UTILIZING TABLEAU FOR VISUALIZATION ANALYSIS AND DECISION MAKING

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ABSTRACT

This study question focuses on the benefits of the analysis of information by means of the use using knowledge visualization software to teach you concerning knowledge and the manner in which it can be turned into data which can enhance the procedure for making decisions. The creators of the information visualization computer program Scene used data from Coursera for research and decision-making. After familiarizing yourself with the data as well as the information's visualization software, that you will be required to carry out an exploratory investigation for the purpose to locate particular trends throughout the data, put together and release the information, and improve the business' decisions-making procedure. This example is meant to be used as an essential introduction to an informational visualizations software program in a program that focuses on collegiate accounting database frameworks, an early administrative unquestionably, or a program focused on statistical analysis of data.

KEYWORDS: Data Visualization, Tableau, Analysis, Coursera

1. INTRODUCTION

These are only a handful of the websites where the data is now made available: YouTube, Reddit, Facebook, Tumblr, Gmail, LinkedIn, WhatsApp, Twitter, Instagram, and the academic community. Since this knowledge will be essential and essential to organisations, countries, and colleges and universities, comprehending it is crucial. Giant data may be defined as a collection of complex and wide-ranging [1] data that is challenging to handle using common data management software programmes. The data sets may be analysed and visualised [2,3] for a variety of purposes, including to avoid contaminations, build underutilised exchanging designs, against appear to establish future laws and wrongdoing by law enforcement. The technologies for data analytics, visualisation, and transparency that are now in existence are among those most common [4, 5]. The business intelligence (BI) product known as Atmosphere is considered to be one of the youngest and most rapidly expanding ones. It takes only a few seconds to send, is simple to remember, and is extremely useful to customers. A personal computer programme named Scene may be equipped to help customers explore and collect the information they have by producing educational images [4]. The computer programme is easy to operate by dropping and dragging objects to create a naturally appearing visualisation [5-8] conveying the required structure, and it has the possibility of being able to function with almost any database. A world-wide online learning platform called Coursera was established in 2012 by computer science professors Andrew Ng and Daphne Koller of Stanford University. The programme offers specialisations, levels, enormous open distance learning programmes (MOOCs), and knowledgeable and professional track choices. Students may learn something new whenever and wherever they choose because each course on Coursera is instructed by top professors from prestigious colleges and businesses.

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A Coursera guide can cost up to 20 lacs and is available for free (no fee is charged). Additionally, there is a subscription plan available, with the typical fee for a 1-month membership to a certain Coursera Specialization being Rs. 5,899 and access to several apps for those who genuinely desire them. Coursera is one of the best online educational platforms with a deep network of organizations that includes some of the top universities and businesses globally. Almost any problem may be thought about for as little as 0 (zero) dollars! Additionally, there are paid elective extension stage certifications available as well as plenty of loose material to consume in order to understand Tracks or, in certain cases. Fundamental destinations of this paper incorporate:

- 1. Aims to help any new learner get the right course to learn by just answering a few questions.
- 2. To search detail of all type of courses which is in VISUAL ANALYSIS OF COURSERA (MOOC) Platform.
- 3. To find best courses regarding your field.
- 4. Supply the good visualization of VISUAL ANALYSIS OF COURSERA (MOOC) Platform for the all type of learner.

2. METHODOLOGY

Authors have utilized dataset from Kaggle reputable net website online. Our project pursuits to help any new learner get the proper direction to study through simply answering a few questions. it is an sensible route advice system. Authors have simply created records visualization and desire this statistics visualization may be beneficial to a person for his/her non-public functions. Datasets from Kaggle, a credible internet resource, were used by the authors. By only responding to a few questions, we want to assist each new learner in receiving the right guidance for their studies. This route recommendation algorithm is logical. The authors have just produced data visualization and hope that a person will find it useful for his or her own purposes.890 course data are mostly contained in 6 columns of the dataset. The COURSERA (MOOC) Platform data visualization was created using this dataset. Here are the specifics:

- Course title: The name or title of the course is contained in this attribute. It is used to specify the particular course being discussed.
- Course organization: This characteristic identifies the company, college, or other educational facility that is in charge of running or offering the courses. It facilitates linking the training to a specific company.
- Course Certificate type: This feature offers details on the various certification options offered for the course. The exact skills taught or the certification level (e.g., beginning, intermediate, advanced) may be among the information it contains.
- Course rating: This feature indicates the course ratings for each item. Students who have completed the course can rate it, and this is a good approach to determine the calibre and acclaim of the programme.
- Course difficulty: This property reflects how challenging or complex the course is. It could provide a numerical difficulty scale or employ categories like beginner, moderate, and advanced.
- The number of students enrolled in the course is indicated by the parameter course_students_enrolled. It provides a sense of the popularity and enrolment numbers for the course.

3. DISCUSSIONS AND SIMULATION

For that measurement, the process of visualization unifies all of the crucial facts, such as the direction, the heading, the course placement, the college call underneath the course, the issue organization of the guides, etc. All of the unused way data must be present. Since it should be made clear that the

subsequent clients/learners are happy with their specific heading detail, the chairman must not remove the course from the Coursera (MOOC) Stage records visualization. This document documents the data of all courses are controlled by visualization. Evaluations, The Exercise manual, Worksheet, cloud database, and other places are where visualization keeps records. Information visualization stores facts in databases that include way call, heading rank, heading information, links for ways, issue levels for courses, and so on. Each repository stores data about some subject. The course requirement, which differs from every other course requirement, the path element, the rating of the route, and the problem level of the course are all incorporated into it, just like in the customer database.

4. CONCLUSION

These measures the finished Coursera (MOOC) Stage is seen working against the demands of both specialized clients and non-technical clients. This reality visualization offers a lot of options that are necessary to find guidance for heading selection, way positioning, course difficulty, course description, which college has a spot for the course, etc. Customers of Coursera have a variety of options for the outcomes of their decisions, regardless of whether they come from a verified specialty background or a non-specialty one. Using the Scene computer program's imaginative and futuristic framework, this measurements visualization of Coursera (MOOC) Stage advanced. The following were the venture's goals that were attained: It provides comprehensive details about Coursera's courses for both technical and non-technical users, and can be used for both individual courses and bulk course guides. Clients can coordinate, dissect, and assess the Coursera (MOOC) distributions by using data visualization, which saves time when evaluating and browsing for the best indent yield of courses for users. It is also easy to use, easy to access, and very user-friendly. It is powered by a web server.

REFERENCES

- [1] Lidong Wang, Guanghui Wang and Cheryl Ann Alexander.(2015)."Big Data and Visualization: Methods Challenges and Technology Progress", Digital Technologies, 1(1), 33-38.
- [2] Joshua N. M. (2015). "Learning Tableau", Published by the PACKT, ISBN-13, 978-1784391164.
- [3] M Cristani, E Karafili and L Vigano. (2013). Tableau systems for reasoning about risk. Ambient Intelligence and Humanized Computing.
- [4] Lei Junhu, Yang Jiahong, Zhong Jiancheng et al. (2011). "High dimensional data visualization based on PCA and parallel coordinates [J]", computer engineering, 37(1), 48-50.
- [5] Janvrin DJ, Raschke RL and Dilla WN. (2014). Making sense of complex data using interactive data visualization.
- [6] J Account Educ, 32(4), 31-48.
- [7] Pascual-cid Victor. (2008). "An Information Visualization System for the Understanding of Web Data", Proceedings of IEEE Symposium on Information Visualization (INFOVIS).
- [8] Manohar V, Arpan G and Björn B. (2018). Brandenburg. 2018. Tableau: A High-Throughput and Predictable VM Scheduler for High-Density Workloads. In EuroSys '18: Thirteenth EuroSys Conference, ACM, New York, NY, US

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