

TheAnalyticsTeam

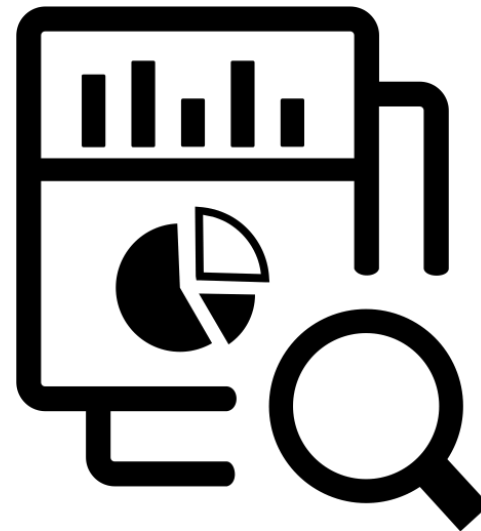
Nhub Nig Ltd

Data analytics approach

Monsieur Bolaji – Data Analyst

Agenda

1. Introduction
2. Data Exploration
3. Visualizations
4. Interpretation
5. Recommendations

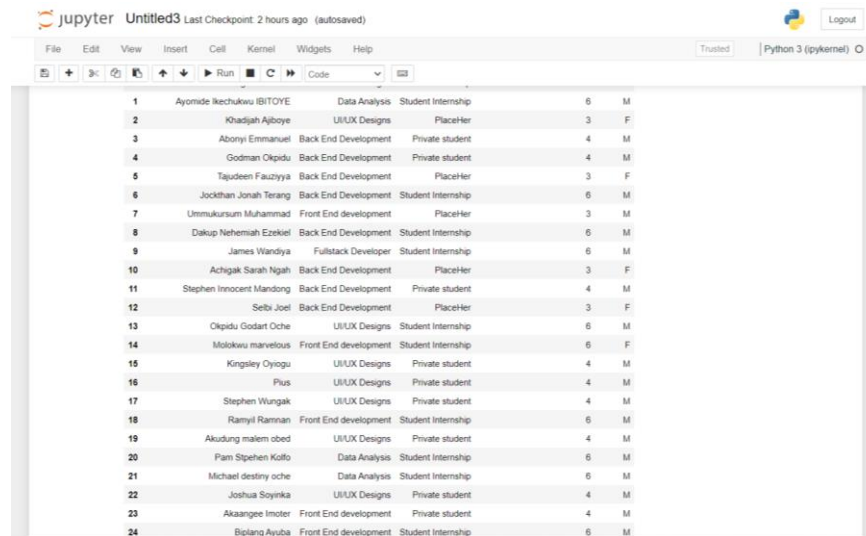


Introduction

Data Analysis: Unveiling Insights from nHub's Dataset

Purpose:

The purpose of this presentation is to delve into nHub's dataset, extracting meaningful insights that will empower informed decision-making. We aim to uncover hidden patterns, trends, and opportunities within the data, ultimately enhancing nHub's strategic direction and operational efficiency



The screenshot shows a Jupyter Notebook interface with a menu bar (File, Edit, View, Insert, Cell, Kernel, Widgets, Help) and a toolbar with icons for file operations, running, and code execution. The notebook is titled 'Untitled3' and shows a 'Last Checkpoint: 2 hours ago (autosaved)' status. The main content area displays a table with 24 rows of data. The table has 5 columns: an index column, a name column, a role column, a status column, and a count column. The data is as follows:

1	Ayomide Ikechukwu IBITOYE	Data Analysis	Student Internship	6 M
2	Khadjah Ajiboye	UI/UX Designs	PlacerHer	3 F
3	Abonyi Emmanuel	Back End Development	Private student	4 M
4	Godman Okpidu	Back End Development	Private student	4 M
5	Tajudeen Fauziyya	Back End Development	PlacerHer	3 F
6	Jockthan Jonah Terang	Back End Development	Student Internship	6 M
7	Ummukunsum Muhammad	Front End development	PlacerHer	3 M
8	Dakup Nehemiah Ezekiel	Back End Development	Student Internship	6 M
9	James Wandiya	Fullstack Developer	Student Internship	6 M
10	Achigak Sarah Ngah	Back End Development	PlacerHer	3 F
11	Stephen Innocent Mandong	Back End Development	Private student	4 M
12	Setti Joel	Back End Development	PlacerHer	3 F
13	Okpidu Godart Oche	UI/UX Designs	Student Internship	6 M
14	Molokwu marvelous	Front End development	Student Internship	6 F
15	Kingsley Oyiogu	UI/UX Designs	Private student	4 M
16	Plus	UI/UX Designs	Private student	4 M
17	Stephen Wungak	UI/UX Designs	Private student	4 M
18	Ramyl Ramnan	Front End development	Student Internship	6 M
19	Akudung malem obed	UI/UX Designs	Private student	4 M
20	Pam Stephen Kotto	Data Analysis	Student Internship	6 M
21	Michael destiny oche	Data Analysis	Student Internship	6 M
22	Joshua Soyinka	UI/UX Designs	Private student	4 M
23	Akaangee Imoter	Front End development	Private student	4 M
24	Biplang Ayuba	Front End development	Student Internship	6 M

Data Exploration

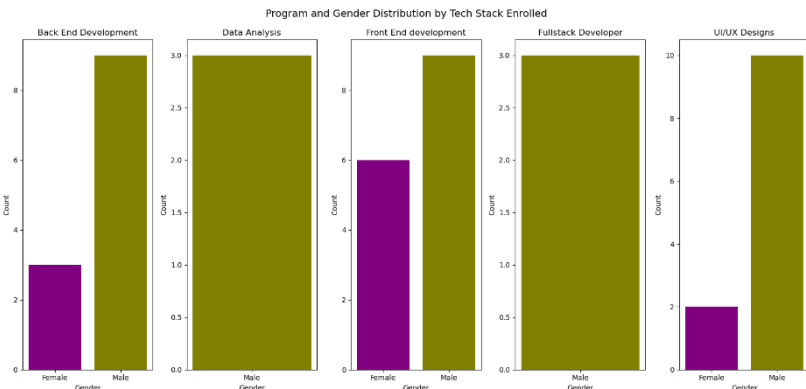
Understanding the Data

During our engagement with the dataset, we rigorously conducted data preprocessing to rectify inconsistencies, handle missing values, and ensure data quality. Following this, we embarked on an in-depth data analysis journey to extract valuable insights and patterns. This pivotal phase of our analysis unveiled crucial information within the dataset, empowering us to make well-informed decisions and recommendations grounded in empirical evidence. In the subsequent slides, we will present the key findings and insights derived from our data exploration

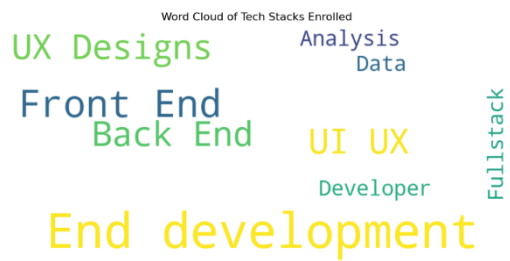
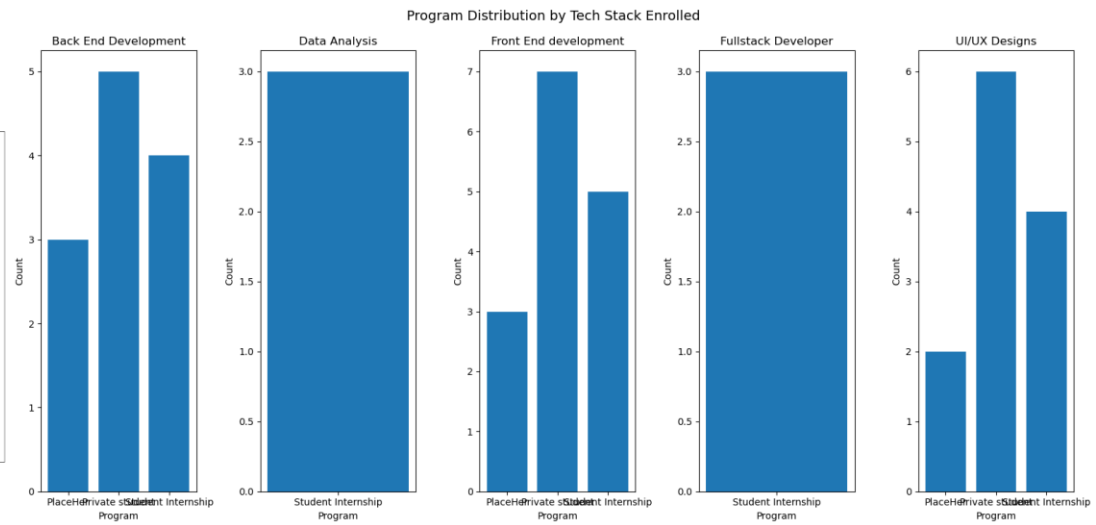


Visualization

Visual Insights: Exploring the Data

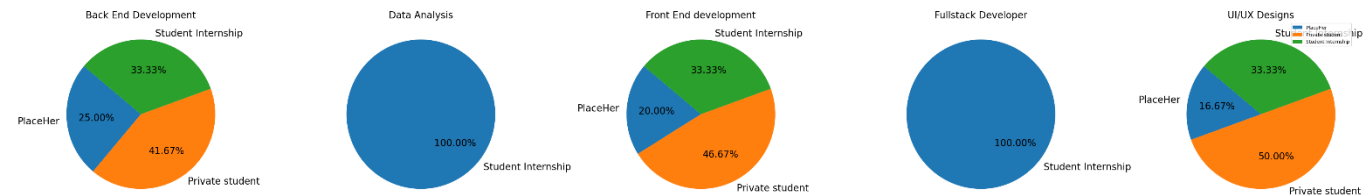


Program and Gender Distribution by Tech Stack Enrolled



Word Cloud of Tech Stacks Enrolled

Program Distribution by Tech Stack Enrolled



Interpretation

Key Insights and Findings

1. The analysis of 'Program and Gender Distribution by Tech Stack Enrolled' underscores a distinct gender enrollment pattern, with a predominant presence of male students across all tech stacks. It is noteworthy that certain tech stacks witnessed exclusive male enrollment, while the Frontend Development stack exhibited the highest female enrollment even though Female students account for a comparatively smaller portion of the overall enrollment. This gender imbalance is consistent across all tech stacks."
2. In the context of the 'Program Distribution by Tech Stack Enrolled' graph, it is evident that for Back End Development, Front End Development, and UI/UX Design, private students accounted for the majority of enrollments, whereas PlaceHer students registered the lowest participation. Conversely, in the realms of Data Analysis and FullStack Development, Student Internship participants achieved full 100% enrollment.
3. The 'Word Cloud of Tech Stacks Enrolled' provides a visual representation of stack popularity. Front End Development emerges as the most sought-after stack, reflecting its relevance in the industry. UI/UX Design and Backend also enjoy considerable interest, while Data Analysis and FullStack Development appear to be areas with room for growth in enrollment
4. Exploring the 'Tech Stack Enrolled vs. Gender' stacked histogram, it becomes apparent that Back End Development and Front End Development are the most popular choices among male students, with significant enrollment numbers. However, there is a substantial contrast among female students, with a notable preference for Front End Development and UI/UX Design over other tech stacks.
5. Analyzing the 'Tech Stack Enrolled vs. Program' histogram, we observe distinct enrollment patterns. Front End Development and Back End Development attract a higher percentage of private students, indicating a potential industry demand for these skill sets. In contrast, Data Analysis and FullStack Development see a significant enrollment from Student Internship participants, possibly due to practical training opportunities in these areas.

Recommendations

Based on the interpretation and findings from the data analysis, you can offer the following recommendations to the stakeholders:

- 1.Promote Gender Diversity:** Given the significant gender imbalance observed in tech stack enrollments, consider implementing initiatives to encourage more female students to enroll in various tech stacks. This could involve outreach programs, scholarships, or mentorship opportunities aimed at bridging the gender gap, programs like ‘PLACEHER’ is a welcome development and its advisable if more publicity goes into it.
- 2.Tailor Program Offerings:** Customize program offerings to match the preferences and enrollment patterns observed in different tech stacks. For example, if Front End Development and UI/UX Design are popular among female students, consider offering specialized programs in these areas to cater to their interests.
- 3.Enhance Internship Opportunities:** Recognizing the high enrollment of Student Internship participants in Data Analysis and FullStack Development, explore opportunities to enhance internship programs in these tech stacks. This can provide practical experience and better align students with industry demands.
- 4.Marketing Focus:** Allocate marketing resources strategically based on stack popularity. Give more emphasis to promoting tech stacks with high enrollment potential, such as Front End Development, Backend, and UI/UX Design, in your promotional campaigns.
- 5.Feedback Mechanism:** Establish a feedback mechanism to gather insights from students regarding their stack preferences and experiences. This feedback can inform program development, curriculum updates, and overall student satisfaction.
- 6.Career Counseling:** Offer career counseling services to guide students in choosing the most suitable tech stack based on their interests and industry demand. This can help students make informed decisions about their educational paths.
- 7.Expand Data Analysis and FullStack:** Recognize the opportunity for growth in Data Analysis and FullStack Development enrollment. Consider expanding course offerings, providing incentives, or partnering with industry organizations to drive interest in these stacks.
- 8.Industry Partnerships:** Collaborate with industry partners to align program offerings with current industry trends and demands. Establishing connections with companies can lead to internships, job placements, and valuable real-world experiences for students, more of pitch Friday activities.
- 9.Regular Data Analysis:** Continue to conduct regular data analysis to track enrollment trends and adapt strategies accordingly. Data-driven decision-making should be an ongoing practice to ensure program effectiveness and relevance.
- 10.Inclusivity Initiatives:** Implement inclusivity initiatives to create an inclusive learning environment. Encourage students from diverse backgrounds to enroll in tech stacks and promote an open and welcoming culture

Appendix



Disclaimer

The analysis presented in this report is based on the data available at the time of the study. It is important to note that the dataset used for this analysis may be subject to certain limitations and biases. The dataset is relatively small in size, which may result in a limited representation of the overall population. Additionally, data accuracy and completeness may be compromised due to various factors.

The insights and recommendations provided herein should be interpreted in light of these limitations. It is advisable to consider these findings as preliminary and not definitive. To improve the quality and robustness of future data analyses, we recommend the following:

Recommendations:

- 1.Data Collection and Management:** Establish a standardized data collection process to ensure data consistency and completeness, Implement data quality control measures to reduce errors and inconsistencies in the dataset.
- 2.Data Enrichment:** Consider augmenting the dataset with additional relevant information to enhance its analytical value.
- 3.Sample Size Enhancement:** Efforts should be made to increase the dataset's sample size to provide a more representative view of the population.
- 4.Data Governance:** Develop a data governance framework that outlines data handling protocols, access controls, and data sharing policies.
- 5.Cross-Functional Collaboration:** Encourage collaboration between data analysts, data scientists, and domain experts to gain deeper insights from the data.
- 6.Continuous Monitoring:** Regularly monitor data quality and update the dataset as new information becomes available.
- 7.Privacy and Ethics:** Ensure compliance with data privacy and ethical standards, especially when handling sensitive or personal information.
- 8.Capacity Building:** Invest in training and capacity building for staff involved in data collection, management, and analysis.

Incorporating these recommendations will not only enhance the accuracy and reliability of future analyses but also contribute to more informed decision-making. It is crucial to recognize that a strong data foundation is an invaluable asset for any organization's data-driven initiatives.

Please be advised that the findings and recommendations provided in this report are based on the data and circumstances at the time of the analysis. As data evolves and new insights emerge, it is advisable to revisit and adapt strategies accordingly to maintain data-driven excellence.