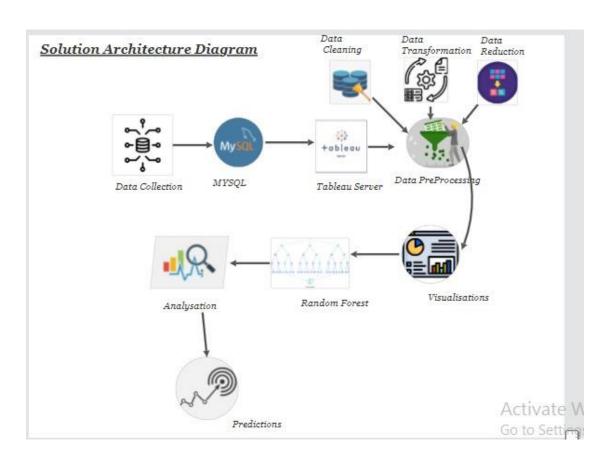
# Graphical Advantages: A tableau Exploration of Top Manga

Since the 1950s, manga has become an increasingly major part of the Japanese publishing industry By 1995, the manga market in Japan was valued at ¥586.4 billion (\$6–7 billion) with annual sales of 1.9 billion manga books and manga magazines (also known as manga anthologies) in Japan (equivalent to 15 issues per person). In 2020 Japan's manga market value hit a new record of ¥612.6 billion due to the fast growth of digital manga sales as well as increase of print sales in 2022 Japan's manga market hit yet another record value of ¥675.9 billion. Manga have also gained a significant worldwide readership. Beginning with the late 2010s manga started massively outselling American comics. Now the Manga want to know the Best-Selling Manga from Past to Now

#### **Technical Architecture:**



#### **Project Flow:**

To accomplish we have to complete all the activities listed below,

- Define Problem / Problem Understanding
  - Specify the business problem
  - Business requirements
  - Literature Survey
  - o Social or Business Impact.
- Data Collection & Extraction from Database
  - Collect the dataset
  - Storing Data in DB
  - o Perform SQL Operations
  - o Connect DB with Tableau
- Data Preparation
  - o Prepare the Data for Visualization
- Data Visualizations
  - No of Unique Visualizations
- Dashboard
  - o Responsive and Design of Dashboard
- Story
  - No. of Scenes of story
- Performance Testing
  - o Amount of Data Rendered to DB '
  - Utilization of Data Filters
  - No of Calculation Fields
  - o No of Visualizations/ Graphs
- Web Integration
  - o Dashboard and Story embed with UI With Flask
- Project Demonstration & Documentation
  - o Record explanation Video for project end to end solution
  - o Project Documentation-Step by step project development procedure

## Milestone 1: Define Problem / Problem Understanding

#### **Activity 1: Specify the Business Problem**

**Refer Project Description** 

#### **Activity 2: Business requirements**

The Business Requirements is for analysing the Best-selling Manga to know which manga has highest sales. Include identifying KPIs, comparing the manga with Average sales and approximate sales identifying affecting factors, creating interactive dashboards and reports, making data-driven decisions, comparing to industry average and creating forecasting models for future performance. The ultimate goal is to gain insights and Show Sufficient Information through Data visualization techniques.

#### **Activity 3: Literature Survey (Student Will Write)**

A literature survey for a Best-Selling Manga project would involve researching and reviewing existing studies, articles, and other publications on the topic of Manga Series. The survey would aim to gather information on current classification systems, their strengths and weaknesses, and any gaps in knowledge that the project could address. The literature survey would also look at the methods and techniques used in previous Manga projects, and any relevant data or findings that could inform the design and implementation of the current project.

#### **Activity 4: Social or Business Impact.**

<u>Social Impact:</u> By providing accurate and up-to-date information on Selling Manga' project can help company make more informative about the Top Selling Mangs and their strengths and weakness

<u>Business Model/Impact:</u> By providing information on the properties and interactions of Selling Mangas, the company will know what are the low selling manga's and try to improve their low selling manga's

#### Milestone 2: Data Collection & Extraction from Database

Data collection is the process of gathering and measuring information on variables of interest, in an established systematic fashion that enables one to answer stated research questions, test hypotheses, evaluate outcomes and generate insights from the data.

#### **Activity 1: Downloading the dataset**

Please use the link to download the dataset: Link

#### Activity 1.1: Understand the data

Data contains all the meta information regarding the columns described in the CSV file. we have provided CSV file.

Best Selling Manga.csv

https://drive.google.com/file/d/1PnMFQzHKdpEmnpiAcW0ATxphIq7MEQcm/view?usp=drive link

#### **Column Description of the Dataset:**

Manga Series: - It is Dimension column shows Manga series names.

<u>Authors: -</u> It is also a dimension column shows the author of each manga.

**Publisher: -** It shows Publisher of each Manga Series.

**Demographic:** - It shows the demographic data of manga.

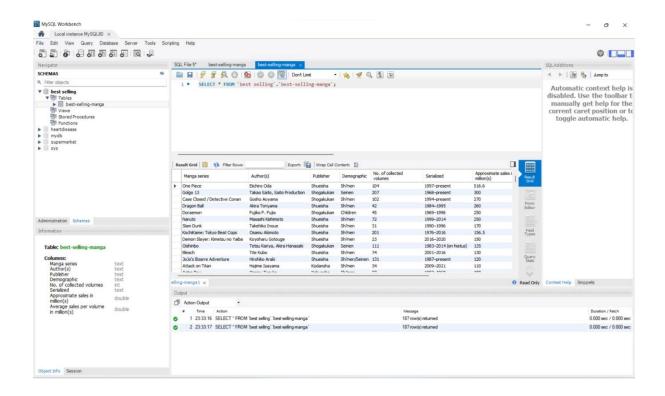
<u>Serialized: -</u> It shows the Year Started the Manga and it ends year or continuing.

No. of collected volumes: - It is measuring Column shows the Volume of Manga Series.

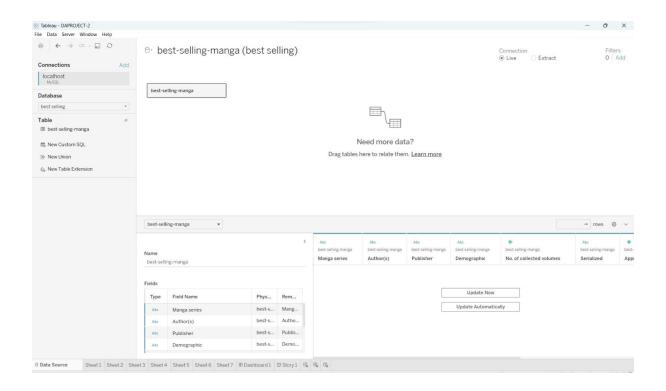
<u>Approximate sales in million(s): -</u> It shows the Approximate sales of the Manga.

<u>Average sales in million(s): -</u> It shows the Average Sales of the Year.

## Activity 2: Storing Data in DB & Perform SQL Operations



## **Activity 3: Connect DB with Tableau**



## **Milestone 3: Data Preparation**

#### **Activity 1: Prepare the Data for Visualization**

Preparing the data for visualization, Sometimes the data is not in correct format and we have to transform the data into a right format. Preparing data means involving cleaning and replacing the null values and missing Values. This process makes the data to understand easily and to make visualizations easily.

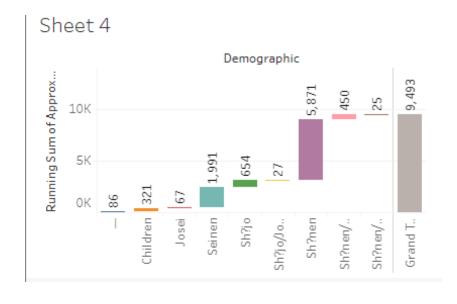
## **Milestone 4: Data Visualization**

Data visualization is the process of creating graphical representations of data to help people understand and explore the information. The goal of data visualization is to make complex data sets more accessible, intuitive, and easier to interpret. By using visual elements such as charts, graphs, and maps, data visualizations can help people quickly identify patterns, trends, and outliers in the data.

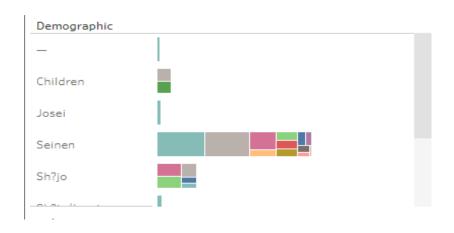
#### **Activity 1: No of Unique Visualizations**

The number of unique visualizations that can be created with a given dataset. Some common types of visualizations that can be used to analyse the Best-Selling Manga.

#### Activity 1.1 - KPIs

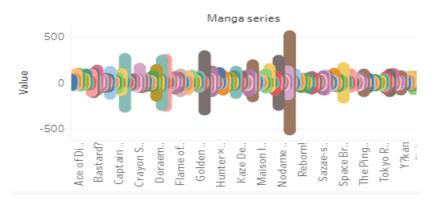


Activity 1.2 – Demographic wise Approximate Sales



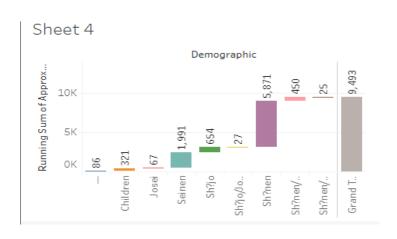
Activity 1.3 – Manga Series wise Average Sales

Sheet 5



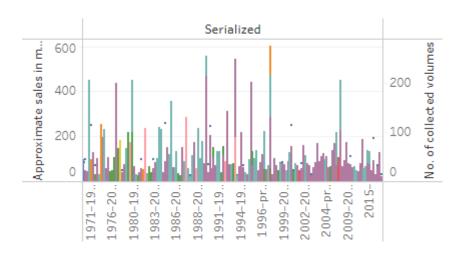
Activity 1.4 – Publisher & Demographic wise No of

### **Volumes**



### Activity 1.5 – Serialized wise Approximate Sales & No of

#### **Volumes**



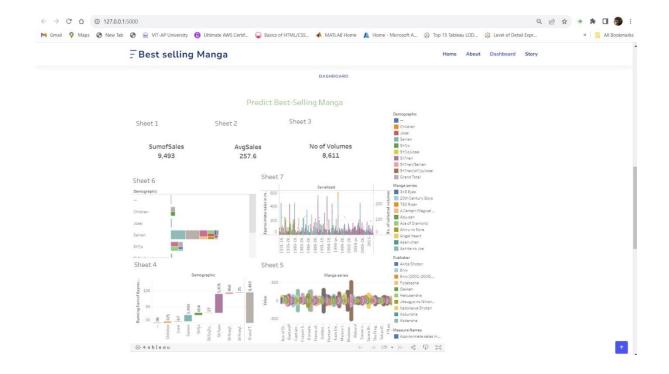
## **Milestone 5: Dashboard**

A dashboard is a graphical user interface (GUI) that displays information and data in an organized, easy-to-read format. Dashboards are often used to provide real-time monitoring and analysis of data and are typically designed for a specific purpose or use case. Dashboards can be used in a variety of settings, such as business, finance, manufacturing, healthcare, and many other industries. They can be used to track key performance indicators (KPIs), monitor performance metrics, and display data in the form of charts, graphs, and tables.

## Activity 1- Responsive and Design of Dashboard

Once you have created views on different sheets in Tableau, you can pull them into a dashboard.

# Harnessing Ai to Predict Best Selling Manga

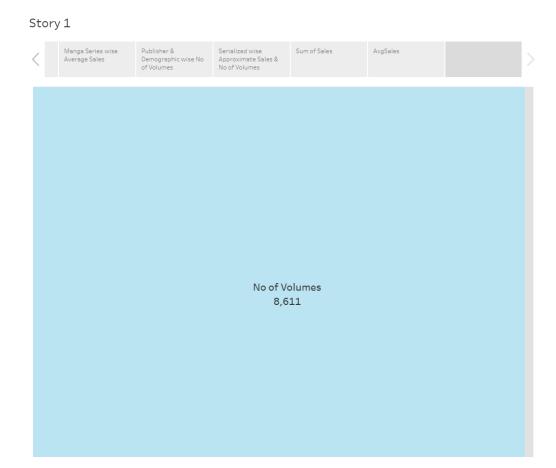


## **Milestone 6: Story**

A data story is a way of presenting data and analysis in a narrative format, intending to make the information more engaging and easier to understand. A data story typically includes a clear introduction that sets the stage and explains the context for the data, a body that presents the data and analysis logically and systematically, and a conclusion that summarizes the key findings and highlights their implications. Data stories can be told using a variety of mediums, such as reports, presentations, interactive visualizations, and videos.

## **Activity 1: No. of Scenes of Story**

The number of scenes in a storyboard for a data visualization analysis of the Heart disease will depend on the complexity of the analysis and the specific insights that are trying to be conveyed. A storyboard is a visual representation of the data analysis process and it breaks down the analysis into a series of steps or scenes.



# **Milestone 7: Performance Testing**

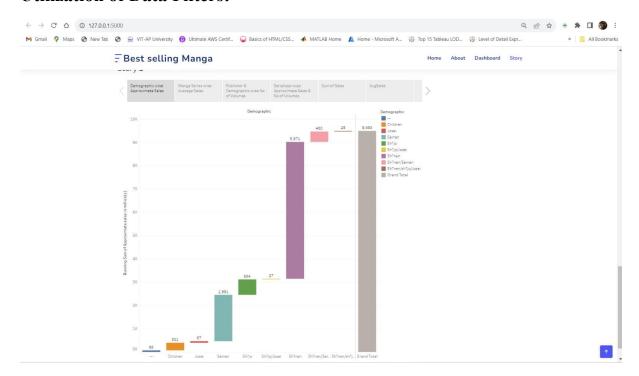
# Activity 1: Amount of Data Rendered to DB

- The amount of the data that is rendered to a database depends on the size of the dataset and the capacity of the database to store and retrieve data.
- Open the MYSQL Workbench, go to the data base then click to expand the tables, select the table and click on the button to get the information related to such as column, count, table rows etc

#### No of Calculated fields



#### **Utilization of Data Filters:**



# **Milestone 8: Web Integration**

Publishing helps us to track and monitor key performance metrics and to communicate results and progress. Help a publisher stay informed, make better decisions, and communicate their performance to others.

# Publishing dashboard and reports to tableau public

Step 1: Go to Dashboard/story, click on the share button on the top ribbon

Give the server address of your tableau account and click on connect.



<u>Step2:</u> once you click on connect it will ask you for the tableau public username and password



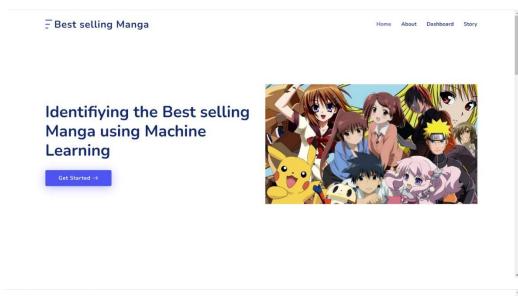
Once you login into your tableau public using the credentials, the particular visualization will be published into the tableau public

These are the dashboard and story links which we have Published

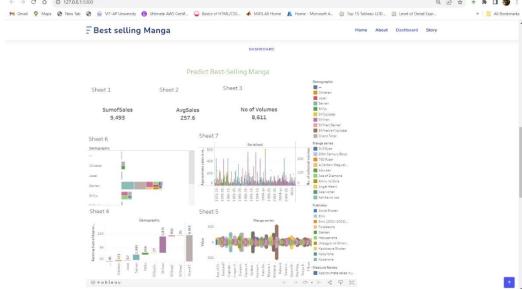
https://public.tableau.com/app/profile/vishnupriya.pragada/viz/DAPROJECT-2/Dashboard1?publish=yes

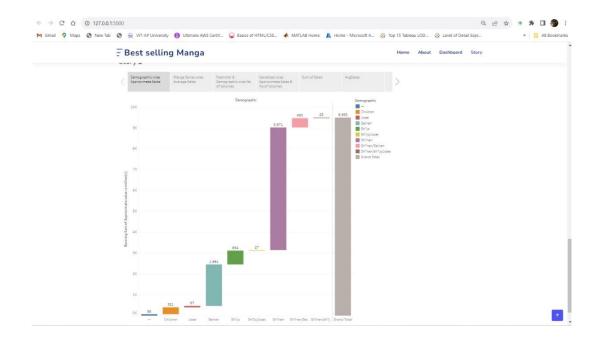
https://public.tableau.com/app/profile/vishnupriya.pragada/viz/DAPROJECT-2/Story1?publish=yes

### Activity 1: Embed Dashboard and Story with Flask









**Bootstrap Link**: <u>http://127.0.0.1:5000</u>