

## **Data Visualization and Story Telling course**

### **Assignment [20% of the Course Weight]**

#### **Key deliverable of the assignment:**

Demonstrate the application of Effective Principles of Visualization Design for designing a dashboard that depicts change in the voter turnout ratio. [ Key aspects, by Gestlat Principles, Visualization Best Practices, color schema should be clearly demonstrated]

#### **Data source:**

- Election Commission of India ( Link: <https://www.eci.gov.in/statistical-reports> )
- 2024, 2019, and 2014 [last three General Elections]
- **Specific table:** PC Wise voter turnout [ e.g. 13.PC Wise Voters Turn Out under 2024]

#### **Assignment Tasks**

##### **1. Creation of data set [5 Marks]**

Create a data set of select 10 constituencies (of your choice) for the last three general elections

*[4 marks will be given for consistency of the data set to support visualization – you should submit this file for evaluations]*

- Variables
  - Constituency name
  - State
  - Total voters with bifurcation of male, female voters
  - Total votes polled with bifurcation of male, female voters and postal votes
  - Voter turnout ratio – overall, male, female, postal votes
- Identify the variable types **[1 Mark]**

##### **2. Visualization Development [10 Marks]**

Create appropriate visualizations based on aggregated data [e.g. by considering the full or aggregate data for the select 10 constituencies]

1.
  - a. Show case change in voter turnout ratio at the aggregate level – over time
  - b. Show case change in voter turnout ratio at the aggregate level – across genders
  - c. Show case distribution of voter turnout – across constituencies and across time
  - d. Show case distribution of voter turnout – across constituencies and genders

##### **3. Dashboard Design [ 5 Marks]**

- a. Design a dashboard and it should have the four visuals covered in question 2
- b. Incorporate drill down or selection feature for showcasing the constituency details

**Platform for presenting the dashboard: POWERBI/ Tableau/ Python/ Even Excel is okay (if you can demonstrate the same) – you must share upload the final file along with the curated data set used for developing the visualization.**

**Ensure enabling access for public view if using powerbi / tableau public applications, python (jupyter or colab file to be shared). All submissions should have the underlying data excel file.**

#### **Reference :**

**Data visualization – Storytelling Using Data by Sharada Sringeswara, Purvi Tiwari, and U. Dinesh Kumar**

**<https://www.storytellingwithdata.com/>**

**All the best**