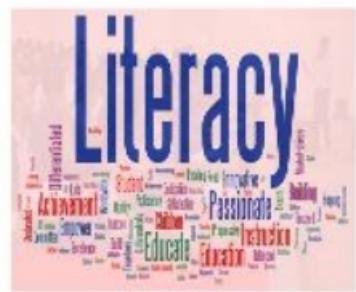


Empowering The Future : A Literacy Analysis For a Better Tomorrow



Team ID	NM2023TMID01225
Project Name	Empowering the Future: A Literacy Rate Analysis for a Better Tomorrow

Project Done by,

Team Lead : B.Gurumoorthy

Team Members : G.Ganesan
M.Jayalesh

III Year

Department of ECE

AVS Engineering College



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Introduction:

- ❖ Empowering the Future is a process of analysis and evaluating the literacy rate and its impact on society's development. By examining the current state of literacy and its implications for the future, we seek to identify opportunities for improvement and propose actionable strategies to enhance literacy rates.

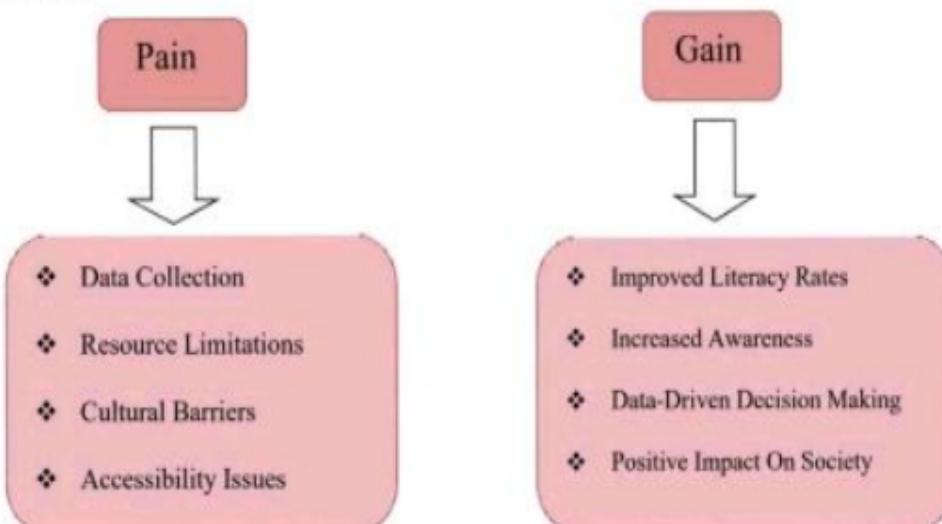
Ideation phase

Problem statement:

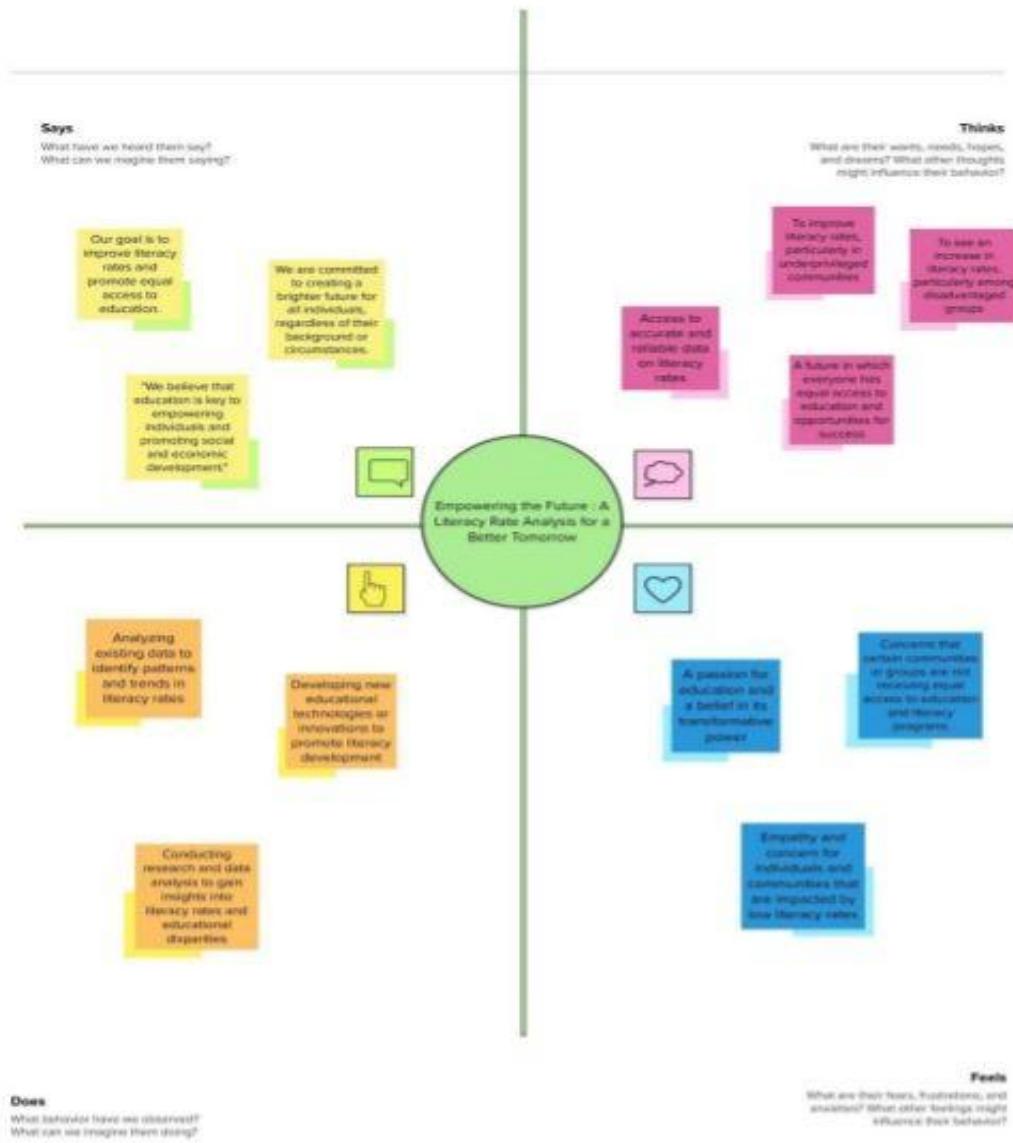
- ❖ Problem statements are analyze the factors impacting literacy rates in a specific region or community in order to develop strategies and interventions that can improve literacy levels and contribute to a better future.

Empathy Map Canvas:

- ❖ An empathy map is a simple, easy-to-digest visual that captures knowledge about a user's behaviours and attitudes.
- ❖ It is a useful tool to helps teams better understand their users.
- ❖ Creating an effective solution requires understanding the true problem and the person who is experiencing it. The exercise of creating the map helps participants consider things from the user's perspective along with his or her goals and challenges.
- ❖ The Empathy map of our project with pain and gain aspects are shown below.



Empathy Map



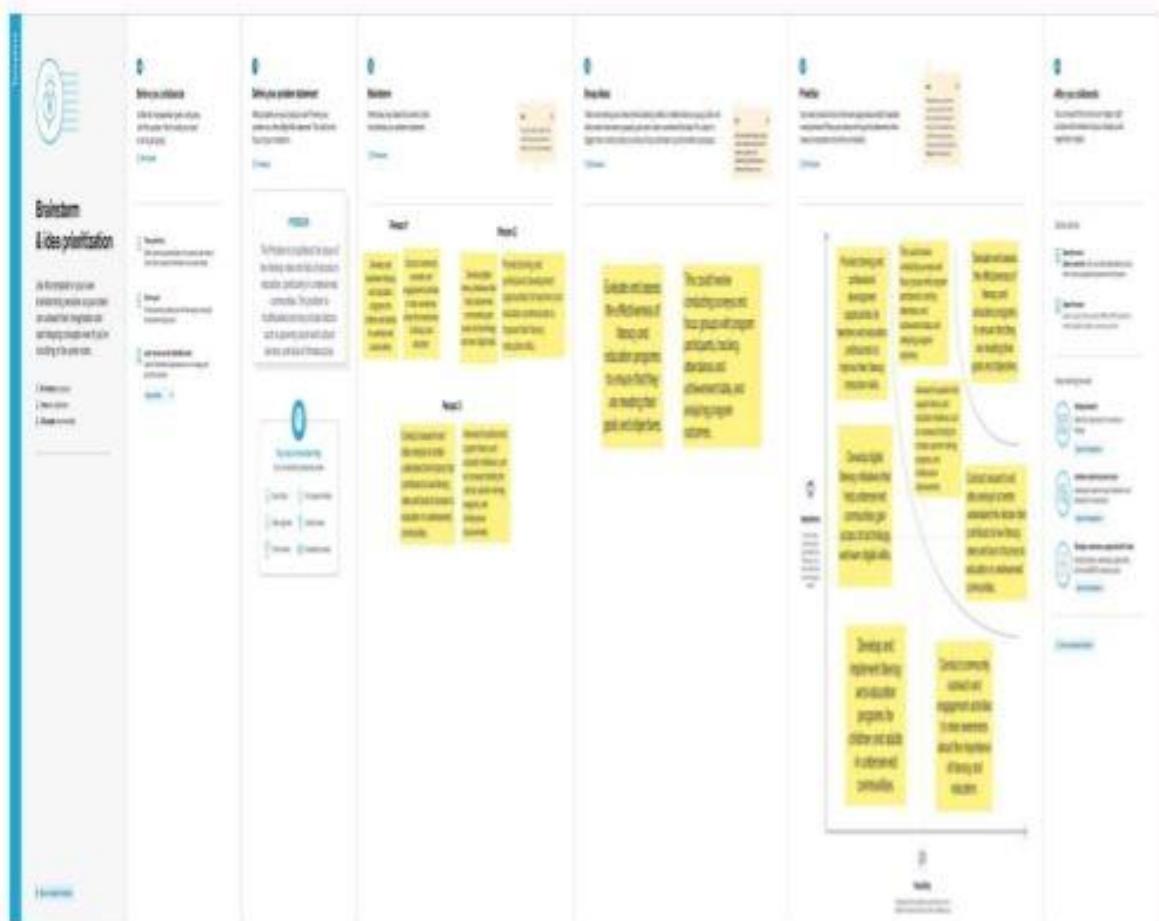
Reference Link :

<https://app.mural.co/t/student80063/m/student80063/1683537045695/d81491f318537b7ecb6992d4eaa2a4a293e9b958?sender=u40cb66432497345712c11613>

Brainstorm and Idea Prioritization :

- ❖ Brainstorming is a great tool for generating new and innovative ideas. It allows team members to share their thoughts and ideas in a non-judgmental and supportive environment.
- ❖ Brainstorming can help teams come up with solutions to complex problems.
- ❖ By pooling their knowledge and expertise, team members can identify the root causes of a problem and develop creative solutions to address it.
- ❖ Brainstorming can also be used to make decisions.
- ❖ Rank ideas based on how much they will positively impact the literacy rates in underserved communities.
- ❖ Rank ideas based on how feasible they are to implement with available resources (e.g. time, money, skills).
- ❖ Rank ideas based on their cost in terms of time, money, and resources.
- ❖ Rank ideas based on how difficult they are to implement.

Brainstorm and Idea Prioritization



Reference Link :

<https://app.mural.co/t/ece6013sroom9812/m/ece6013sroom9812/1683568318106/6388fba32d9d8983d57418accab190f523588449?sender=u663d6c9cc6f552a471770976>

Problem Statement :

- ❖ Despite efforts to improve literacy rates, many individuals in underserved communities continue to lack access to quality education and resources, leading to limited opportunities for personal and professional growth.
- ❖ This project aims to address this issue by analyzing the current state of literacy rates in these communities and developing tailored programs and resources to empower individuals to become lifelong learners and achieve their goals.



Reference Link :

<https://miro.com/app/board/uXjVMKmea9s=/>

Proposed Solution Template:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	<ul style="list-style-type: none">❖ The Project aims to address the persistent issue of low literacy rates and inadequate access to education in various regions or communities.❖ The problem statement revolves around the need to improve literacy rates, enhance educational opportunities, and empower individuals and communities through education.
2.	Idea / Solution description	<ul style="list-style-type: none">❖ The project proposes a comprehensive solution that leverages data analysis and insights to identify factors contributing to low literacy rates and develop strategies to address them.❖ By collecting and analyzing data related to literacy rates, education levels, demographics, and socioeconomic factors, the project aims to generate actionable insights and recommendations to improve literacy and education outcomes
3.	Novelty / Uniqueness	<ul style="list-style-type: none">❖ The combining data collection, analysis, and visualization techniques, the project provides a unique perspective on the challenges faced by different communities in achieving literacy goals.

4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"> ❖ The project's ultimate goal is to empower individuals and communities through improved literacy rates and education. ❖ Higher literacy rates lead to increased opportunities for employment, better healthcare, poverty reduction, and overall societal development and the involving of stakeholders such as policymakers, educators, and community leaders, the project ensures a customer-centric approach, considering the satisfaction and well-being of the target beneficiaries.
5.	Business Model (Revenue Model)	<ul style="list-style-type: none"> ❖ The project's business model can incorporate various revenue streams. ❖ These may include partnerships with educational institutions, government agencies, or non-profit organizations that are invested in improving literacy rates. ❖ Revenue can be generated through consulting services, data analysis and insights, educational programs, or by offering value-added products or services related to literacy and education.
6.	Scalability of the Solution	<ul style="list-style-type: none"> ❖ The proposed solution is designed with scalability in mind and the utilizing a solution architecture to accommodates the growth expansion, the project can scale its operations to cover the largest target of additional communities with low literacy rates and the project can be a leverage technology, automation, and partnerships to enhance scalability.

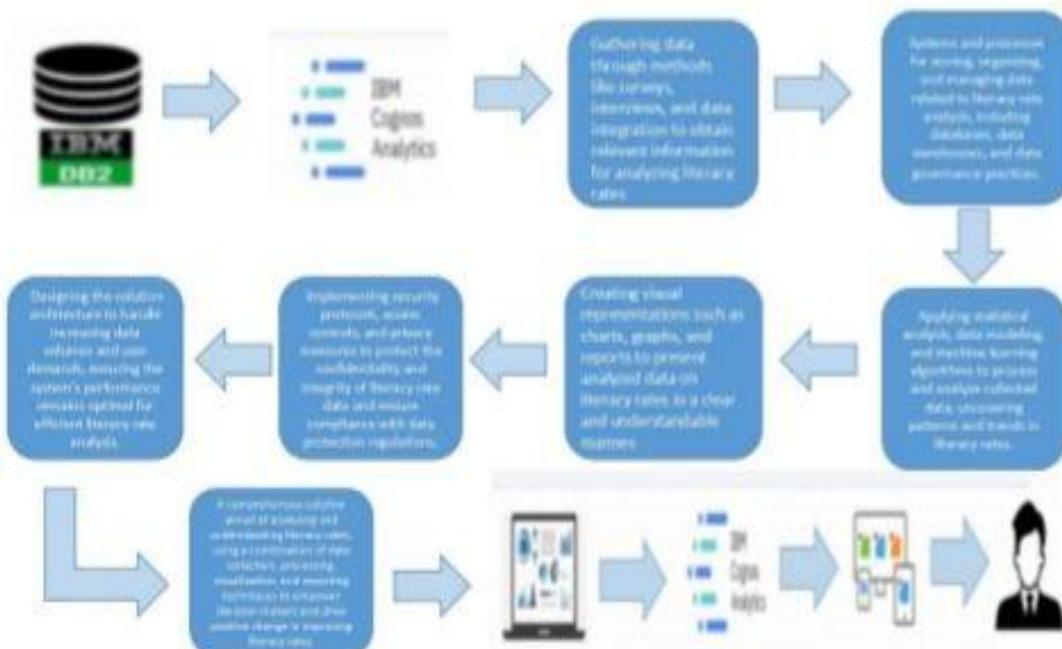
Project Design:

Solution Architecture:

Solution architecture is a complex process – with many sub-processes – that bridges the gap between Literacy Rate Analysis Solutions. Its goals are to:

- ❖ The solution architecture involves identifying and understanding the stakeholders involved in the project, such as policymakers, educators, community leaders, and learners.
- ❖ The solution architecture assesses the existing systems, processes, and infrastructure related to literacy rate analysis and education of the solution architecture addresses security and privacy concerns related to the collection, storage, and processing of data.
- ❖ It defines the security protocols, access controls, data encryption, and privacy safeguards to protect sensitive information and it determines how users, such as policymakers or educators, will interact with the solution to access and interpret the analyzed data and it aims to provide user-friendly interfaces and intuitive visualizations that facilitate data exploration and decision-making.

Solution Architecture Diagram:



Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

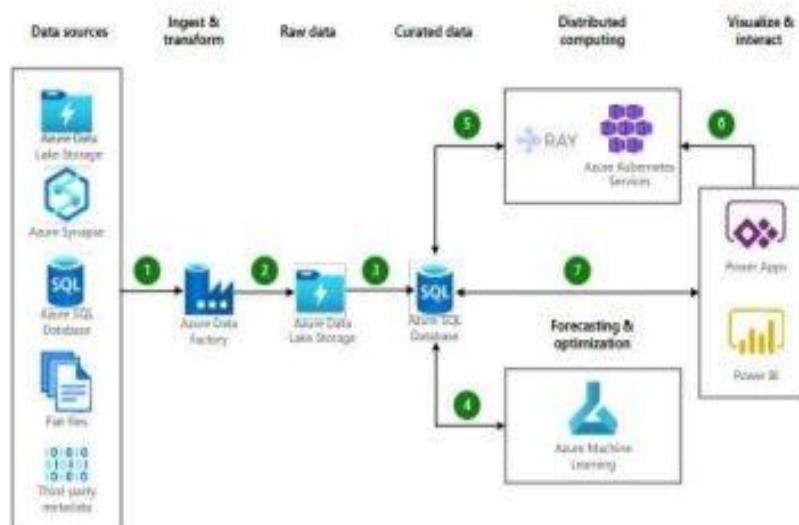


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Handles the presentation and interaction	HTML, CSS, JavaScript, UI Framework
2.	Application Logic-1	Business logic component 1	Python
3.	Application Logic-2	Business logic component 2	Python
4.	Application Logic-3	Business logic component 3	Python
5.	Database	Stores and manages the data	MySQL

6.	Cloud Database	Cloud-based database for scalability and flexibility	Cloud database service (AWS)
7.	File Storage	Stores and manages file data	Cloud storage service (AWS S3, Google Cloud Storage)
8.	External API-1	Integration with external API 1	API documentation (RESTful API)
9.	External API-2	Integration with external API 2	API documentation (RESTful API)
10.	Machine Learning Model	Trains and applies ML algorithms	Machine learning framework (scikit-learn, TensorFlow)
11.	Infrastructure	Server or cloud infrastructure for hosting	On-premises server or cloud platform (AWS, Azure)

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Utilize open-source frameworks	Django, Flask (Python)
2.	Security Implementations	Implement robust security measures to protect the application and data	SSL/TLS, JWT
3.	Scalable Architecture	Design an architecture that can handle increasing load and user demands	Microservices, Kubernetes
4.	Availability	Ensure high availability of the application to minimize downtime	Load balancing, fault tolerance
5.	Performance	Optimize application performance for faster response times and efficient resource utilization	Caching, indexing, query optimization

Requirement Analysis:

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	<ul style="list-style-type: none">❖ Provide a user registration form with fields for username, email, and password.❖ Validate and store user registration information in the database.
FR-2	User Confirmation	<ul style="list-style-type: none">❖ Send a confirmation email to the registered user's email address.❖ Include a unique confirmation link in the email for user verification.❖ Verify the user's email address upon clicking the confirmation link.

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	<ul style="list-style-type: none">❖ The solution should have a user-friendly interface and intuitive navigation to ensure ease of use for users.
NFR-2	Security	<ul style="list-style-type: none">❖ The solution should implement appropriate security measures, including data encryption, access control, and user authentication, to protect user information and maintain data confidentiality.
NFR-3	Reliability	<ul style="list-style-type: none">❖ The solution should be reliable and consistently available to users, minimizing downtime and ensuring data integrity.
NFR-4	Performance	<ul style="list-style-type: none">❖ The solution should perform efficiently and provide a responsive user experience, handling a large volume of users and data without significant delays or performance issues.
NFR-5	Availability	<ul style="list-style-type: none">❖ The solution should be highly available, with minimal planned or unplanned downtime, to ensure uninterrupted access for users.
NFR-6	Scalability	<ul style="list-style-type: none">❖ The solution should be scalable to accommodate future growth and increasing user demands, allowing for easy expansion and adaptation to changing needs and requirements.

Data Flow Diagrams:

- ❖ A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.
- ❖ This is the interface through which users interact with the system. It allows users to input data and view the generated reports. Users provide data related to literacy rates, demographic information, education statistics, etc., which is then passed to the data processing stage.
- ❖ The input data is validated to ensure its accuracy, consistency, and adherence to predefined rules. Invalid or inconsistent data may be rejected or flagged for correction. The validated data is stored in a data repository or database for future reference and analysis. The stored data can be retrieved when required for analysis or report generation purposes.
- ❖ The collected data is processed using various techniques and algorithms to derive meaningful insights and patterns related to literacy rates. Statistical analysis techniques are applied to the processed data to identify trends, correlations, and other relevant information.

Data Flow Diagram:



User Stories:

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Team Member
Researcher	Data Input and Validation	USR-001	As a researcher, I want to input and validate literacy rate data for different regions to analyze the overall literacy trends and identify areas that need improvement.	<ul style="list-style-type: none">❖ The system should provide a user interface to input literacy rate data for different regions.❖ The system should validate the input data for accuracy and consistency.	High	G.Ganesan
Policymaker	Report Generation	USR-002	As a policymaker, I want to view reports and visualizations that highlight the correlation between literacy rates and various socio-economic factors to make informed decisions on resource allocation and educational policies.	<ul style="list-style-type: none">❖ The system should generate reports that include visualizations representing the correlation between literacy rates and socio-economic factors.❖ The reports should be accessible through the user interface.	High	M.Jayalekshmi
School Administrator	Data Retrieval and Analysis	USR-003	As a school administrator, I want to retrieve and analyze literacy rate data for my institution's catchment area to identify potential challenges and develop targeted intervention strategies.	<ul style="list-style-type: none">❖ The system should allow the retrieval of literacy rate data specific to an institution's catchment area.❖ The system should provide	Medium	B.Gurumoothy

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Team Member
				functionalities to generate reports and visualizations based on the analyzed data.		
Citizen	Community Reports	USR-004	As a citizen, I want to access user-friendly reports that illustrate the literacy rates in my community and compare them to national or global benchmarks for awareness and advocacy purposes.	<ul style="list-style-type: none"> ❖ The system should generate reports that present literacy rates specific to a community. ❖ The reports should be easily understandable and accessible through the user interface. 	Medium	M.Jayalesh
Data Analyst	Statistical Analysis	USR-005	As a data analyst, I want to perform statistical analysis on literacy rate data to uncover significant patterns, such as gender-based disparities, regional variations, or the impact of educational interventions.	<ul style="list-style-type: none"> ❖ The system should provide statistical analysis functionalities for the collected literacy rate data. ❖ The analysis should include identifying gender-based disparities, regional variations, and the impact of educational interventions. 	High	G.Ganesan

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Team Member
Teacher	Student-Level Data Analysis	USR-006	As a teacher, I want to input student-level literacy data and receive personalized reports that highlight individual progress, areas of improvement, and recommend tailored teaching strategies.	<ul style="list-style-type: none"> ❖ The system should allow teachers to input student-level literacy data. ❖ The system should process the input data to generate personalized reports for each student. 	Medium	B.Gurumoorthy
Customer (Web user)	Login	USR-007	As a customer, I want to log in to the system to access personalized features and data related to literacy rate analysis.	<ul style="list-style-type: none"> ❖ The system should provide a login page with fields for username and password. ❖ Users should be able to enter their credentials and securely log in to their respective accounts. ❖ Upon successful login, customers should be directed to their personalized dashboard. 	High	G.Ganesan
Customer Care Executive	Dashboard	USR-008	As a customer care executive, I want to have a dashboard that provides an overview of customer interactions, inquiries, and relevant information.	<ul style="list-style-type: none"> ❖ The system should provide a dashboard for customer care executives. ❖ The dashboard should display key metrics, such as 	High	M.Jayalesh

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Team Member
				customer inquiries, response times, and pending tasks.		
Administrator	Customer Management	USR-009	As an administrator, I want to manage customer accounts, including their information, access privileges, and system settings.	<ul style="list-style-type: none"> ◆ The system should allow administrators to create, update, and delete customer accounts. ◆ Administrators should be able to manage customer information, such as names, contact details, and preferences. ◆ The system should provide options to assign access privileges to customers based on their roles and responsibilities. 	High	G.Ganesan

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Team Member
Customer (Web user)	Login	USR-10	As a customer, I want to be able to log in to the system to access personalized features and data.	<ul style="list-style-type: none"> ◆ The system should provide a login page with username and password fields. ◆ Upon successful login, the customer should be redirected to their personalized dashboard. ◆ Invalid login attempts should display appropriate error messages. 	High	B.Gurumoorthy
Customer Care Executive	Customer Support	USR-11	As a customer care executive, I want to assist customers with their inquiries and provide support regarding the literacy rate analysis system.	<ul style="list-style-type: none"> ◆ The system should provide a customer support interface for executives to receive and respond to customer inquiries. ◆ The customer care executive should have access to customer data and their usage history for effective assistance. 	Medium	M.Jayalesh

Performance Testing:

1) Dashboard Design

The screenshot displays the 'Literacy Dashboard' in the IBM Cognos Analytics with Watson interface. The dashboard features a central map of India composed of various Indian scripts, overlaid with key literacy statistics. The data is presented in four main sections across four tabs:

- Total Men (in %):** 84.4
- Women Literacy Rate:** 41
- Total Women (in %):** 71.5
- Men Literacy Rate:** 50.2
- Child Literacy (in %):** 13.6
- Average Literacy Rate:** 34.93

The left sidebar shows the 'Selected sources / Literacy New Module' section, which includes navigation paths, tables like 'Literacytable', and various demographic filters such as 'Avg', 'sum', 'States Uts', 'Area', 'Children Age ...imary School', 'Women Age 15-49', 'Men Age 15-49', 'Women Age 15-49f Schooling', and 'Men Age 15-49f Schooling'. The right sidebar contains 'Dashboard properties' for layout, zoom, page size, and grid settings.

2) Data Responsiveness

My IBM * Literacy Dashboard + https://us3.ca.analytics.ibm.com/bi/?perspective=dashboard&id=IBC0B3036C320438FBB2D5B3673449D0D&objRef=IBC0B3036C320438FBB2D5B3673449D0D&options%5Bdis... 🔍 ⚡ 🌐

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IBM Cognos Analytics with Watson * Literacy Dashboard Search content

Selected sources / Literacy New Module + : Search

Navigation paths + Literacytable Avg sum States Uts Area Children Age ...imary School Women Age 15 49 Men Age 15 49 Women Age 15...f Schooling Men Age 15 4...f Schooling

Tab 1 Tab 2 Tab 3 Tab 4 + Overall Literacy Rate Total Education of Children, Women and Men Literacy Rate in States Total Literacy Level of Children, Women and Men in Indian States

Andhra... Arun... Bihar Chhatt... Goa Hau... Jami... Karna... Ladakh Mad... Man... Miz... Nag... Pud... Raja... Tamil... Tripura Uttra...

Data on this dashboard is provided by IBM Db2.

Analytics Filters Fields Properties

Dashboard properties

Canvas Layout positioning Relative

Page zoom (Absolute layout only)

Default zoom value 100%

Page size

Preset Screen 16:9

Fit page

Width 1280 px Height 720 px

Grid

Type here to search 06:17 20-05-2023

My IBM * Literacy Dashboard + https://us3.ca.analytics.ibm.com/bi/?perspective=dashboard&id=IBC0B3036C320438FBB2D5B3673449D0D&objRef=IBC0B3036C320438FBB2D5B3673449D0D&options%5Bdis... 🔍 ⚡ 🌐

Gmail News Translate YouTube Inbox (56) - ganesa...

IBM Cognos Analytics with Watson * Literacy Dashboard Search content

Selected sources / Literacy New Module + : Search

Navigation paths + Literacytable Avg sum States Uts Area Children Age ...imary School Women Age 15 49 Men Age 15 49 Women Age 15...f Schooling Men Age 15 4...f Schooling

Tab 1 Tab 2 Tab 3 Tab 4 + Women Literacy Rate in Rural and Urban Area Men Literacy Rate in Rural and Urban Area Children Literacy Rate in Rural and Urban Area

Uttarak... Kerala Manipur Tamil N... West Be... Karnataka Telangana Madhya... Uttar P... Andhra... Himachal... Gujarat Arunachal... Bihar Assam Chandig... Jammu ... Goa Andaman...

Data on this dashboard is provided by IBM Db2.

Analytics Filters Fields Properties

Dashboard properties

Canvas Layout positioning Relative

Page zoom (Absolute layout only)

Default zoom value 100%

Page size

Preset Screen 16:9

Fit page

Width 1280 px Height 720 px

Grid

Type here to search 06:18 20-05-2023

My IBM

Literacy Dashboard

IBM Cognos Analytics with Watson * Literacy Dashboard

Selected sources / Literacy New Module

Search

Navigation paths

Literacytable

- Avg
- sum
- States Uts
- abc Area
- Children Age ...mary School
- Women Age 15 49
- Men Age 15 49
- Women Age 15...f Schooling
- Men Age 15 4...f Schooling

Tab 1 Tab 2 Tab 3 Tab 4

Men with Age 15-49 With Over Those Who Attended Schooling

State	Avg
ama...	55.00
Goa	59.77
Ladakh	58.70
Nagaland	54.42
Tri...	49.13
Jammu an...	48.40
Bihar	47.80
Manipur	47.27
Rajasthan	46.97
As...	46.50

Women with Age Group 15-49 With Over Those Who Attended Schooling

State	Avg
ama...	55.00
Goa	59.77
Ladakh	58.70
Nagaland	54.42
Tri...	49.13
Jammu an...	48.40
Bihar	47.80
Manipur	47.27
Rajasthan	46.97
As...	46.50

Top 10 Literate States

State	Avg
Lak...	60.25
Kerala	59.77
Goa	58.70
Andaman...	54.42
Sikkim	49.13
Himach...	48.40
Tamil...	47.80
Mahar...	47.27
Dadra...	46.97
West Ben...	46.50

Bottom 10 Literate States

State	Avg
Dadra...	46.97
West Ben...	46.50
Bihar	47.27
Jharkhand	47.80
Gujarat	48.40
Chhattisgarh	49.13
Odisha	54.42
Tripura	58.70
Assam	59.77
As...	60.25

Dashboard properties

Canvas

Layout positioning

Relative

Page zoom (Absolute layout only)

Default zoom value 100%

Page size

Preset Screen 16:9

Fit page

Width 1280 px Height 720 px

Grid

Data on this dashboard is provided by IBM Db2.

Type here to search

06:19 20-05-2023

3) Utilization of Data Filters

IBMid - Sign in or create an account

Welcome to the Professional

IBM

nanmudhalvan-SI/PBL-NT

Literacy Dashboard

IBM Cognos Analytics with Watson * Literacy Dashboard

Selected sources / Literacy New Module

Search

Navigation paths

Literacytable

- Avg
- sum
- States Uts
- abc Area
- Children Age ...mary School
- Women Age 15 49
- Men Age 15 49
- Women Age 15...f Schooling
- Men Age 15 4...f Schooling

Top 10 Literate States

State	Avg
Lakshadweep	60.25
Kerala	59.77
Goa	58.70
Andaman and Nicobar Islands	54.42
Puducherry	49.13
Sikkim	48.40
Uttarakhand	47.80
Himachal Pradesh	47.27
Tamil Nadu	46.97
Maharashtra	46.50

Dashboard properties

Canvas

Layout positioning

Relative

Page zoom (Absolute layout only)

Default zoom value 100%

Page size

Preset Screen 16:9

Fit page

Width 1280 px Height 720 px

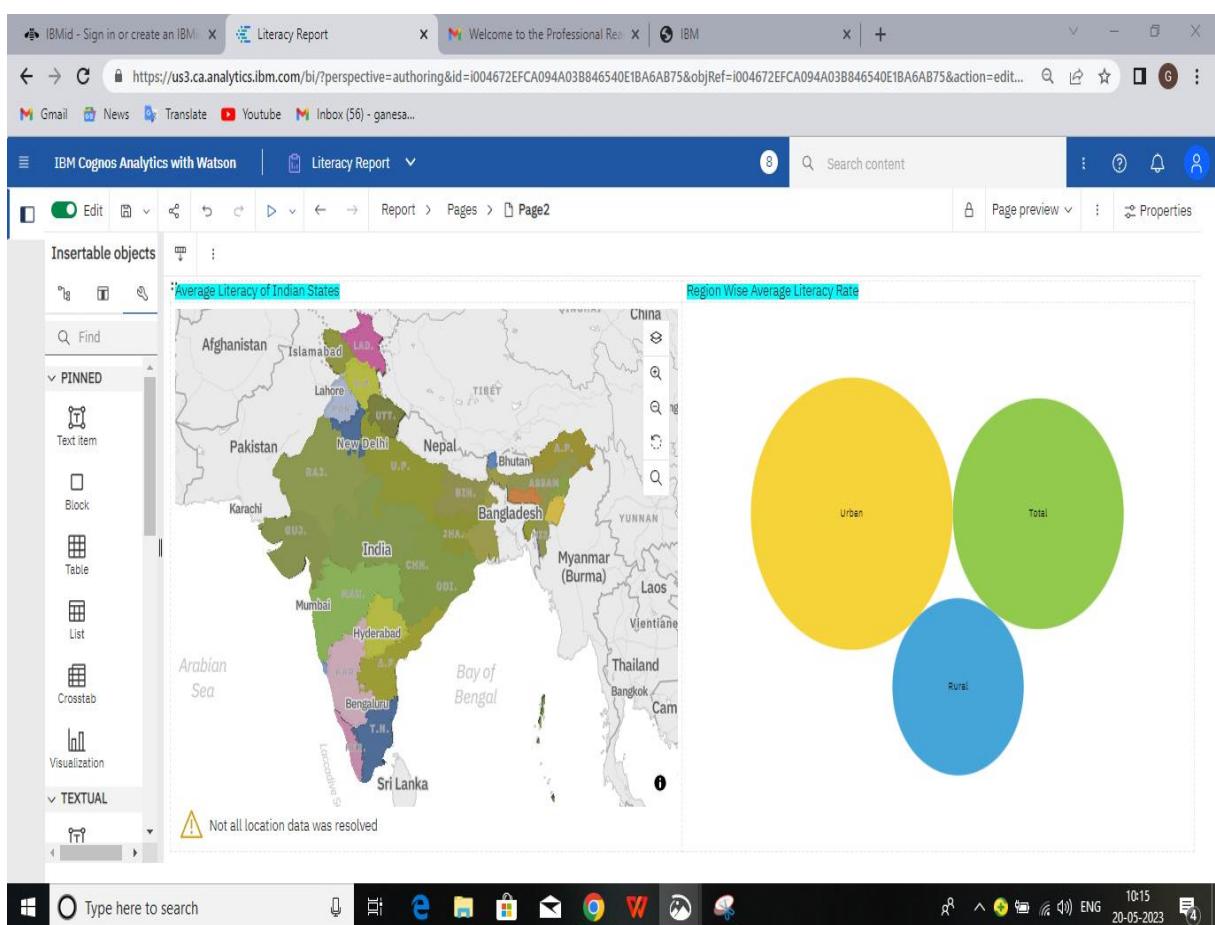
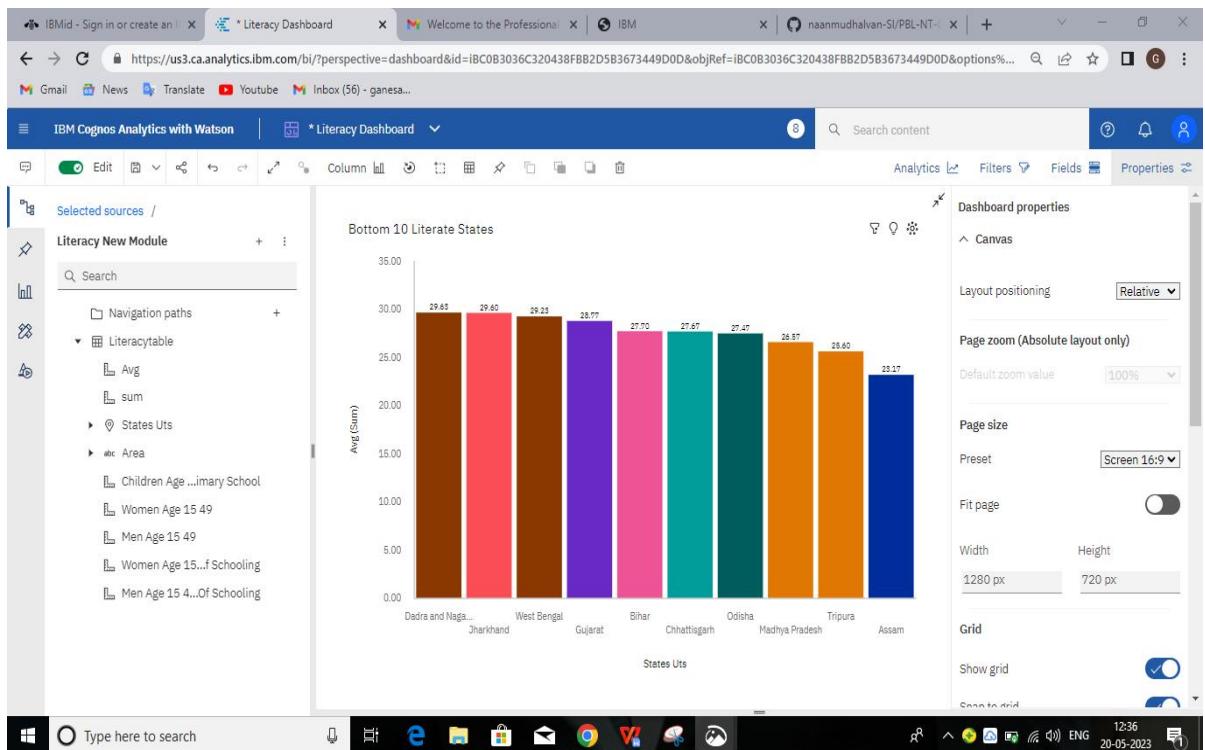
Grid

Show grid

Switch to grid

Type here to search

12:34 20-05-2023



4) Effective User Story

The screenshot shows a browser window with multiple tabs open. The active tab is titled "Literacy Story". The main content area displays a slide from "IBM Cognos Analytics with Watson" with the title "Literacy is the ability to read ,write, speak and listen in a way that lets us communicate effectively and make sense of the world." Below the title is a photograph of a globe, an apple, and a pencil holder. The left sidebar shows a navigation tree under "Literacy New Module" with categories like "Navigation paths", "Literacytable", "Avg", "sum", "States Uts", "Area", "Children Age ...mary School", "Women Age 15 49", "Men Age 15 49", "Women Age 15...f Schooling", and "Men Age 15 4...f Schooling". The right sidebar contains "Story properties" sections for "Scenes", "Story type" (set to "Slide show"), "Scene transition" (set to "Animated path"), "Canvas", "Color and theme", and "Advanced". The bottom status bar shows system information including the date and time.

This screenshot shows a second slide from the same "Literacy Story" presentation. The title is "Overall India Literacy Rate". The slide features a map of India color-coded by literacy rate and a bar chart comparing literacy rates for children, men, and women across different age groups. The left sidebar and right sidebar "Story properties" are identical to the first slide. The bottom status bar shows system information including the date and time.

My IBM * Literacy Story * Welcome to the Professional Re... IBM

<https://us3.ca.analytics.ibm.com/bi/?perspective=story&id=i29FBA771A836477C842805112CBDDB3A&objRef=i29FBA771A836477C842805112CBDDB3A&options%5BdisableGlass...>

Gmail News Translate YouTube Inbox (56) - ganesa...

IBM Cognos Analytics with Watson * Literacy Story

Selected sources / Literacy New Module

Search

Navigation paths

- Literacytable
 - Avg
 - sum
 - States Uts
 - Area
 - Children Age 15...ary School
 - Women Age 15 49
 - Men Age 15 49
 - Women Age 15...f Schooling
 - Men Age 15 4...f Schooling

Area Wise Literacy Rate

Children Literacy Rate: 18.1

Women Literacy Rate: 56.3

Men Literacy Rate: 62.1

Story properties

Scenes

Story type: Slide show

Scene transition: Animated path

Canvas

Color and theme

Advanced

Data on this slide: 3 of 10 | 0:00.0 | 0:05.0

Type here to search

My IBM * Literacy Story * Welcome to the Professional Re... IBM

<https://us3.ca.analytics.ibm.com/bi/?perspective=story&id=i29FBA771A836477C842805112CBDDB3A&objRef=i29FBA771A836477C842805112CBDDB3A&options%5BdisableGlass...>

Gmail News Translate YouTube Inbox (56) - ganesa...

IBM Cognos Analytics with Watson * Literacy Story

Selected sources / Literacy New Module

Search

Navigation paths

- Literacytable
 - Avg
 - sum
 - States Uts
 - Area
 - Children Age 15...ary School
 - Women Age 15 49
 - Men Age 15 49
 - Women Age 15...f Schooling
 - Men Age 15 4...f Schooling

Top Literacy Rate

Lakshadweep and Kerala is Highest Literate State

Top 10 Literate States

Rank	State	Avg (Sum)
1	Lakshadweep	60.00
2	Kerala	60.00
3	Uttarakhand	56.00
4	Goa	54.00
5	Assam	52.00
6	Haryana	51.00
7	Jharkhand	50.00
8	Odisha	49.00
9	Chhattisgarh	48.00
10	Maharashtra	48.00

Story properties

Scenes

Story type: Slide show

Scene transition: Animated path

Canvas

Color and theme

Advanced

Data on this slide: 4 of 10 | 0:00.0 | 0:05.0

Type here to search

My IBM * Literacy Story X Welcome to the Professional Re... IBM

<https://us3.ca.analytics.ibm.com/bi/?perspective=story&id=i29FBA771A836477C842805112CBDB3A&objRef=i29FBA771A836477C842805112CBDB3A&options%5BdisableGlass...>

Gmail News Translate YouTube Inbox (56) - ganesa...

IBM Cognos Analytics with Watson * Literacy Story 9 Search content

Selected sources / Literacy New Module + : Search

Navigation paths + Literacytable Avg sum States Uts abc Area Children Age ...imary School Women Age 15 49 Men Age 15 49 Women Age 15...f Schooling Men Age 15 4...Of Schooling

Bottom Literate States

Assam and Tripura are the Bottom Literate States

Bottom Literate States

Avg (Sum)

State	Avg (Sum)
Dadra and ...	~15
Andaman and ...	~45
Dadra and ...	~48
Chandigarh	~48
Assam	~50
Tripura	~52
NCT of Delhi	~52
Odisha	~52
Madhya Pr...	~52
Gujarat	~52

States Uts Data on this st... 0:00:0 0:05:0

Type here to search

Story properties Scenes Story type Slide show Scene transition Animated path Canvas Color and theme Advanced

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<https://us3.ca.analytics.ibm.com/bi/?perspective=story&id=i29FBA771A836477C842805112CBDB3A&objRef=i29FBA771A836477C842805112CBDB3A&options%5BdisableGlass...>

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Analytics Filters Fields Properties

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Navigation paths + Literacytable Avg sum States Uts abc Area Children Age ...imary School Women Age 15 49 Men Age 15 49 Women Age 15...f Schooling Men Age 15 4...Of Schooling

Region Wise Children Literacy Rate

Uttarakhand and Meghalaya are States with Highes Children Literacy Rate

Region Wise Children Literacy Rate

Children Age 5 Ye...

State	Approx. Literacy Rate
Uttarakhand	~45
Kerala	~40
Manipur	~35
Tamil Nadu	~30
West Bengal	~28
Karnataka	~25
Maharashtra	~22
Uttar Pradesh	~20
Bihar	~18
Jharkhand	~15
Chhattisgarh	~12
Jharkhand	~10
Jammu and Kashmir	~8
Andaman and Nicob...	~5

States Uts Data on this st... 0:00:0 0:05:0

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<https://us3.ca.analytics.ibm.com/bi/?perspective=story&id=i29FBA771A836477C842805112CBDB3A&objRef=i29FBA771A836477C842805112CBDB3A&options%5BdisableGlas...>

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- Navigation paths
- Literacytable
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 - Area
 - Children Age ...imary School
 - Women Age 15 49
 - Men Age 15 49
 - Women Age 15...f Schooling
 - Men Age 15 4...f Schooling

Region Wise Women Literacy Rate

Kerala and Himachal Pradesh has States Highest Women Literacy Rate

Region Wise Women Literacy Rate

Women Age 15 49 States Uts

Data on this slide is provided by IBM Db2.

Prev scene ◀ ▶ Next scene Scene 7 of 10 0:00.0 0:05.0

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Story properties

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Story type: Slide show

Scene transition: Animated path

Canvas

Color and theme

Advanced

06:58 20-05-2023

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Selected sources / Literacy New Module + : Search

- Navigation paths
- Literacytable
 - Avg
 - sum
 - States Uts
 - Area
 - Children Age ...imary School
 - Women Age 15 49
 - Men Age 15 49
 - Women Age 15...f Schooling
 - Men Age 15 4...f Schooling

Region Wise Men Literacy Rate

Goa and Himachal Pradesh are with Highest Men Literacy Rate

Region Wise Men Literacy Rate

Men Age 15 49 States Uts

Data on this slide is provided by IBM Db2.

Prev scene ◀ ▶ Next scene Scene 8 of 10 0:00.0 0:05.0

Type here to search

Story properties

Scenes

Story type: Slide show

Scene transition: Animated path

Canvas

Color and theme

Advanced

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Story properties

Scenes

Story type: Slide show

Scene transition: Animated path

Canvas

Color and theme

Advanced

Literacy Rate of Women Over Age Group 15-49

Women with Age Group 15-49 With Over Those Who Attended Schooling

State	Literacy Rate (%)
Andaman and Nicobar Islands	86
Arunachal Pradesh	68.6
Bihar	77.2
Chhattisgarh	83
Goa	93
Haryana	65
Jammu and Kashmir	91.7
Karnataka	77.3
Ladakh	76.7
Madhya Pradesh	98.3
Manipur	68.5
Mizoram	96.5
Nagaland	88.2
Puducherry	85
Rajasthan	71.9
Tamil Nadu	88.9
Tripura	66.4
Uttarakhand	80.6
Uttar Pradesh	81.6
West Bengal	68.6

Prev scene Next scene Scene 9 of 10 0:00.0 0:05.0 07:00 20-05-2023

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Story properties

Scenes

Story type: Slide show

Scene transition: Animated path

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Color and theme

Advanced

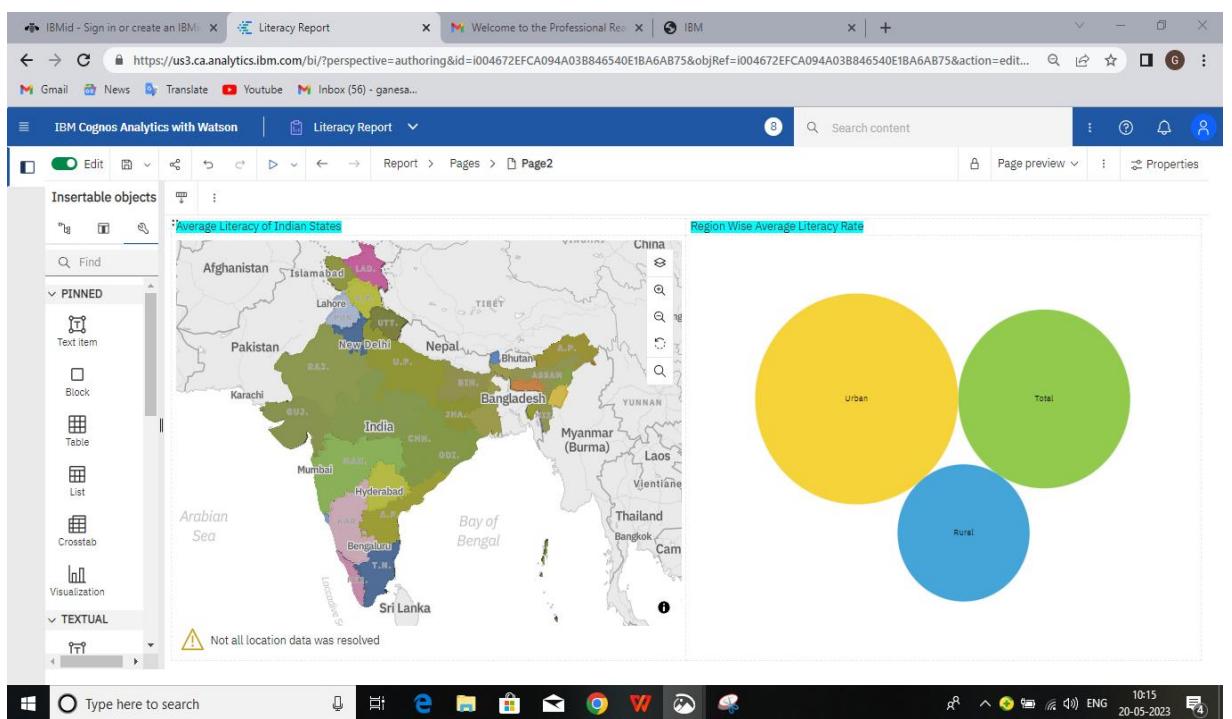
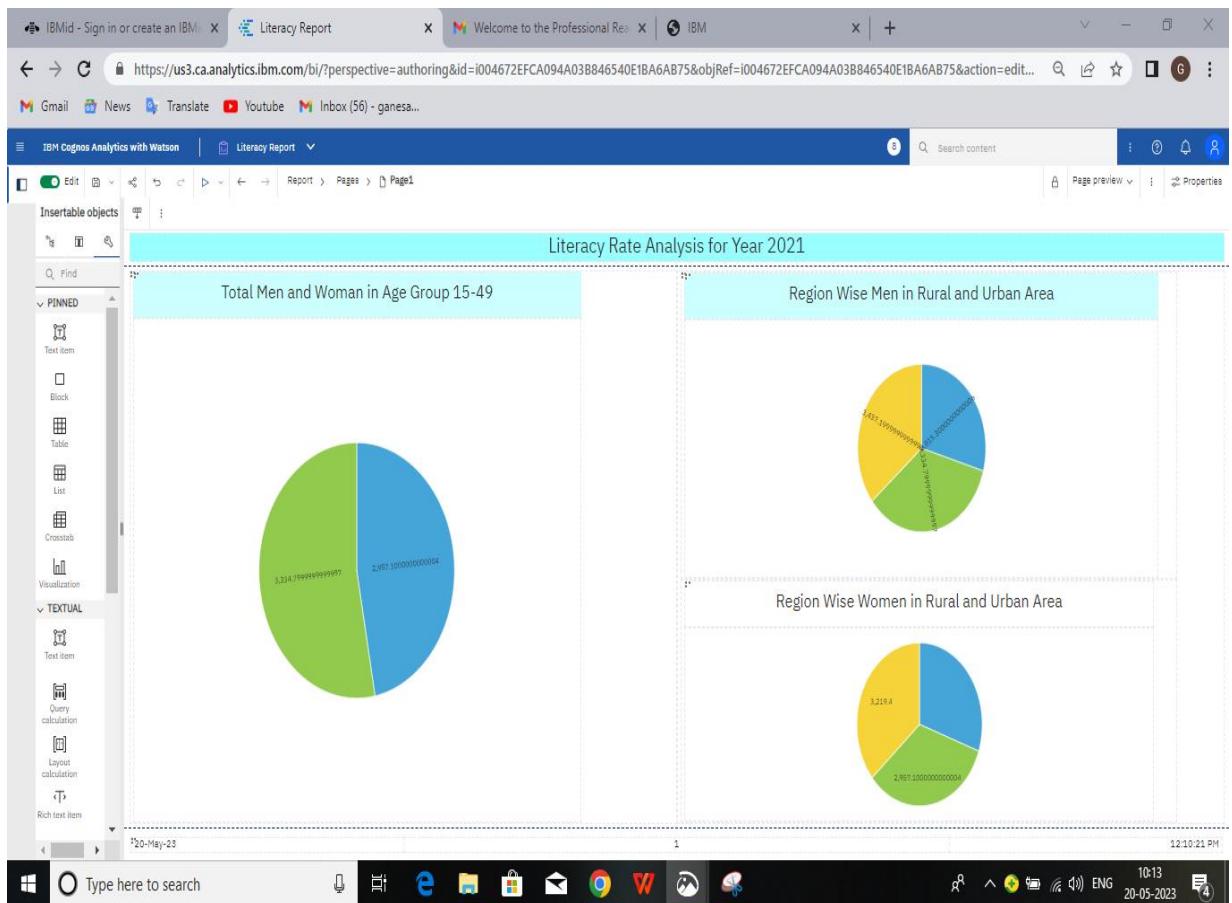
Literacy Rate of Men Over Age Group 15-49

Men with Age 15-49 With Over Those Who Attended Schooling

State	Literacy Rate (%)
Andaman and Nicobar Islands	92.5
Arunachal Pradesh	96.7
Bihar	73
Chhattisgarh	97.3
Goa	96.3
Haryana	93.5
Jammu and Kashmir	91.5
Karnataka	88.4
Ladakh	93.7
Madhya Pradesh	95.3
Manipur	93.2
Mizoram	97.1
Nagaland	93.3
Puducherry	94.6
Rajasthan	90.7
Tamil Nadu	93.4
Tripura	88.2
Uttarakhand	92.9

Prev scene Next scene Scene 10 of 10 0:00.0 0:05.0 07:01 20-05-2023

5) Descriptive Reports



IBMID - Sign in or create an IBM ID | Literacy Report | Welcome to the Professional Re... | IBM

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IBM Cognos Analytics with Watson | Literacy Report | Page 3

Search content | Page preview | Properties

Insertable objects | Find | PINNED | Text item, Block, Table, List, Crosstab, Visualization | TEXTUAL

Total Literacy Rate of Children, Women and Men

Literacy Rate of IT Sectors

Men Age 15-49 With 10 Or More Years Of Education

Women Age 15-49 With 10 Or More Years Of Education

Children Age 5 Years Who Attended Pre-Primary School

States Uts

Andaman and Nicobar Islands, Andhra Pradesh, Assam, Chandigarh, Dadra and Nagar Haveli and Daman and Diu, Goa, Gujarat, Haryana, Jammu and Kashmir, Jharkhand, Jharkhand, Kerala, Lakshadweep, Maharashtra, Meghalaya, NCT of Delhi, Odisha, Punjab, Sikkim, Tamil Nadu, Uttar Pradesh, West Bengal

Values

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<https://us3.ca.analytics.ibm.com/bi/?perspective=authoring&id=i004672EFCA094A03B846540E1BA6AB75&objRef=i004672EFCA094A03B846540E1BA6AB75&action=edit...>

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IBM Cognos Analytics with Watson | Literacy Report | Page 4

Search content | Page preview | Properties

Insertable objects | Find | PINNED | Text item, Block, Table, List, Crosstab, Visualization | TEXTUAL

Men Literacy Rate in Rural and Urban Area

Children Literacy Rate in Rural and Urban Area

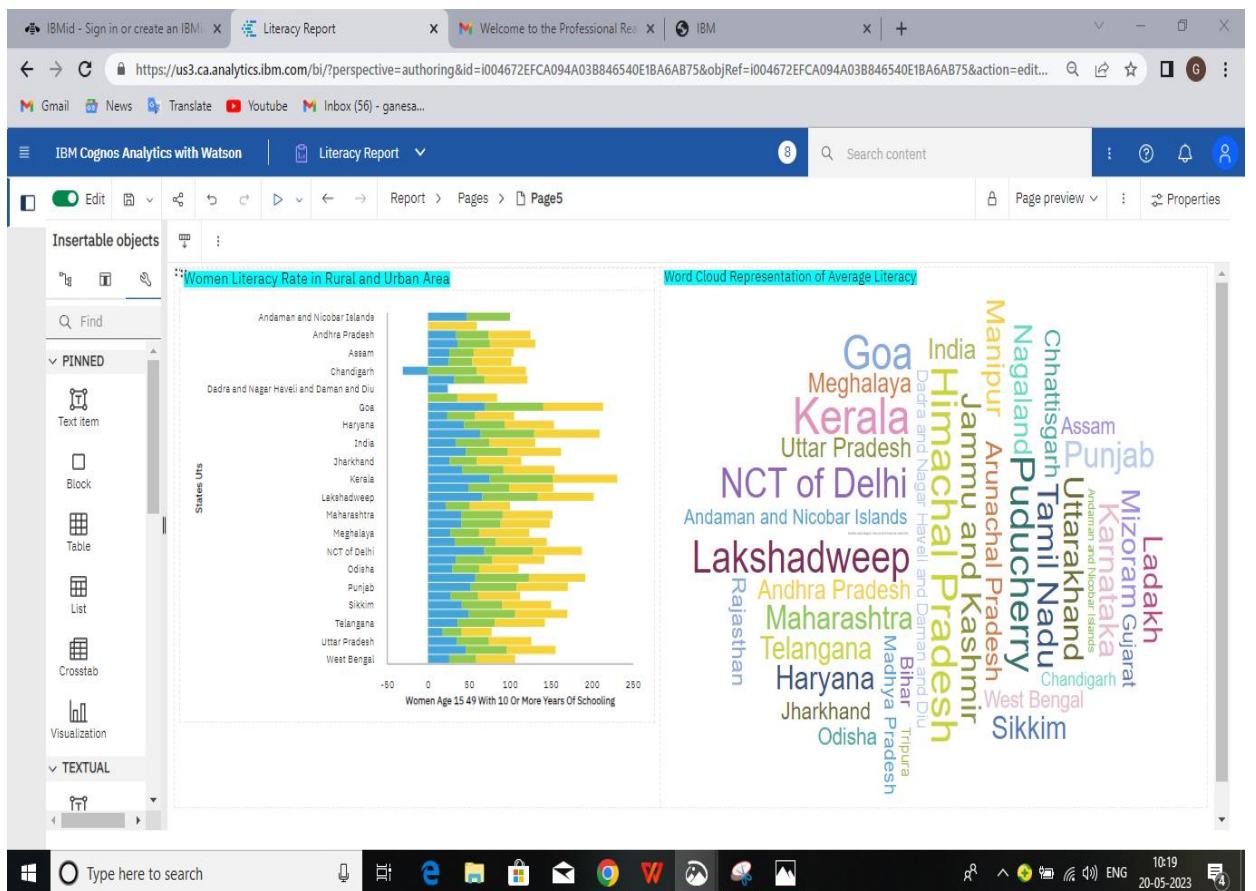
Men Age 15-49 With 10 Or More Years Of Education

Children Age 5 Years Who Attended Pre-Primary School

States Uts

Andaman and Nicobar Islands, Andhra Pradesh, Assam, Chandigarh, Dadra and Nagar Haveli and Daman and Diu, Goa, Gujarat, Jammu and Kashmir, Jharkhand, Jharkhand, Kerala, Lakshadweep, Maharashtra, Meghalaya, NCT of Delhi, Odisha, Punjab, Sikkim, Tamil Nadu, Uttar Pradesh, West Bengal

10:17 20-05-2023



Reference Links:

Dashboard:

https://us3.ca.analytics.ibm.com/bi/?perspective=dashboard&pathRef=.my_folders%2FLiteracy%2BDashboard&action=view&mode=dashboard&subView=model000001883543e376_00000000

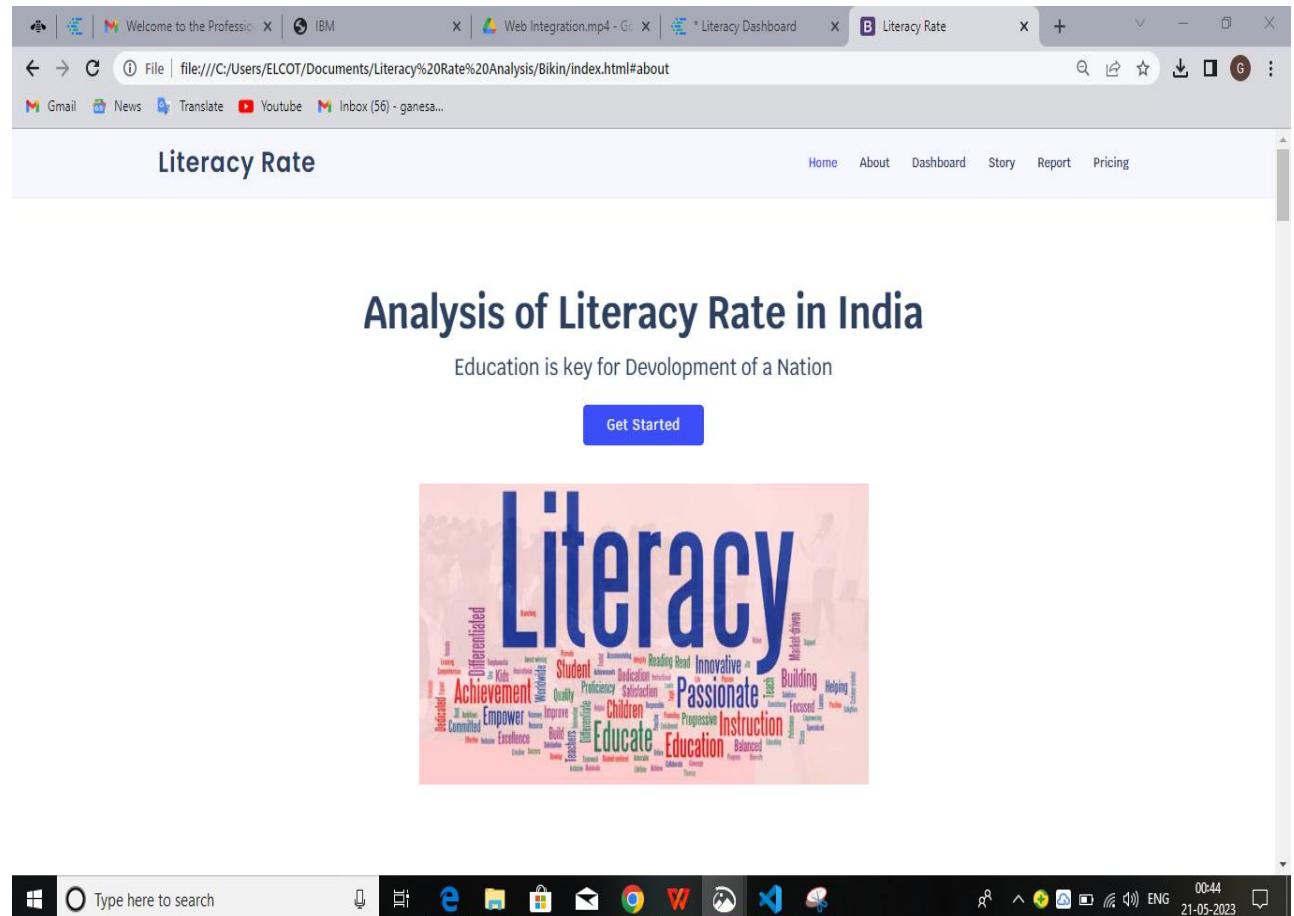
Story:

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Report:

https://us3.ca.analytics.ibm.com/bi/?pathRef=.my_folders%2FLiteracy%2BReport&action=run&format=HTML&prompt=false

Coding and Solution:



Reference Link:

<file:///C:/Users/ELCOT/Documents/Literacy%20Rate%20Analysis/Bikin/index.html>

Github Link:

<https://github.com/naanmudhalvan-SI/PBL-NT-GP-9168-1682679190>

Project Video Demo Link :

<https://youtu.be/DnJ85OjkRpk>

Result:

- ❖ Thus the analysis, data visualization and creation of web integration are done for the given data successfully.

Advantages:

- ❖ Increased awareness: The analysis will raise awareness about the importance of literacy and its correlation with social and economic development.
- ❖ Empowering individuals: By addressing literacy gaps, the project can empower individuals with essential skills for personal growth and socioeconomic advancement.

Disadvantages:

- ❖ Limited scope: The analysis may not capture all aspects of literacy, such as digital literacy or specialized literacy in specific fields.
- ❖ Data limitations: The literacy analysis is effectiveness relies on the availability and accuracy of literacy data, which can be challenging to obtain in some regions.

Conclusion:

- ❖ The highlights at a importance of literacy and its potential to drive positive societal change. Through data analysis and policy recommendations, Empowering the Future to contribute the improving literacy rates and fostering a more empowered future.

Future scope:

- ❖ Longitudinal analysis: Tracking literacy rates over time to assess progress and identify trends.
- ❖ Comparative analysis: Comparing literacy rates across different countries or regions to gain insights into successful approaches.