Project

Design Thinking for BI

Solving Business Problems like a Designer

- **Total Marks: 20%**
- This project must be completed in teams of **maximum 4 members**.
- Only **one** member should submit.
- The file names should follow the following format: **Name1(ERP1)_Name2(ERP2)…**
- **Deadline:**
  - **LMS Submission of Files:** Sunday, 1st June 2025 @11.55pm
  - **BI Open House:** Monday 2nd June 2025 @ 2 pm - 5 pm (mandatory)

Objective

In this project, you are required to apply all the skills learnt during the course. You will utilize the Design Thinking framework for Business Intelligence to solve a real business problem based on a real-world dataset – the requirement is to solve a business problem through multiple interactive dashboards.

Plagiarism Note

In case of potential plagiarism in notebooks / BI file / analysis, all involved will receive a zero.

Grading Rubric

Design Thinking Sprint – In class – 14th May 2025	2.5 %
Background Data Knowledge Template and Problem Identification	2.5 %
Data Cleaning and EDA	3.0 %
Quality of BI solution, interactivity and insights generation How well your charts communicate the insights and how quick a layman can make sense of your dashboard solution.	7.0 %
Open House Presentation and Industry Evaluations	5.0 %
Total	**20.0 %**

Team Guidelines

- Up to 4 members on the team from the **same** section.
- You will present your work at the BI Open House to the instructor and industry evaluators. Your friends will also be reviewing your work.
- Please note that students who don't contribute to the teamwork will be identified and will not receive the same marks as students who put in the effort. You may also be asked to appear for a viva or written test to gauge your contribution to the project.

Task

Follow the Design Thinking Process to solving BI problems as studied to complete the task.

1. Properly document and improve work done during the design sprint.
2. In addition to empathy stage completed in the design sprint, meet and interview with a business professional with experience in the related domain or worked at the same or similar company. Complete an empathy map to understand the stakeholder needs. Submit the details of the interviewee, their LinkedIn profile, proof of interview (audio/video recording) and empathy map.
3. Fill the *Background.Data.Knowledge* Excel file summarizing business knowledge, competitor analysis, pain areas and data information. (Template uploaded)
4. Data Wrangling and EDA
   - Data cleaning (if required) – Even if the data is clean, you must validate.
   - EDA (necessary descriptives of numerical variables and basic statistical tests specific to your analysis – too much detail is not required)
   - Your notebook should include interpretations.
5. **Overall Analysis in the form of a documented report** in which you will answer each of your BI queries. The report document will include the following:
   - Description of your dataset and some industry background.
   - Summary of your Data Wrangling/EDA steps and consolidated results.
   - Summary of your Design Thinking framework implementation with screenshots from your design sprint, summarized insights from your domain expert interview and empathy map .
   - Attach images of each chart made on BI tool and in caption briefly explain the message of the chart (1-2 lines each)
   - Attach image of each dashboard made on BI tool and in caption briefly explain the message of the dashboard (1-2 lines each)
   - Attach all images of your data story in sequence. In a few sentences, describe how your problem is being solved with this story (you can create multiple stories if required).
   - At the end of the report include a section of "Work Contributions". This is where you will each tell how you contributed to the project.

- o Compile your work in a presentable manner and submit both the PDF and Word document.

6. **Files to Submit**
   - o Design Sprint workbook scanned document.
   - o Proof of Business Professional Interview + Empathy Map
   - o BI tool file
   - o Python notebook (s)
   - o Datasets (clean and dirty)
   - o Report Document
   - o A video demo and presentation of Max 5 mins explaining your BI solution.
   - o If file size exceeds the limit, upload a drive link which must not be modified after the deadline. Make sure to upload the report on LMS either way.

7. **BI Open House**
   - o You will be evaluated by industry experts at the open house and their scores will be averaged to include in the project score.

List of Datasets

Project Dataset List and Sign Up