



EMPOWERING THE FUTURE: A LITERACY RATE ANALYSIS FOR A BETTER FUTURE TOMORROW

Presented by

RITHISH KUMAR K	(611220104116)
ROSHINI JK	(611220104118)
SABARI V	(611220104119)
SANGANIDHI S	(611220104122)

UNDER THE GUIDANCE OF

Mr. J. MURUGESAN (IT)

ASSISTANT PROFESSOR,

DEPARTMENT OF INFORMATION TECHNOLOGY

INTRODUCTION

- Data analytics is a method of applying quantitative and qualitative techniques to analyze data, aiming for valuable insights. With the help of data analytics, we can explore data and we can even draw conclusions about our data.
- In this project, we will fetch the dataset from the external API. Using the IBM Cognos Analytics tool cleaned data module is created. Using those exploration ideas dashboards, reports, and stories are created. Finally, the dashboard, report, and story are linked to the webpage.

ABSTRACT

- The literacy rate in India in 2022 is examined in this research. An important factor in determining a country's degree of development is literacy. An individual's ability to communicate through reading and writing is referred to as literacy.
- Any population's literacy rate calculates the proportion of people over a given age who are literate. The percentage of adults over the age of fifteen who are literate is known as the literacy rate.
- To ensure that people have the complex communication and critical thinking abilities required to succeed in the workplace and a global economy because a high literacy rate is crucial.

KNOWLEDGE INSTITUTE OF TECHNOLOGY

LITERATURE SURVEY

PAPER-I

TITLE: Literacy Rate Analysis Dashboard.

AUTHOR: Kavita Sheoron ,2019

CSE

The key to literacy is a fundamental comprehension of composed content, the capacity to comprehend someone else talking, and comprehension and the ability to write. Reading and writing are foundation skills. Not solely are they needed for additional study, but they're conjointly crucial in helping us to know and interact with the world around us.

KNOWLEDGE INSTITUTE OF TECHNOLOGY

LITERATURE SURVEY

PAPER-II

TITLE: Literacy Rate In India In 2022

AUTHOR: Khritish Swargiary, Kavita Roy, 2022

Khritish Swargiary and Kavita Roy presented a paper on **ACADEMICIA: An International Multidisciplinary Research Journal** ISSN: 2249-7137 Vol. 12, Issue 08, August 2022 in which they state that A high literacy rate (or low illiteracy rate) indicates the presence of a primary education system and/or literacy programs that have made it possible for a significant portion of the population to learn how to use the written word (and perform basic arithmetic calculations) in daily life and to continue learning



LITERATURE SURVEY

PAPER-III

TITLE: Literacy Rate at Primary Level: Identification of Causes and Impacts.

AUTHOR: Mariam Javed, Dr. Qaisar Abbas et al ,2021.

Mariam Javed, Dr. Qaisar Abbas and Dr. Shafqat Hussain presented a paper on Pakistan Social Sciences Review April-June 2021, Vol. 5, No. 2 [492-506] in which they state that Illiteracy greatly hinders the economic and social progress of a person and a country. Education allows one to seek and pursue opportunities. People who have been to school or have a good education have the skill and intelligence to make good investment decisions and advance a country's growth agenda

KNOWLEDGE INSTITUTE OF TECHNOLOGY

LITERATURE SURVEY

PAPER-IV

TITLE : Analysis And Forecast Of Literacy Rates In India

AUTHOR: Vaidehi Nimje, Aboli Kulkarni Et Al, 1996

CSE

Vaidehi Nimje, Aboli Kulkarni, and Prajakta Kulkarni presented a paper on JETIR December 2018, Volume 5, Issue 12 in which they state that In this research paper, the principle feature for forecasting literacy is considered to be the Population of a region. Hence, the projection of future population trends is carried out first and then a predictive algorithm is used to forecast the literacy rate

DRAWBACKS IN EXISTING SYSTEM

- The user interface may not be the most intuitive, we feel that there is room for improvement.
- Its data visualization features require configuration to integrate with third-party tools.
- Errors and fake analysis of literacy rate may be occur.
- Lack of access to computers and the internet or who limited digital literacy skills may face disadvantages in education and the job market.

KNOWLEDGE INSTITUTE OF TECHNOLOGY

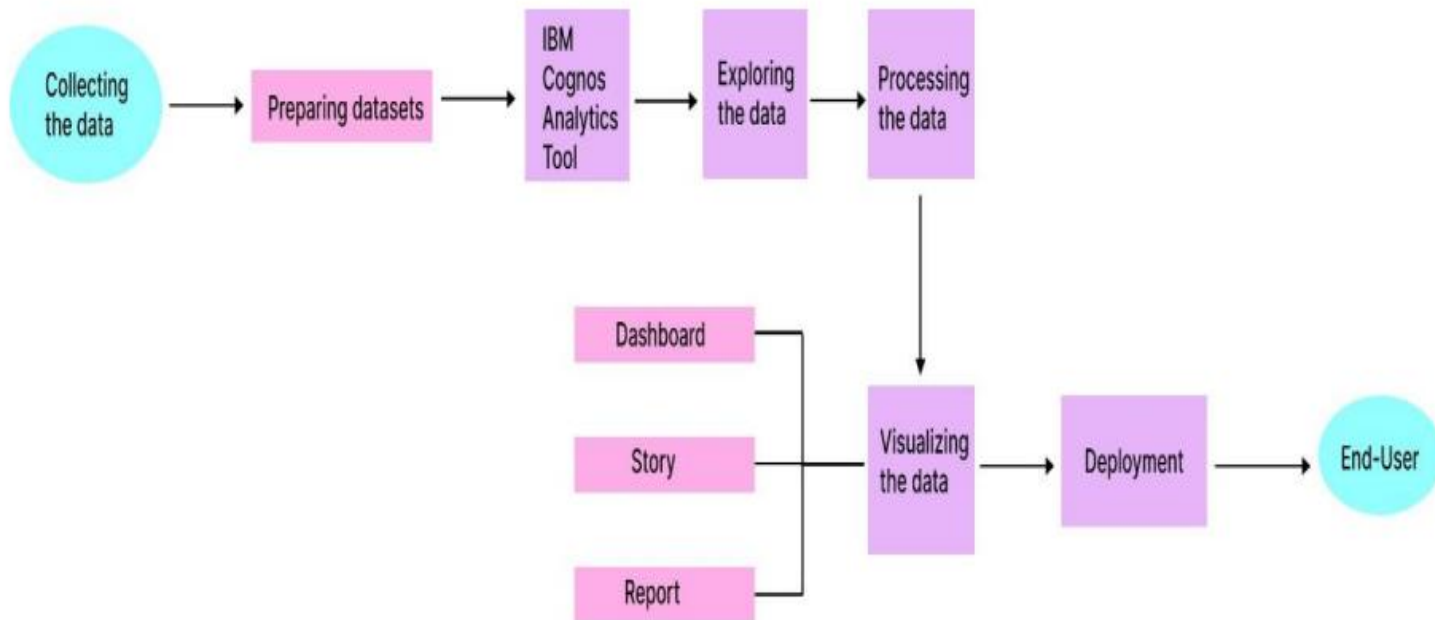
PROPOSED SOLUTION

- This project deals with the analysis of Literacy Rates in different states of India based on 680 factors.
- We are focusing on finding the top five factors and the least five factors that influence the literacy rate of a given state. Also, we predicted the literacy rate based on features and compared them with the available literacy rates and it was found to be accurate up to 93%.
- In our effort, we have tried to predict the Literacy Rates of each state using a reduced set of features.
- The scalability of our project is very huge, especially covering the people on the education and human welfare development side.

ADVANTAGES

- Lower costs—reduces maintenance due to complete report coverage and a zero-footprint environment.
- Faster results—shorten reporting time due to seamless integration and adaptive authoring.
- Improved decision-making—reports and dashboards present data in easily-understood formats.
- Ability to use a variety of charts—crosstabs, bar or 3D bar, pie or doughnut, line, gauge, funnel, scatter, dot density, waterfall, and so forth.

DATAFLOW DIAGRAM



KNOWLEDGE INSTITUTE OF TECHNOLOGY

SYSTEM SPECIFICATION

HARDWARE USED:

Processor -AMD/INTEL

RAM -4GB

Hard Disk -256 GB

SOFTWARE USED:

Language - Python, HTML, CSS and Javascript

Framework - Flask

Package Manager & Build Tool - PIP

Database - IBM_DB2

Service - SendGridAPI(Email)

MODULES

1. Authentication

- Login
- Sign in

2. Home

- Home page of the Project.

3. About

- About the Project Web Page.

4. Analysis Page

- Dash Board Page
- Report Page
- Stories Page

MODULE DESCRIPTION

1. Authentication: Users can create a new account or log in to an existing account. It typically requires users to provide a username or email address and a password for authentication purposes. Once authenticated, users can access their personalized content or services on the website.

2. Home: User will know about the site using the home page. It contains other navigation page like services page, team page, about page and analysis page. It act like starting page of the website.

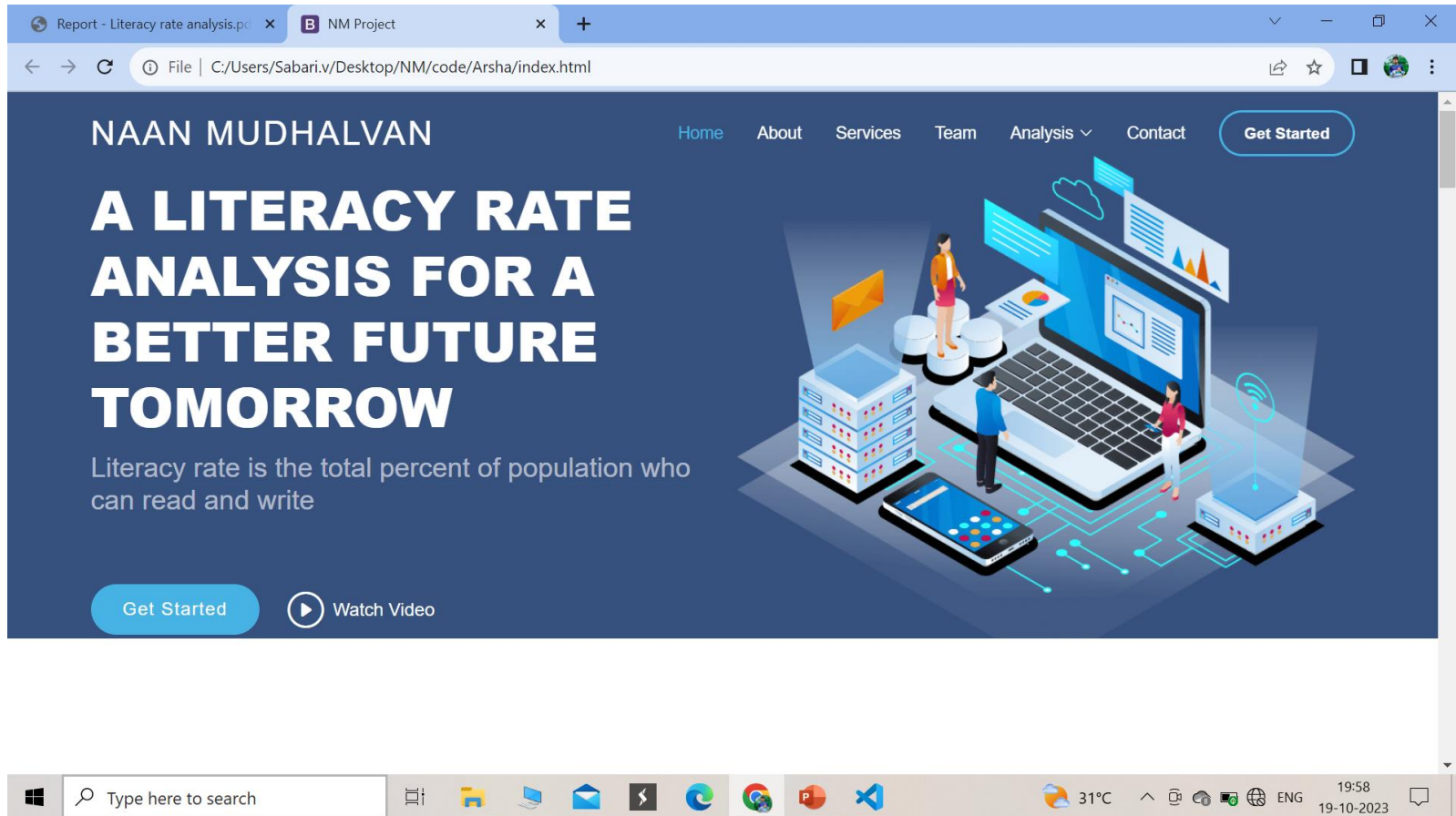
MODULE DESCRIPTION

3. About : In this, it contains about the services provided my the web site. It also contains why literacy rate analysis have done, past literacy rate surveys , service details etc...

4. Analysis Page : It contains about dash boards ,report and stories of the literacy rate analysis, their rate percentage , gender based literacy rate , state and area based analysis.

RESULT AND DISCUSSION

CSE

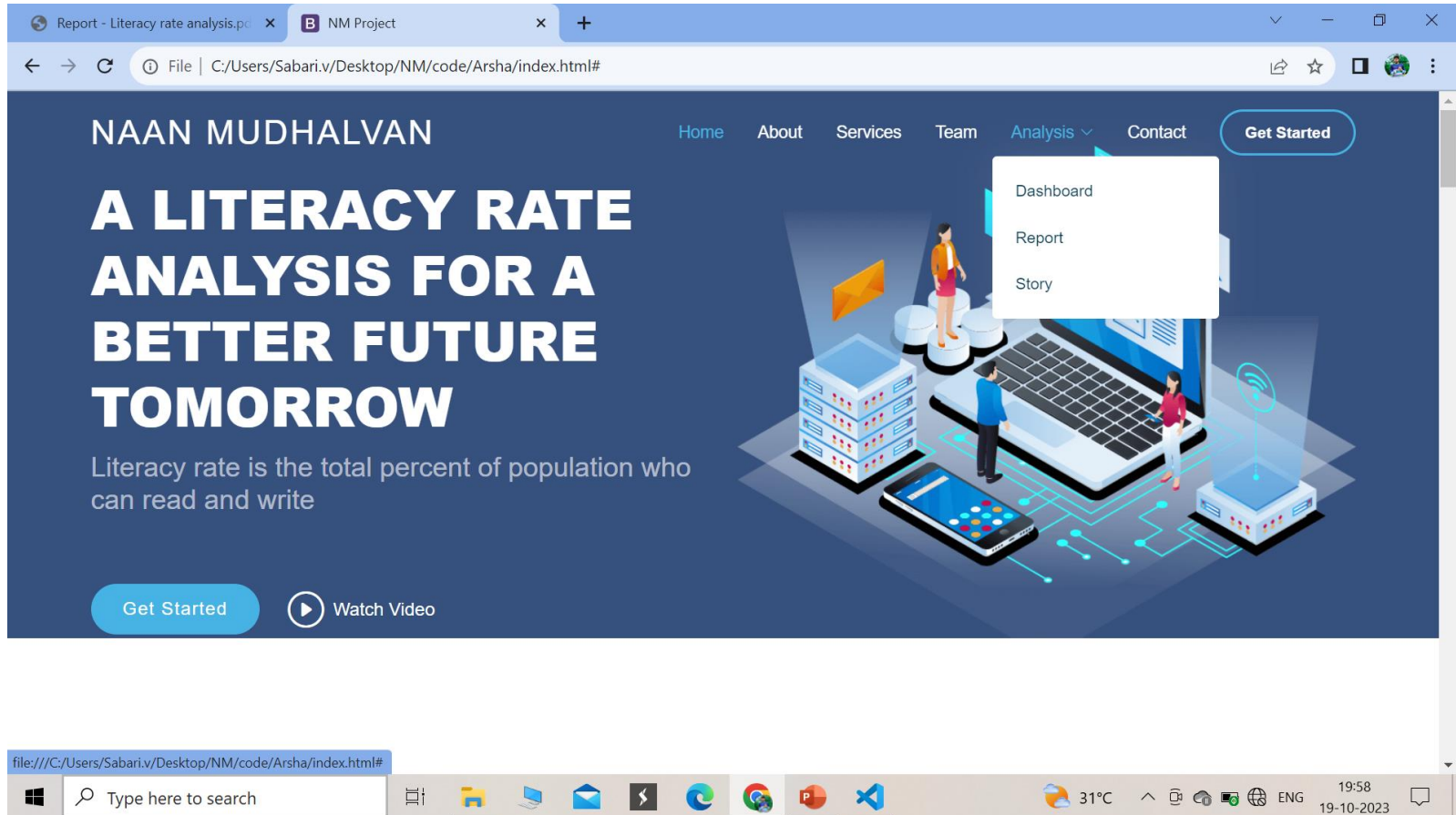


The screenshot shows a web browser window with two tabs: 'Report - Literacy rate analysis.pdf' and 'NM Project'. The address bar shows the file path 'C:/Users/Sabari.v/Desktop/NM/code/Arsha/index.html'. The webpage has a dark blue header with the text 'NAAN MUDHALVAN' and a navigation menu with links: 'Home', 'About', 'Services', 'Team', 'Analysis', and 'Contact'. A 'Get Started' button is in the top right. The main content area features the title 'A LITERACY RATE ANALYSIS FOR A BETTER FUTURE TOMORROW' in large white letters. Below the title is a paragraph: 'Literacy rate is the total percent of population who can read and write'. To the right is an illustration of people interacting with a large laptop, a smartphone, and server racks. At the bottom, there are two buttons: 'Get Started' and 'Watch Video'. The Windows taskbar at the bottom shows the search bar, task view, and various application icons. The system tray on the right shows the temperature as 31°C, the time as 19:58, and the date as 19-10-2023.

KNOWLEDGE INSTITUTE OF TECHNOLOGY

RESULT AND DISCUSSION

CSE



Report - Literacy rate analysis.p... x NM Project x +

File | C:/Users/Sabari.v/Desktop/NM/code/Arsha/index.html#

NAAN MUDHALVAN

Home About Services Team Analysis Contact Get Started

A LITERACY RATE ANALYSIS FOR A BETTER FUTURE TOMORROW

Literacy rate is the total percent of population who can read and write

Get Started Watch Video

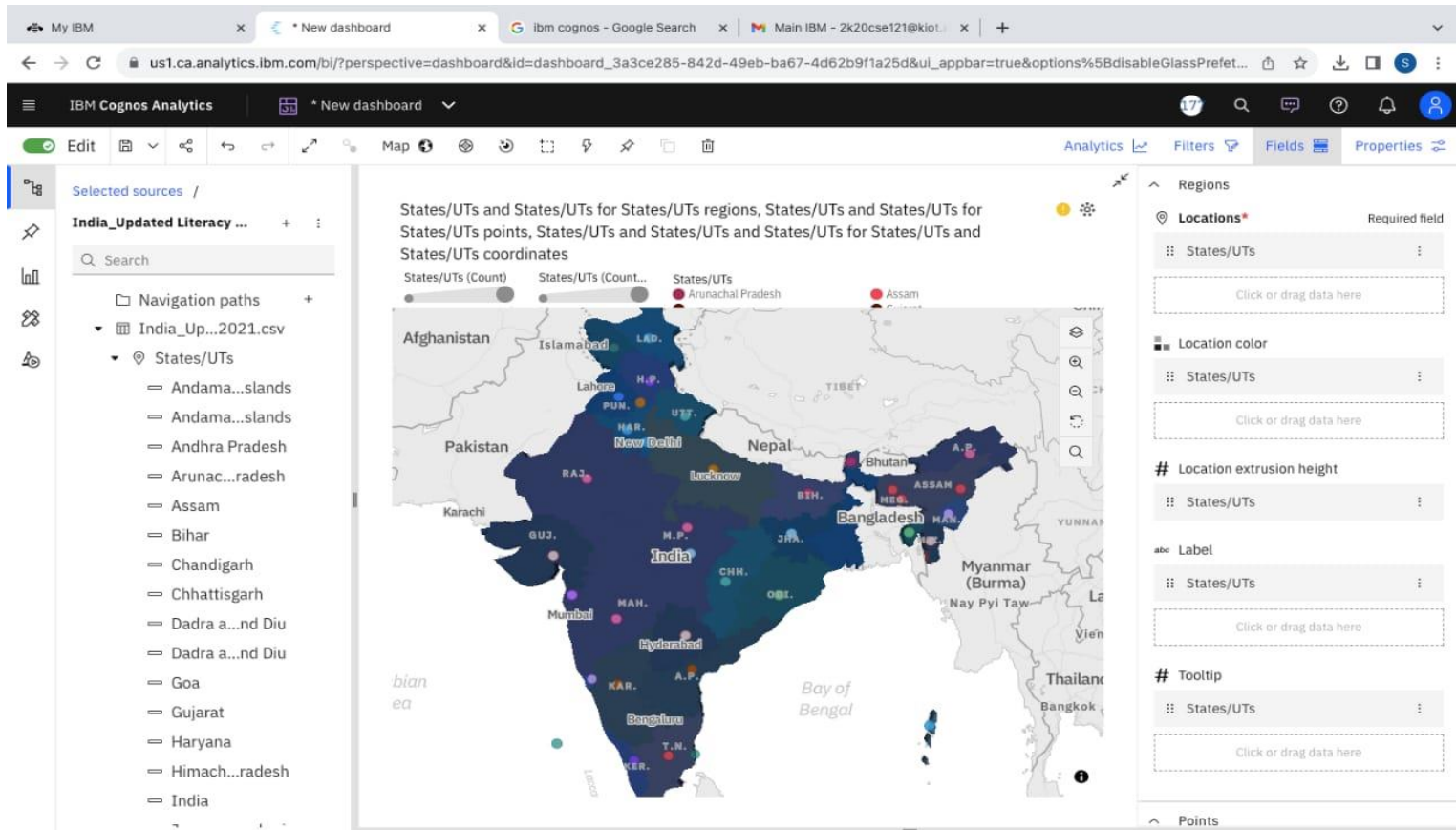
Dashboard
Report
Story

file:///C:/Users/Sabari.v/Desktop/NM/code/Arsha/index.html#

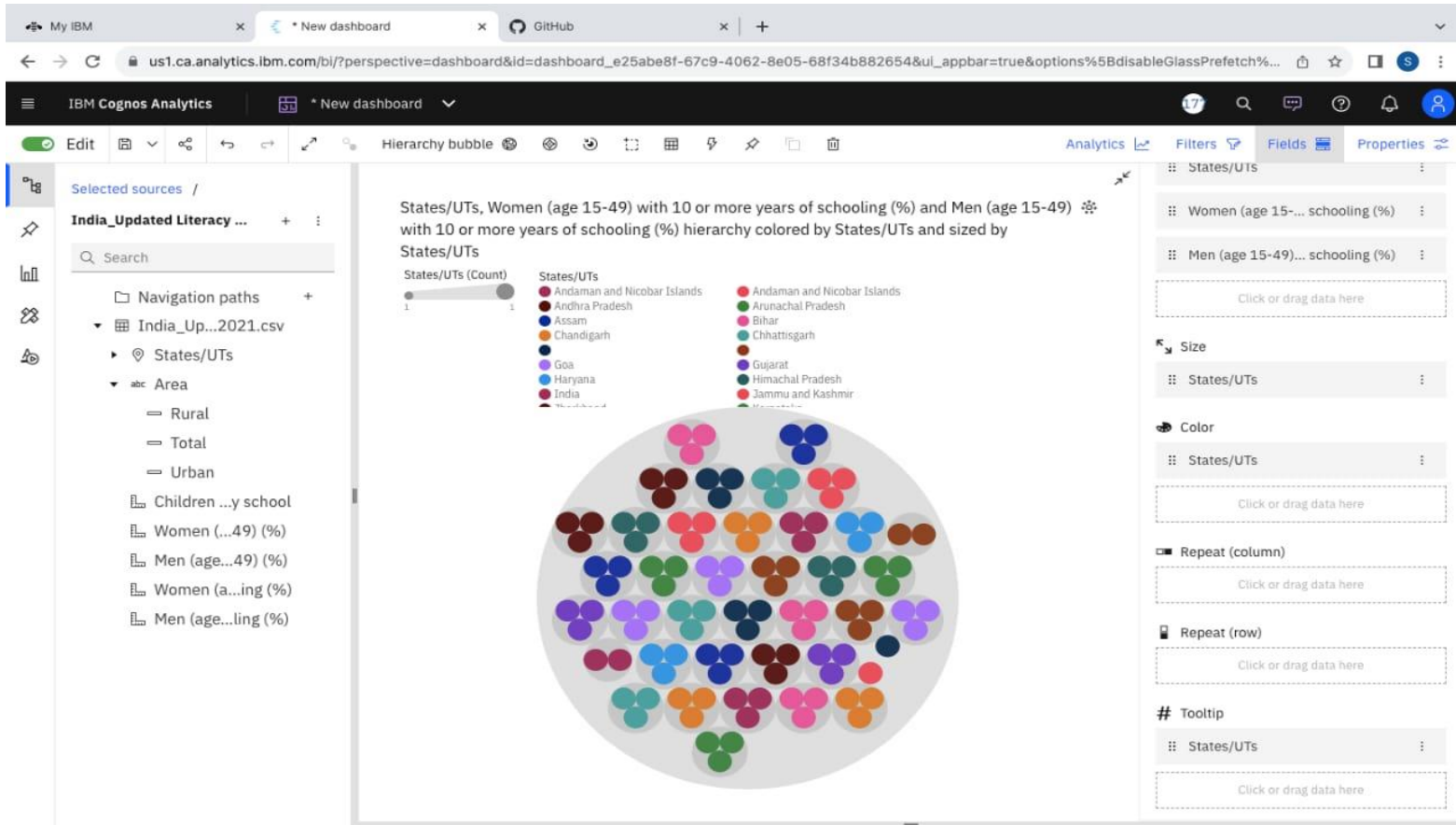
Type here to search

31°C 19:58 19-10-2023

RESULT AND DISCUSSION

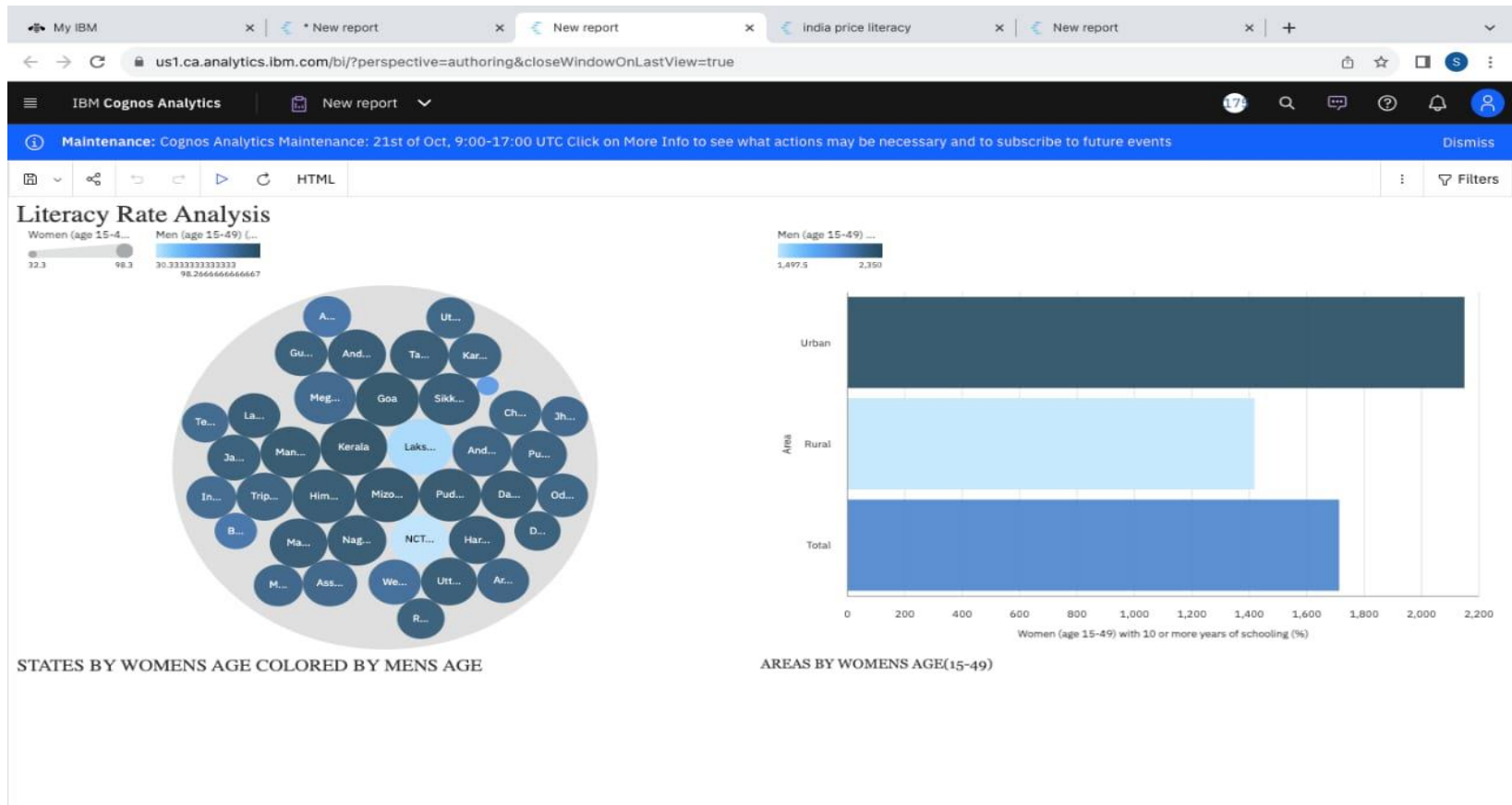


RESULT AND DISCUSSION

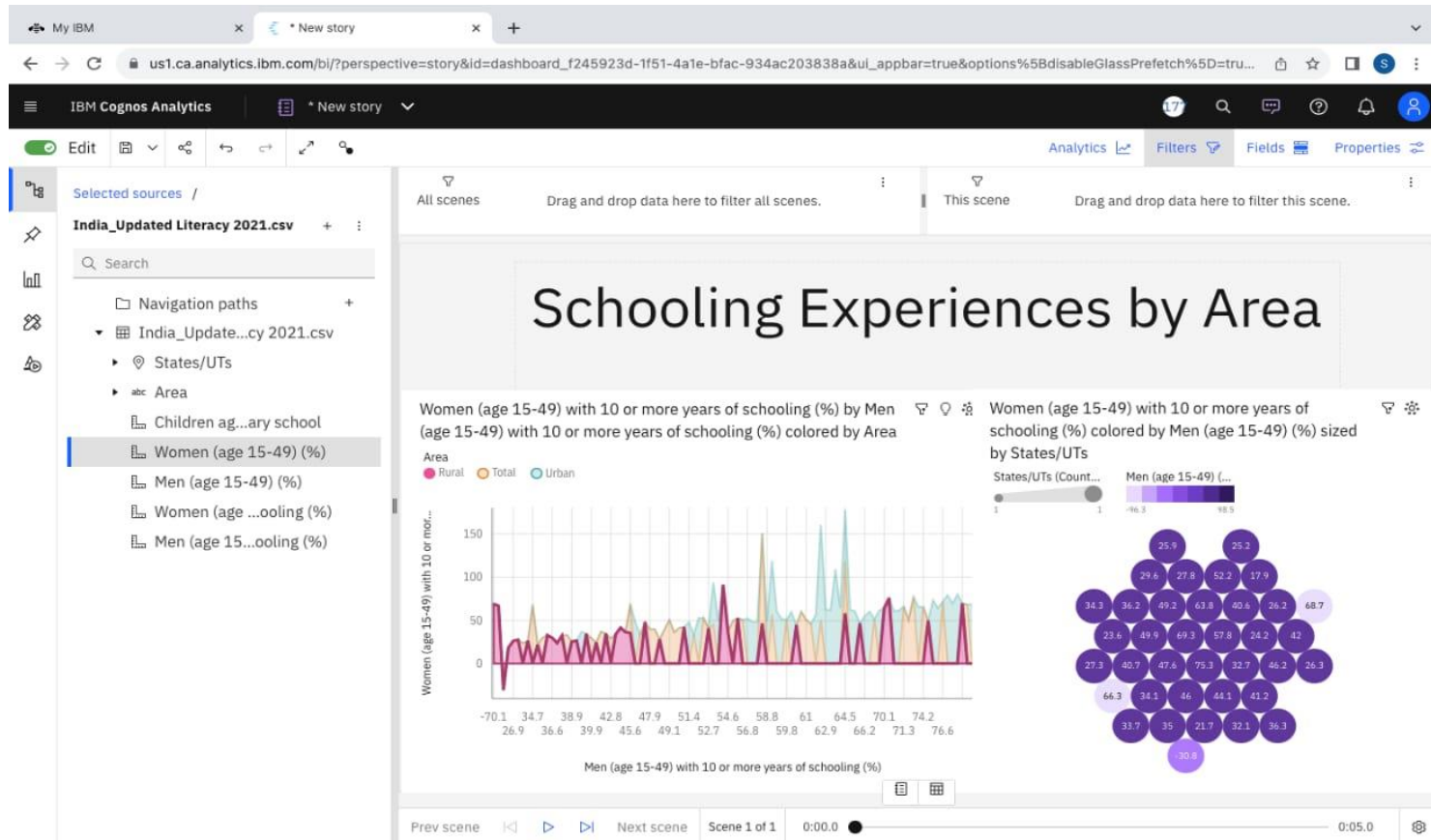


RESULT AND DISCUSSION

CSE



RESULT AND DISCUSSION



CONCLUSION

- The goal of this project is to analyze the literacy dataset. The provided dataset is first checked for null values and the columns with null values are identified using Python.
- The dataset is uploaded to the database using the IBM cloud and the database is connected to the IBM Cognos Analytics tool. In the IBM Cognos Analytics tool, the data module option is selected and the dataset is pre-processed (null values are replaced with valid values).
- Using this cleaned data module data exploration process is carried out, in which different visualizations are created. An interactive dashboard, report, and story are created in the IBM Cognos Analytics tool using the cleaned data module.
- Finally those things are embedded in webpage.

FUTURE SCOPE

- In future, we would like to add more parameter metrics along with this project. It can be developed using Python and machine learning algorithms.
- After developing the code we can analyze the result accurately. Then we added the pages to our website. When we connect the website, we are visualization the dataset not only for literacy it will fit all types of datasets.
- But only in the form of a CSV file it accepts. we can easy to visualize the dashboard, report, and story helping people to understand in better ways.



KNOWLEDGE INSTITUTE OF TECHNOLOGY



CSE

THANK YOU

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING