields

Fourth Week: Charts & Graphs

- Data Visualization
- Creating Charts
- Important Visualization
- 2 CAPSTONE PROJECTS

Section 2: POWER BI

Fifth Week: MEET POWER BI

- Introducing POWER BI
- POWER BI vs. EXCEL
- Installation Option
- Adjusting Settings
- Interface and Workflow

Sixth Week: CONNECTING AND SHAPING DATA

- Introduction to Power Query
- Data Connectors
- The Query Editor
- Connection Modes
- Data Quality Checks
- Data Profiling
- Table Transformations
- Calendar Tools
- Combining Queries

Seventh Week: CREATING DATA MODEL

- Data Modelling
- Normalization
- Facts and Dimensions
- Primary and Foreign Keys
- Cardinality
- Filter Flows
- Common Schemas
- Hierarchies

Eight Week: CALCULATED FIELDS WITH DAX

- What is DAX?
- Column and Measure
- Row and Filter Context
- DAX syntax
- Common Functions
- Calculate
- Iterators
- Time Intelligence

Ninth Week: VISUALIZING DATA

- Data Visualization
- Formatting and Filtering
- Bookmarks
- Report Interactions
- User Roles
- Parameter
- 2 CAPSTONE Projects

Section 3: SQL & MySQL

Tenth Week: INTRODUCTION TO SQL

- Listening to events
- SQL and why do we learn it?
- Database and it types
- SQL Commands
- SQL Components
- SQL Coding Style
- Installation and setting up of MYSQL
- Ways of Loading data into MYSQL Workbench

Eleventh Week:

- DATA QUERY LANGUAGE (SELECT)
  - Introduction to MYSQL keywords (SELECT, FROM, WHERE , …)
  - Query order and Execution
- DATA DEFINITION (DDL)
  - CREATE, ALTER, DROP
- DATA MANIPULATION (DML)
  - INSERT, UPDATE, DELETE
- DATABASE CONSTRAINTS
  - Not NULL, UNIQUE, PRIMARY KEY, FOREIGN KEY, CHECK, DEFAULT
- FILTERING DATA
  - Comparison Operators
  - Logical Operator
  - BETWEEN
  - IN
  - LIKE

Twelfth Week:

- COMBINING DATA
  - Joining Data
  - SET Operators
- ROW-LEVEL FUNCTIONS
  - String Functions
  - Number Functions
  - Date & Time Functions
  - Null Functions
  - Case Statement

Thirteenth Week: Aggregation & Analytical Functions

- Aggregate Functions
- Window Basics
- Window Aggregate Function
- Window Ranking Function
- Window Value Function


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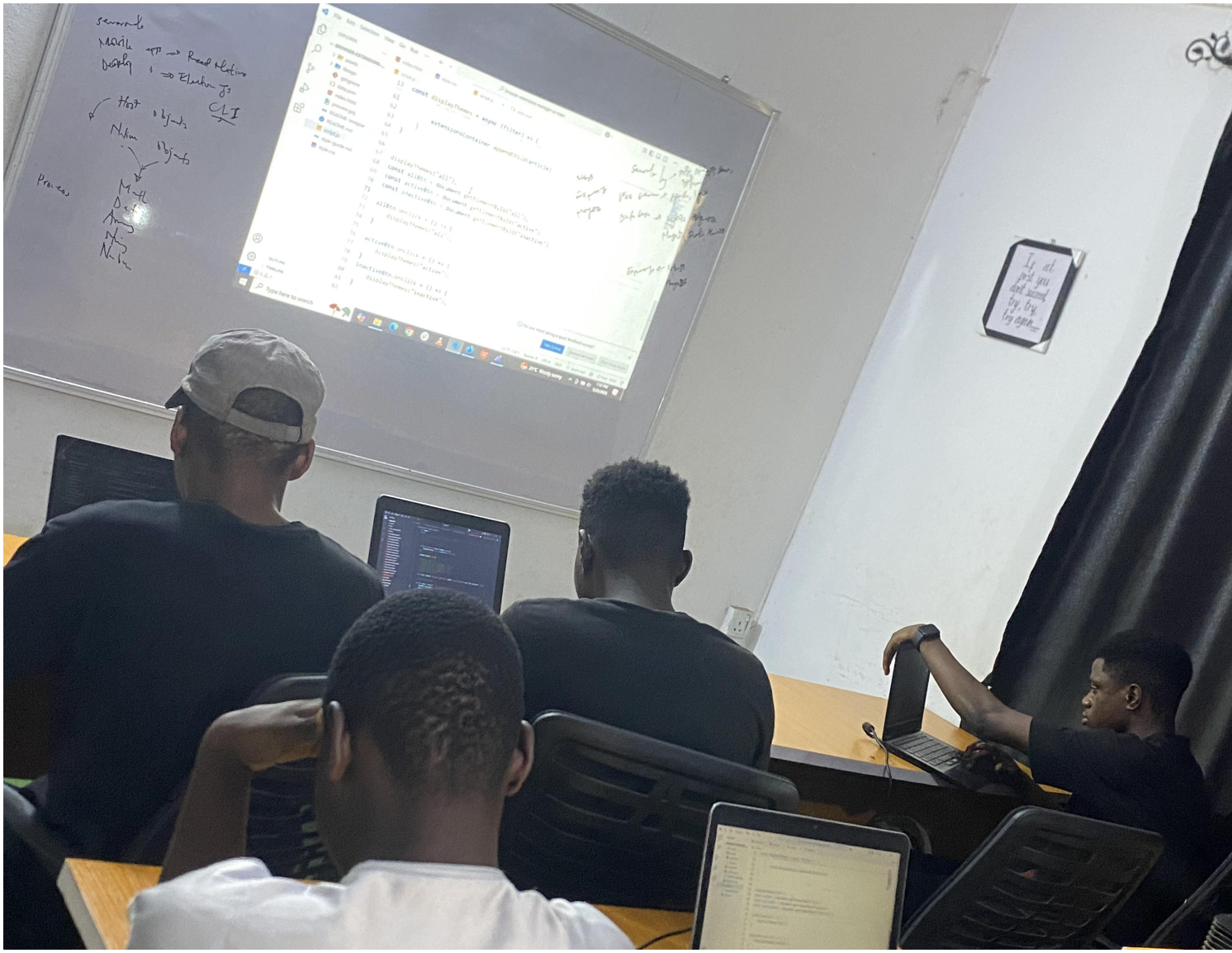

Fourteeth Week:

- ADVANCED SQL TECHNIQUES
  - Subqueries
  - CTE
  - Views
- 2 CAPSTONE PROJECTS

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Section 4: Python & Pandas Library

Fifteenth Week: Python

- INTRODUCTION TO PYTHON
  - Overview of Python and its capabilities in data analytics
  - Understanding basic concepts in data analysis

- DATA PREPARATION AND ANALYSIS IN PYTHON
  - Importing and reading data in Python
  - Data cleaning and preparation and preparation
  - Data analysis techniques in Python (Pandas library)

Sixteenth Week: Projects & Seminar

- CAPSTONE PROJECT
- Going Forward as a Data Analyts.

CURRICULUM ENDS

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Other Benefits:

- LinkedIn and GitHub Optimization
- 7 Portfolio Projects
- Soft Skills: Report Writing and Project Presentation

Program Cost

Learning mode	Cost
Boarding & Internship	**NGN400,000**
Boarding	**NGN300,000**
Week days	**NGN195,000**
Weekends	**NGN180,000**
Online	**NGN175,000**

Payment Method

Transfer to:
Account Number: **4091698613**
Bank: **Polaris Bank**
Account Name: **Geegstack Academy of Software Engineering Ltd.**

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For More Enquiry, Call or WhatsApp:

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or

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