**BE Project Report Format for AI and Data Science**

**Sequence in which Pages should be arranged in the Report:**

**(black binding cover)**

1. Title Page
2. Certificate Page (with Internal Guide / External Guide / HOD / Principal Signature)

Certificate of Industrial Project/NGO from Industry/NGO (If any)

1. Report Approval
2. Declaration
3. Acknowledgement Page (to Guide / HOD / Department / Company (if applicable)
4. Course outcome page
5. Abstract (200 to 300 words)
6. Table of Contents

* Chapter Index
* List of Figures
* List of Tables

1. Chapters (chapters)
2. References (papers + books + Patent) (Should not be marked as Chapter)
3. Appendix (Should not be marked as Chapter)

Ist Paper published in last semester (with header and footer of respective journal or conference)

IInd Paper which you are going to publish with its plagiarism check report, if it is already published then published paper (with header and footer of respective journal or conference)

**Contents of each Chapter:**

**Chapter 1: Introduction**

1.1 Motivation

1.2 Problem Definition

1.3 Relevance of the Project

1.4 Methodology used

**Chapter 2: Literature Survey** (with citation of references)

2.1 Papers or books

2.2 Patent studies (if nay)

**Chapter 3: Requirements**

* 1. Functional Requirements
  2. Non-Functional Requirements
  3. Constraints
  4. Hardware & Software Requirements
  5. System Block Diagram

**Chapter** 4**: Proposed Design**

4.1 System Design / Conceptual Design (Architectural)

4.2 Detailed Design (DFD, Flowchart, State Transition Diagram, ER Diagram, etc...)

4.3 Plan of Work

4.4 Project Scheduling & Tracking using Time line / Gnatt Chart

**Chapter 5: Implementation**

**Chapter 6: Testing**

**Chapter 7: Result Analysis**

7.1 Simulation Model

7.2 Parameters / Graphs

7.3 Output Printouts (with Explanation)

7.4 Observations & Analysis

**Chapter 8: Conclusion**

8.1 Limitations

8.2 Conclusion

8.3 Future Scope

**References (papers + books + Patent)**

**Appendix (Paper I, Paper II, and other if any)**

**General Instructions:**

1. Report should include proper table of content
2. Figure/Table should be appropriately named & should be included in list of Figures / Tables.
3. Report should be justified.
4. Line spacing should be 1.5.
5. Fonts for Heading/ Section / subsection / Body Text)

**Heading 1 (Times New Roman 20 Bold)**

**Heading 2 (Times New Roman 16 Bold)**

**Heading 3 (Times New Roman 14 Bold)**

Heading 4 (Times New Roman 14)

Body Text (Times New Roman 12)

**References (format)**

**ASME standard**

**Book,**

[1] Merritt, H. E., 1971, *Gear Engineering*, Pitman, New York, pp. 82–83.

**Journal Paper,**

[2] Arakere, N. K., and Nataraj, C., 1998, “Vibration of High-Speed Spur Gear Webs,” ASME Journal of Vibration Acoustics, 120(3), pp. 791–800.

**Proceeding Paper,**

[3] Stewart, R. M., 1977, “Some Useful Data Analysis Techniques for Gearbox Diagnostics,” Proceedings of the Meeting on the Application of Time Series Analysis, ISVR, University of Southampton, Southampton, UK.

**Thesis,**

[4] Kong, D. W., 2008, “Research on the Dynamics and Fault Diagnosis of the Large Gear Transmission Systems,” Ph.D., thesis, JiLin University, Changchun, China.

**Patent**

Patents Basic Format:

[1] J. K. Author, “Title of patent,” U.S. Patent x xxx xxx, Abbrev. Month, day, year.

Example:

[1] J. P. Wilkinson, “Nonlinear resonant circuit devices,” U.S. Patent 3 624 125, July 16, 1990. NOTE: Use “issued date” if several dates are given.

**--------------------------------------------------------------**

**IEEE standard**

**Book,**

[1] J. F. Curtis, (Ed.), *Processes and Disorders of Human Comm-unication.* New York: Harper and Row, 1978.

**Journal Paper,**

[2] J. Schroeterand M. M. Sondhi, “Techniques for estimating vocal-tract shapes from the speech signal,”*IEEE Trans. Speech Audio Process.*, vol. 2, no. 1, pp. 133–150, 1994.

**Proceeding paper,**

**[3]** J. M. Pardo, “Vocal tract shape analysis for children,” in *Proc. IEEE Int. Conf. Acoust., Speech, Signal Process.*, 1982, pp. 763–766.

**Patent**

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**Report starting pages**

**VIVEKANAND EDUCATION SOCIETY’S INSTITUTE OF TECHNOLOGY**

An Autonomous Institute Affiliated to University of Mumbai

Hashu Advani Memorial Complex, Collector Colony, Chembur East, Mumbai - 400074.

**Department of Artificial Intelligence and Data Science**



Project Report on

Healthcare Fraud Detection using Data Mining

In partial fulfillment of the Fourth Year, Bachelor of Engineering (B.E.) Degree in **Artificial Intelligence and Data Science** at **VIVEKANAND EDUCATION SOCIETY’S INSTITUTE OF TECHNOLOGY ,** An Autonomous Institute Affiliated to University of Mumbai. Academic Year 2023-2024

**Submitted by**

Deepak Badlani

SuryaPrakash Vishwakarma

Harsh Modi

**Project Mentor**

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(2023-24)

**VIVEKANAND EDUCATION SOCIETY’S INSTITUTE OF TECHNOLOGY**

An Autonomous Institute Affiliated to University of Mumbai

Hashu Advani Memorial Complex, Collector Colony, Chembur East, Mumbai - 400074.

**Department of Artificial Intelligence and Data Science**



**Certificate**

This is to certify that ***name1,name2*** of Fourth Year **of Artificial Intelligence and Data Science**  have satisfactorily completed the project on “***PAPERLESS TICKETING SYSTEM***” as a part of their coursework of PROJECT-I for Semester-VII under the guidance of their mentor ***Prof.xyz*** in the year 2023-2024 .

This thesis/dissertation/project report entitled (***Title***) by (***Author Name***) is approved for the degree of \_\_\_\_\_\_\_\_\_\_\_\_ (***Degree details***).

| Programme Outcomes | Grade |
| --- | --- |
| PO1,PO2,PO3,PO4,PO5,PO6,PO7,  PO8, PO9, PO10, PO11, PO12  PSO1, PSO2 |  |

Date:

Project Guide: Internal and External

------------------------------------------

**Project Report Approval**

**For**

**B. E (Artificial Intelligence and Data Science )**

This thesis/dissertation/project report entitled (***Title***) by (***Author Name***) is approved for the degree of \_\_\_\_\_\_\_\_\_\_\_\_ (***Degree details***).

Internal Examiner

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External Examiner

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Head of the Department

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Principal

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Date:

Place:

**Declaration**

We declare that this written submission represents our ideas in our own words and where others' ideas or words have been included, we have adequately cited and referenced the original sources. We also declare that we have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in our submission. We understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

| -----------------------------------------  (Signature)  -----------------------------------------  (Name of student and Roll No.) | -----------------------------------------  (Signature)  -----------------------------------------  (Name of student and Roll No.) |
| --- | --- |
| -----------------------------------------  (Signature)  -----------------------------------------  (Name of student and Roll No.) | -----------------------------------------  (Signature)  -----------------------------------------  (Name of student and Roll No.) |

Date:

**ACKNOWLEDGEMENT**

We are thankful to our college Vivekanand Education Society’s Institute of Technology for considering our project and extending help at all stages needed during our work of collecting information regarding the project.

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We wish to express our profound thanks to all those who helped us in gathering information about the project. Our families too have provided moral support and encouragement several times.

**Computer Engineering Department**

**COURSE OUTCOMES FOR B.E PROJECT**

Learners will be to,

| **Course Outcome** | **Description of the Course Outcome** |
| --- | --- |
| CO1 | Identify problems based on societal /research needs. |
| CO2 | Apply Knowledge and skill to solve societal problems in a group |
| CO3 | Draw the proper inferences from available results through theoretical/ experimental/simulations |
| CO4 | Analyze the impact of solutions in societal and environmental context for sustainable development. |
| CO5 | Demonstrate capabilities of self-learning in a group, which leads to lifelong learning. |
| CO6 | Demonstrate project management principles during project work. |

**Abstract**