

Data Analytics & Visualization (CS/IT 312)
Mini Project Submission & Feedback Form

Student Information

- **Student Name:**
- **Student Roll No.:**
- **Mini Project Title:**
- **Are you working with anyone else on the same project (data)?** Yes / No
(If yes, mention their name and roll number.)

Mini Project Details

1. **Type of Data Considered:**
(e.g., 1D Signal, Sound, 2D Image, 3D Video, Text Data, Tabular Data, etc. Specify clearly.)
2. **Number of Observations / Subjects:**
 - Total number of samples:
 - Categories (e.g., how many samples per class, if applicable):
3. **Project Type:**
(e.g., Classification, Regression, Clustering, Time Series Forecasting, etc. Specify clearly.)
4. **Data Source:**
 - URL (if downloaded online):
 - If it's a large dataset, write "**Large dataset**" and submit it later via pen drive.
 - Otherwise, upload your dataset in a ZIP format (name the ZIP file as your **RollNo_Data**).
5. **Data Representation Before Feature Extraction:**
 - How did you represent the raw data? (e.g., tables, time-series plots, images)
 - How many graphs did you use? List their names and explain the reasons for using each.
6. **Feature Extraction / Creation Details:**
 - Total number of features extracted:
 - Names of features and their formulas (if possible), and brief explanation of their use.
7. **Data Representation After Feature Extraction:**
 - Types and number of graphs used to represent extracted features:
 - Reason for choosing each graph:

8. Feature Selection Techniques Used:

- Methods used (e.g., Filter, Wrapper, Embedded, or any discussed in class/PPTs):
- Number of features selected and justification:

9. Feature Transformation Techniques Used:

- Describe the transformation methods applied (e.g., normalization, standardization, log scaling) and their purpose.

10. Feature Reduction Techniques Used:

- Mention any dimensionality reduction techniques used (e.g., PCA, LDA, t-SNE) and provide a clear explanation.

11. Hypothesis Testing Methods Used:

- Mention any statistical tests used (e.g., t-test, ANOVA, Chi-square, etc. excluding final model analysis), with brief purpose.

12. Models Employed:

- List all models used (e.g., Decision Tree, SVM, Random Forest, Linear Regression, etc.)

13. Best Model Selection Criteria (Beyond Accuracy):

- Describe how you identified the best model using other metrics

14. Document & Code Upload:

- Upload your project document and code ZIP file at:
https://docs.google.com/forms/d/e/1FAIpQLScqPdTjm8tF9Si6PQDwl73ybfeR_YCOPIb_3YH_ky9xYh_XlA/viewform?usp=header
- The Word document should include all details above along with a workflow diagram.
- The ZIP file (named RollNo_ALL) should contain your code and report (excluding the dataset).

Optional Course Feedback

1. What did you learn from the Data Analytics & Visualization course?

Describe the key concepts, skills, or tools you learned through lectures, labs, and your mini project.

2. Was this course helpful in learning new concepts or improving your problem-solving skills?

Explain how the course contributed to your academic or project-based development.

3. Suggestions for Improvement (Excluding Internet Issues):

Mention ways to enhance course delivery, content, lab experience, or resources.

4. Difficult Topics That Need More Explanation:

List specific topics that were challenging and need more focus or clarification.

5. Personal Feedback on the Subject or Faculty:

Share your experience, suggestions, or comments about the teaching and overall course.