

**BCA (Cloud Computing)**  
**Semester-VI**

L-0 T-0 P-36 C-18

**25BCC220P: Major Project**

**Course Objectives**

- To solve industrial (or society or research) problems.
- To plan, schedule, and monitor the software project.
- To learn Development, coding, and testing of a large project cohesively.
- To learn Documentation of projects.

**Course Outcomes**

**Students will be able to:**

1. Understand fundamental concepts and principles relevant to their project domain.
2. Apply appropriate methodologies and technologies to design and develop a software solution or system addressing a real-world problem or need.
3. Analyze the effectiveness, efficiency, and quality of their software solution through testing, debugging, and optimization processes.
4. Evaluate their knowledge, skills, and experiences to innovate and propose enhancements or extensions to their project, demonstrating creativity and problem-solving abilities.
5. Develop solutions for contemporary problems using modern tools for sustainable development.

**Articulation Matrix:-**

(Program Articulation Matrix is formed by the strength of the correlation of COs with POs and PSOs. The strength of correlation is indicated as 3 for substantial (high), 2 for moderate (medium) correlation, and 1 for slight (low) correlation)

| CO/PO/PSO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PSO1 | PSO2 |
|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1       | 2   | 3   | 1   | -   | -   | -   | -   | -   | -   | -    | -    | -    |
| CO2       | -   | 2   | 3   | 1   | -   | -   | -   | -   | 2   | -    | -    | -    |
| CO3       | -   | 1   | 2   | 3   | -   | -   | 1   | -   | -   | -    | -    | -    |
| CO4       | 1   | -   | 2   | -   | 3   | -   | -   | -   | -   | -    | 2    | 1    |
| CO5       | -   | 1   | -   | 2   | -   | 3   | -   | -   | -   | -    | 1    | 2    |

High-3 Medium-2 Low-1

**Major Project Guidelines**

1. The project proposal should be prepared in consultation with your guide. The project proposal should clearly state the project objectives and the environment of the proposed project to be undertaken. The project work should compulsorily include the software development.

2. Synopsis of the project proposal (15-20 pages) covering the following aspects may be Prepared:
  - a. Title of the Project
  - b. Introduction and Objectives of the Project
  - c. Problem Definition, Requirement Specifications (Detailed functional Requirements and Technical Specifications), Project Planning and Scheduling (Gantt chart/PERT chart)
  - d. Scope of the solution
  - e. Analysis (DFDs, ER Diagrams/Class Diagrams etc. as per the project requirements)
  - f. A complete structure which includes:
    - i. Number of modules and their description to provide an estimation of the student's effort on the project
    - ii. Data Structures as per the project requirements for all the modules. Process Logic of each module
    - iii. Implementation methodology
    - iv. List of reports that are likely to be generated
  - g. Overall network architecture (if required for your project)
  - h. Implementation of security mechanisms at various levels
  - i. Future scope and further enhancement of the project
  - j. Bibliography
3. Every student, (in a group of maximum two) will be asked to select a particular project listed by the department, on which he/she will have to develop a working module in semesters.
4. Two copies of the original project report in the hard bound form along with the CD (containing the executable file(s) of the project should be enclosed in the last page) is to be submitted to the University.
5. Coding standards should be followed meticulously. At the minimum, the code should be self documented, modular, and should use the meaningful naming convention.

**Project Title**

**A Project Report Submitted to**



**Mandsaur University, Mandsaur**

**Towards Partial Fulfillment for the Award of**

**Name of Program**

**Submitted By**

**STUDENT NAME**

**Enrollment No**

**Project Title**

**A**

**Project Report Submitted to**



**Mandsaur University, Mandsaur**

**Towards Partial Fulfillment for the Award of**

**Name of Program**

**Submitted To**

**Submitted By**

**Project Guide Name**

**Student Name**

**Designation**

**Enrolment No.**

***Department of Computer Science & Applications  
Mandsaur University, Mandsaur***

## ***CERTIFICATE***

The Dissertation entitled “**Project Title**” being submitted by **Student Name (Enrollment No.)** has been examined by us and is hereby approved for the award of degree **Program name** for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn therein, but approve the dissertation only for the purpose for which it has been submitted.

**Internal Examiner**

**Date:**

**External Examiner**

**Date:**

## **DISSERTATION APPROVAL SHEET**

The dissertation work entitled “Project Title” submitted by Student Name **(Enrollment No.)** is approved as partial fulfillment for the award of the **Program Name** degree by Mandsaur University, Mandsaur (M.P).

**Approved by**

Head of Department Name  
(HOD CA)

## DECLARATIONS

I hereby declare that the work, which is being presented in the dissertation, entitled **“Project Title”** partial fulfillment of the requirements for the award of degree of **Program Name** submitted in the **Department of Computer Science & Applicatiosns (Mandsaur University, Mandsaur)** is an authentic record of my own work carried under the guidance of **Guide Name**. I have not submitted the matter embodied in this report for award of any other degree.

**Student Name**

**(Enrollment No)**

## **ACKNOWLEDGEMENT**

I take the opportunity to express my cordial gratitude to **XYZ**, HOD Department of Computer Science & Application, Mandsaur University, Mandsaur (M.P.) for the valuable guidance and inspiration throughout the dissertation work. I feel thankful for his innovative ideas, which led to successful completion of this work.

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**Student Name**

# CONTENTS

| CHAPTER                              | PAGE NUMBER |
|--------------------------------------|-------------|
| CHAPTER 1: INTRODUCTION              | 01 - 04     |
| 1.1 Aim of Project                   | 01          |
| 1.2 Problem Definition               | 03          |
| 1.3 Problem Description              | 03          |
| 1.4 Need and Scope                   | 04          |
| CHAPTER 2: ANALYSIS                  | 05 - 08     |
| 2.1 Software Process Model           | 05          |
| 2.2 Advantages of Model              | 07          |
| 2.3 Disadvantages of Model           | 07          |
| 2.4 Product Perspective              | 08          |
| CHAPTER 3: REQUIREMENT SPECIFICATION | 09 - 11     |
| 3.1 Requirement Analysis             | 09          |
| 3.2 Software Specifications          | 10          |
| 3.3 Hardware Specifications          | 10          |
| 3.4 Non-Functional Requirements      | 11          |
| CHAPTER 4: FEASIBILITY ANALYSIS      | 12 - 13     |
| 4.1 Technical Feasibility            | 12          |
| 4.2 Economic Feasibility             | 12          |
| 4.3 Behavioural Feasibility          | 13          |
| 4.4 Time Feasibility                 | 13          |
| CHAPTER 5: RISK ANALYSIS             | 14 - 17     |
| 5.1 Why Risk Management              | 14          |
| 5.2 Risk Projection                  | 15          |
| 5.3 Types of Risks                   | 15          |
| 5.3.1 Project Risk                   | 15          |
| 5.3.2 Technical Risk                 | 16          |
| 5.3.3 Business Risk                  | 16          |

|                                   |                             |         |
|-----------------------------------|-----------------------------|---------|
| 5.4                               | Known Risk                  | 16      |
| 5.5                               | Predictable Risk            | 17      |
| 5.6                               | Unpredictable Risk          | 17      |
| CHAPTER 6: TECHNOLOGY USED        |                             | 18 - 24 |
| 6.1                               | Selection of Platform       | 18      |
| 6.2                               | Tool Selection              | 18      |
| 6.3                               | Database Used               | 21      |
| CHAPTER 7: PLANNING AND DESIGNING |                             | 25 - 57 |
| 7.1                               | Planning                    | 25      |
| 7.2                               | Designing                   | 28      |
| 7.3                               | Entity Relationship Diagram | 30      |
| 7.4                               | Data Flow Diagram           | 37      |
| 7.4.1                             | DFD Level 0                 | 37      |
| 7.4.2                             | DFD Level 1                 | 37      |
| 7.4.3                             | DFD Level 2                 | 39      |
| 7.5                               | Use Case Diagram 1          | 40      |
| 7.5.1                             | Use Case Diagram 2          | 41      |
| 7.5.2                             | Use Case Diagram 3          | 42      |
| 7.6                               | Activity Diagram            | 45      |
| 7.7                               | Sequence Diagram            | 53      |
| 7.8                               | Architecture Diagram        | 56      |
| 7.9                               | Class Diagram               | 57      |
| CHAPTER 8: IMPLEMENTATION         |                             | 58 – 66 |
| CHAPTER 9: TESTING                |                             | 67 - 73 |
| 9.1                               | Unit Testing                | 67      |
| 9.2                               | Integration Testing         | 68      |
| 9.3                               | Validation Testing          | 68      |
| 9.4                               | Test Case Design            | 68      |
| 9.5                               | Test Cases                  | 71      |
| CHAPTER 10: COST ESTIMATION AND   |                             | 74 - 78 |

|                                     |    |
|-------------------------------------|----|
| VERIFICATION CRITERIA               |    |
| CHAPTER 11: LIMITATIONS OF PROJECT  | 79 |
| CHAPTER 12: FUTURE SCOPE            | 80 |
| CHAPTER 13: CONCLUSION              | 81 |
| CHAPTER 14: BIBLIOGRAPHY/REFERENCES | 82 |

## LIST OF TABLES

| CHAPTER                  | PAGE NUMBER |
|--------------------------|-------------|
| CHAPTER 3                | 09 - 11     |
| Table 3.1 Table Caption  | 10          |
| CHAPTER 9                | 67 - 73     |
| Table 9.1 Table Caption  | 71          |
| Table 9.2 Table Caption  | 72          |
| Table 9.3 Table Caption  | 73          |
| Table 9.4 Table Caption  | 73          |
| CHAPTER 10               | 74 - 78     |
| Table 10.1 Table Caption | 77          |

## LIST OF FIGURES

| CHAPTER                   | PAGE NUMBER |
|---------------------------|-------------|
| CHAPTER 2                 | 05 - 08     |
| Figure 2.1 Figure Caption | 06          |
| Figure 2.2 Figure Caption | 08          |
| CHAPTER 8                 | 58 - 66     |
| Figure 8.1 Figure Caption | 58          |
| Figure 8.2 Figure Caption | 59          |
| Figure 8.3 Figure Caption | 60          |
| Figure 8.4 Figure Caption | 61          |
| Figure 8.5 Figure Caption | 61          |
| Figure 8.6 Figure Caption | 62          |
| Figure 8.7 Figure Caption | 62          |
| Figure 8.8 Figure Caption | 63          |

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