Institute of Information Technology & Management, New Delhi

# CONDUCT OF MINOR PROJECT: BCA SEMESTER V

## Objective

1. Students of BCA Semester V are required to work on a project as per syllabi. It is planned to link and extend the work done in the Summer Training of Semester IV with the project work that is to be done during this semester. At the end of the semester the students are to submit a written project report to be forwarded to GGSIP University. The objective of this Academic Circular is to lay guidelines to conduct minor project and to standardise the format of submission of required report.

**University Scheme for Minor Project**

2. As per the syllabi of BCA (Paper No BCA-357 of 4 credits), students of Semester V are to design and develop an application software in continuation with the summer training carried out during BCA Semester IV on a real information system and to submit a written report. In this case evaluation has two components, viz.

**Paper No : BCA -357 (MINOR PROJECT)**

**Credits : 4**

**Max Mark’s : 100**

**(a) Internal : 40 Marks**

**(b) External : 60 Marks**

**Time Duration : 10 Weeks**

**Scope of Project**

3. The SRS worked out during the summer training are to be converted into an application using front & back-end tools during the Vth semester as a software project independently by each student.

4. The project work shall be an application development in a language/platform that the student has learnt during the previous semester’s viz. **JAVA/ ANDROID /PHP and Oracle/ mysql** as Back End Tool. It shall be an in-house development. **Each student is required to carry out the work in a team of two (max) and submit the joint report at the end. ANY PREVIOUS WORK OR BORROWED REPORT WILL BE SUMMARILY REJECTED AND IN ALL CASES OF REJECTION THE WORK IS TO BE REPEATED AFRESH.**

**Methodology**

5. Methodology and activities that are to be performed to conduct the summer training project are given in details in **Appendix-A**.

**Format & Final Report**

6. The Guidelines for the format to be used for compilation of the project report are given in **Appendix-B**. **All students are to adhere to these guidelines.**

**Schedule of Submissions**

7.

|  |  |  |  |
| --- | --- | --- | --- |
| **To be Completed by Date** | **Activity** | **Marks Allotted** | **Remarks** |
| 11th Sep 2021 | Briefing about the Minor Project | - | - |
| 25th Sep 2021 | Completion & Submission of activities Under Chapter-1 with Database design (Database Schema Implementation in Lab.) and Forms designed. | 5 | As per Appendix-A. |
| 01st Oct 2021 | Completion & Submission of activities under Chapter -2 along with first demonstration of Application Software developed. | 5 | As per Appendix-A. |
| 05th Oct 2021 | **Ist Phase Marks Submission & Displayed on Notice Board** | | |
| 16th Oct 2021 | Submission of Application Software developed. ( Software Demonstration) | 5 | As per Appendix-A. |
| 21st  Oct 2021 | **IInd Phase Marks Submission & Displayed on Notice Board** | | |
| 30th Oct 2021 | Completion & Submission of activities Under Chapter-3 & 4 along with System Test results. | 5 | As per Appendix-A. |
| 10th Nov 2021 | Submission of Final Report (One hard copy & CD) to the respective guides along with CD containing Project EXE & report | 10 | As per Appendix-A & B. |
| 12th Nov 2021 | **IIIrd Phase Marks Submission & Displayed on Notice Board** | | |
| 15th Nov – 18th Nov 2021 | Presentation & Viva before the Faculty Panel Committee | 10 |  |
| **Total Marks** | | **40** |  |

**Formation of Teams**

8. As stated summer training project is to be conducted by a team of TWO students. Team composition and names of guides is given in **Appendix-C**.

Prof. (Dr.) Sudhir K. Sharma

**Director**

1. All Students of BCA (M+E) Semester V

2. Concerned IT Faculty Members

**Appendix ‘A’**

(Refer Para 7)

**METHODOLOGY FOR THE PROJECT WORK**

Chapter-1: System Introduction

**Description of System**: Give brief description of the organisation and the proposed information system whose analytical study has been during semester IV summer training period.

**System Requirement Submission Report (As per IEEE Format):** The SRS worked out during the summer training IVth semester has to be formally explained as per IEEE standard notation for implementing the user requirement of the proposed system as per analysis done during two months training period.

**NOTE: YOU MUST INCORPORATE THE CHANGES IN SYSTEM DESIGN IF**

**ANY HAS BEEN SUFGGESTED BY THE PROJECT GUIDE DURING THE CODING & IMPLEMENTATION OF THE PROPOSED SYSTEM**

## Chapter-2: Systems Design

**Physical Design**: Explain relationship between various components (processes, input, output & entities) of the system. Draw DFD’s or other relative diagrams. (As per the implemented system design)

**Database Design:** Depending on the tool/package used, give contents of each file including Field Name, Type, and Size & Description. Generate ER diagram and Tabular Data Dictionary of the all supported data files & objects. (As per implemented database schema)

**Interface Design**:

(a) **Output Design**: Screen & Print layouts, i.e., the format and contents (fields) to be included – along with the file to which it is linked.

(b) **Input (Form or Screen) Design**: For keying-in data. Give fields, format, codes to be used, validation (error detection) requirements & the file to which it is linked.

**NOTE: YOU MUST INCLUDE SOME VALIDATION CHECKS. SECURITY AND CONTROL FEATURES (ACCESS RIGHTS) COULD BE ADDITIONAL.**

### Chapter-3: Systems Development & Implementation

**Purpose**: To carry out the activities of writing actual programmes, their debugging, testing and validation. Following activities are to be carried out:

(a) **Programme Development**: Develop the programs using the tools/platform specified in Chapter-1 (both back-end and front-end). Attach programme codes, screen prints of GUI and ‘Actual Output Reports’ using the real data. Codes may be attached as appendix & on CD.

(b) **Testing & Debugging**: Use previous work data to check whether the programmes work as intended by you or you can use dummy data. Give the testing techniques and testing strategies used. Front-end and Back-end validation applied. Debugging and code improvement techniques applied.

**NOTE: INCLUDE THE TEST REPORTS IN THE PROJECT TO SHOW THE ERRORS, IF ANY, AND A BRIEF WRITE-UP ON THEIR RECTIFICATION.**

**Chapter-4: Scope of Improvement, Summary and Conclusions**

Describe what has been achieved vis-à-vis objectives & scope of the project. Is the application developed by you ready for use or some bugs remain? Describe limitations and scope for future development/improvement.

**Appendix-B**

(Refer Para 6)

**FORMAT OF THE PROJECT REPORT**

## Format

1. The format for compilation of final report is given below:

1. Title Page
2. Certificate

(c) Acknowledgements

(d) Table of Contents

(e) List of Tables

(f) List of Figures

(g) List of Symbols

(h) Body of the Project Report

(j) Appendices

## Title Page

2. The format of the title page is attached as **Annexure-I**.

## Certificate

1. The format of the certificate is attached as **Annexure-II**. A certificate by the student, guide and duly authenticated by the Director is to be attached.

## Acknowledgement

4. In the “Acknowledgement” page, the writer recognises his indebtedness for guidance and assistance by the guide and other members of the faculty. Courtesy demands that he/she also recognises specific contributions by other persons or institutions such as libraries and research foundations. Acknowledgements should be expressed simply, tastefully, and tactfully **duly signed above the name.**

**Table of Contents**

5. The format of ‘Table of Contents’ and list of Tables/Figures/Symbols is attached as **Annexure-III**.

###### Body of the Project Report: Guidelines for Project Report Writing

6. The guidelines for the Body of the Project Report (methodology) are detailed in **Appendix-A**. Following aspects must be adhered to:

(a) **Page Size**: Good quality white A4 size executive bond paper should be used for typing and duplication.

(b) **Chapter/Para Numbering**: The chapters are to be numbered as Chapter-1, Chapter-2 etc. The heading/title of the chapter is to appear below the chapter number in uppercase. Paragraphs are to be numbered as 1,2,3 etc in every chapter separately. Sub-paras are to be numbered as 1.1, 1.2, 1.3----, 2.1, 2.2, 2.3-----etc. Sub-sub paras are to be numbered as 1.11, 1.12, 1.13, 2.11, 2.12, 2.13 etc.

(c) **Page Specifications:**

(i) Left Margin : 1.25 inch

(ii) Right Margin : 1.25 inch

(iii) Top Margin : 1 inch

(iv) Bottom Margin : 1 inch

(d) **Page Numbers:**  All text pages starting from Body of the Project Report as well as program source code listings should be numbered at the **bottom center** of the pages.

(e) **Normal Body Text:**

(i) **Font Size:** 12, Times New Roman, One and a half Spacing, Single Side Writing.

(ii) **Paragraphs Heading Font Size:** 12, Times New Roman, Underlined

1. **Page/Title Font Size**: 14

(f) **Table and Figure Number**: Table and figure numbers are to be written at the bottom of the table/ figure as given below:

(i) **Table No-1: File Design for Employee Record**

(ii) **Figure No-1: Data Flow Diagram**

1. **Binding & Color Code of the Report**: Each team is to submit a joint written project report in following format along with a project CD.

(i) Hard Bound Report

(ii) Background of the cover page – **Dark Brown**

(iii)Letters in **Silver White**

## Appendices

7. The appendices are to be attached at the end of the report and to be numbered as Appendix-A, Appendix-B etc right justified at the top of the page. Below the word Appendix write in parenthesis “Refer Para No\_\_”. The para number is to be the number in the body of text where the reference of appendix is given. An appendix may have annexure (s). If there are annexure, these are to be attached immediately after the said appendix. The annexures are to be numbered as Annexure-I, Annexure-II etc.

**Annexure-I**

### Title of The Project Report

(Font size = 18)

*Submitted in partial fulfillment of the requirements*

*for the award of the degree of*

**Bachelor of Computer Applications**

To

Guru Gobind Singh Indraprastha University, Delhi

Guide: Submitted by:

(Guide Name)

1. (Student name Roll No)

2. (Student name Roll No)

****

Institute of Information Technology & Management,

New Delhi – 1100 58

**Batch (2019-2022)**

Annexure-II

##### Certificate

We, 1. (Name & Roll No) & 2. (Name & Roll No) certify that the Minor Project Report (BCA-357) entitled “\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_” is done by us and it is an authentic work carried out by us at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (Name of the organization or of the Institute). The matter embodied in this project work has not been submitted earlier for the award of any degree or diploma to the best of my knowledge and belief.

1. Signature of the Student 2. Signature of the Student

Date:

Certified that the Project Report (BCA-357) entitled “\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_”

done by the above students is completed under my guidance.

Signature of the Guide

Date:

Name of the Guide:

Designation:

Countersigned

(Mr. Ashish Nayyar/Dr.Ruby Dahiya) Prof. (Dr.) Sudhir K. Sharma

PC Director

Annexure-III

**FORMAT FOR TABLE OF CONTENTS**

**TABLE OF CONTENTS**

|  |  |  |
| --- | --- | --- |
| **S No** | **Topic** | **Page No** |
| 1 | Certificate | - |
| 2 | Acknowledgements | - |
| 3 | List of Tables/Figures/Symbols | - |
| 4 | Chapter-1: Introduction |  |
| 5 | Chapter-2: System Analysis |  |
| 6 | Chapter-3: System Design |  |
| 8 | Appendices |  |

**FORMAT FOR LIST OF TABLES/FIGURES/ SYMBOLS**

**LIST OF TABLES**

|  |  |  |
| --- | --- | --- |
| **Table No** | **Title** | **Page No** |
| 1 | File Design for Employee Record |  |
| 2 | File Design for Personal Details |  |

**LIST OF FIGURES**

|  |  |  |
| --- | --- | --- |
| **Figure No** | **Title** | **Page No** |
| 1 | Data Flow Diagram |  |
| 2 | Input Screen for Data Entry |  |

**LIST OF SYMBOLS**

|  |  |  |
| --- | --- | --- |
| **S No** | **Symbol** | **Nomenclature & Meaning** |
| 1 | **Σ** | Sigma (Summation) |
| 2 | **Kbps** | Kilo bits per second |