

**Amrut Mody School of Management**  
**Monsoon 2023: TOD212\_Decision Sciences**  
**Project Guidelines**

- As a part of the Data Science TOD212 course, students will carry out a Group Project. While developing the group project, the students will follow specific internal evaluation procedures. A student should choose real-life cases for related topics of the course Decision Sciences TOD212 Viz. LPP, Spreadsheet modeling using What-if Analysis, KNN Regression modeling, Decision Theory, and Time Series Analysis of their interest. (The choice of a minimum of four-course topics should be appreciated).
- Formulate the real-life case into the general format and find the best solution by using appropriate techniques for the case analysis.
- As a part of 15% of the total evaluation of the project, the students are required to complete a task. It is implemented by a team of 5 students to do all necessary work correctly. The submission of this project and the PowerPoint presentation will be evaluated for 20 marks. The group's compatibility, presentation skills, analytical skills, teamwork, and willingness to work in a group will also be part of the evaluation.

**Students have to submit the project based on the given below aspects. The project will be assessed based on the following:**

### **Chapter 1: Introduction**

This chapter will give an overview of the project. It shall provide an introduction to the fundamentals present scenario of various technologies/methodologies concerned with the theme of the project purpose, scope and objectives, and background of the project. It will also include the research problem (technical or Techno-business) and clearly explain the methodology of the conduct of research. It shall comprise of:

- Objectives
- Scope and Background
- User Requirements (If any)
- Unresolved Issues (If any)

A description of the real-life problem taken by the group should be mentioned with the contact details of the problem holder (company/factory/shop/...)

### **Chapter 2 – Analysis of Work Done and Design:-**

- This is a crucial chapter in the project since it explains the work done by the researcher and the analysis justifying it. It will explain in detail in a step-by-step manner the conduct of the project and the technology/tools used, stages of development, use of special software tools (if any), use of statistical techniques (if any), various tests of the validity of the approaches used and data analysis.
- Due importance shall be given to procedures and techniques developed, methodologies developed, and adopted.
- While necessary, derivations/formulae/codes/syntaxes/templates/models/flow charts should usually be presented as a part of this chapter.

- This section shall comprise the planning charts, use case diagram, sequence, table design, etc., as mentioned below:
  - Planning Chart
  - Use Case Diagram (if any)
  - Activity Diagram(if any)
  - Sequence Diagram (if any)
  - Data Dictionary (if any)
  - Data Set Preparation (if any)
  - Report Layouts/ Screenshots /Graphs
  - Test Procedures and Implementation (with reports, if any) /Accuracy Metrics
  - Tools used

### **Chapter 3 – Learning Experiences on Business / Technology:-**

This chapter will explain the critical lessons learned and experiences imbibed from the project. It will bring the behavioral aspects of learning and bridge the gap between the theory and practice of the chosen technology or business concept for research. Moreover, it will also highlight the situational and crisis management scenarios experienced during the project period.

### **Chapter 4 – Conclusion:-**

This chapter shall thoroughly evaluate the investigation and discuss the project's findings, suggestions, and contributions. The discussion shall logically lead to inferences and conclusions and scope for future research as much as possible. Conclusions derived from the logical analysis shall be presented and enumerated, each point stated separately.

### **Chapter 5 - Bibliography / References:-**

References, Websites, other material, etc.  
Details on the working part for each student in the group.

<b>Sr. No.</b>	<b>Title of the Chapter</b>
1	<b>Introduction</b> - Objectives - Scope and Background - User Requirements (If any) - Unresolved Issues (If any)
2	<b>Analysis of Work Done and Design</b> - Planning Chart -Use Case Diagram (if any) -Activity Diagram (if any) -Sequence Diagram(if any)
3	<b>Learning experiences in Business / Technology</b> -Application of Knowledge in the Project -You may follow the steps to create a Data Science Project
4	<b>Conclusion</b> -Findings -Recommendations
5	<b>Bibliography / References</b>

## TECHNICAL SPECIFICATIONS OF THE PROJECT REPORT

- The project should be submitted in soft copy.
  - Font: Times New Roman, 12 sizes, 1.5 spacing
  - Margin: Left 35 mm. Right 20 mm. Top 35 mm. Bottom 20 mm.
  - Top: The title in CAPITAL letters or Centre: Full name of the student in CAPITAL letters and Enrolment Number
  - Use heading levels for ease of access.
  - Use clear graphics and outline every graphic. Lock the graphic so that it will not move.
  - Figures and tables should be presented immediately following their first mention in the text.
  - All the figures and tables must be serially numbered, captioned, and cited in the body text.
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- This Project is part of the curriculum to allow students to experience real-life situations to substantiate their learnings. In addition, they are expected to learn new technologies, methodologies, or practices. A large part of the evaluation will depend on this. In addition, if a student contributes in terms of an original solution or suggestions, they will be deemed valuable. Students can either develop/implement new software/applications or use existing techniques/tools in actual practice; **theoretical-based/study-based projects are not accepted.**

## Project Submission

- On the submission day, any group member must submit a soft copy of the complete project (PDF of the Word document + Excel file) on Google Classroom on or before **November 08, 2023.**
- The project report's hard copy (spiral bound) should be submitted during the PowerPoint presentation, scheduled between **November 16 and 25, 2023**, at a mutually convenient time.
- **On November 1, 2023, a Google sheet will be opened for 24 hours to select your Project Presentation Slot. After 24 hours, access to the slot selection sheet will be disabled.**
- The final schedule of the PowerPoint presentation will be shared through Google Drive.
- Request for change in the submission/presentation date and time will not be entertained.
- Each member of the group should be aware of the entire project.
- **Each group will be given 30 minutes for a project presentation (20-minute presentation and 10 min Q&A).**

The students can contact the Course Instructor or the Teaching Assistant for any queries.

**Project Reports which are different from the guidelines will not qualify for evaluation.**

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