**Department of Computer Science & Engineering**
**Chitkara University Institute of Engineering & Technology**
***(Accredited by NAAC with Grade 'A+')***

Ref No: CUIET/CSE/ACAD/2024/357 Date: 9th September, 2024

# NOTICE

## ATTENTION:- Gamma (G1-G14, G33) & I Gamma (All Groups)

This is to inform students of the BE CSE Batch 2022 that Module IV of Sem 5 commenced on September 9, 2024, In continuation to Module III, Module IV will have: -

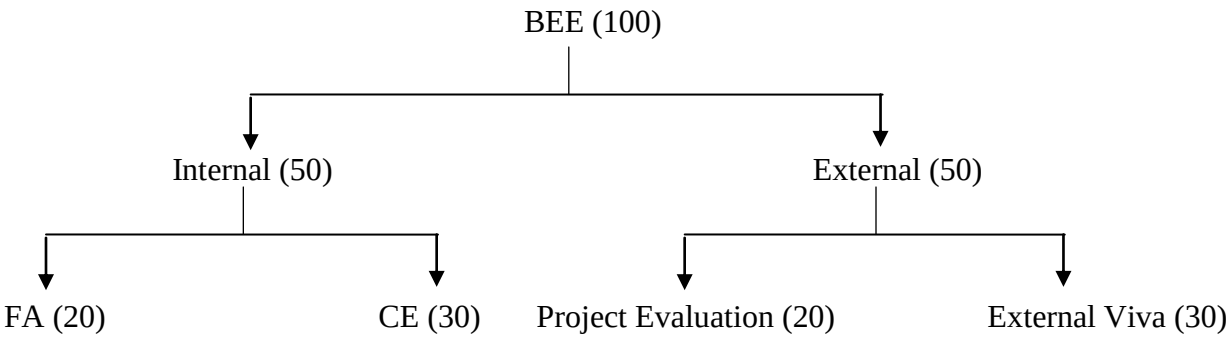
**System Design (22CS024):** 2 hours of instruction daily as per Timetable.

**Back End Engineering (22CS026):** 1 hour of instruction daily as per the timetable already has been updated and will be uploaded on Chalkpad Pro.

In View of that project evaluations for Back-End Engineering (BEE) will be evaluated by SPOCs and mentors in their respective classes. These evaluations will be based on predefined rubrics as below

| Components | Marks | Date |
|---|---|---|
| Project Proposal | 5 | 9th -13th September |
| Synopsis | 5 | 16th - 20th September |
| 1st Progress Report | 10 | 23rd- 28th September |
| 2nd Progress Report | 10 | 30th – 4th October |

**Kindly adhere to the predefined Annexure for the component mentioned in the above table**
Project Proposal: Annexure I
Rubrics: Annexure II
Project Synopsis: Annexure III
Project Report: Annexure IV
Presentation: Annexure V
The final criteria for BEE will be as follows:




*Out of 5 FA best 3 will be considered

*CE both will be considered

**-Sd-**
Dr. Rupali Gill: Dean CSE (Cluster Gamma)
Dr. Raj Gaurang Tiwari: Dean CSE (Cluster iGamma)

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# Annexure I (For Project Proposal for BEE)

1. **Project Statement:**
2. **Approximate duration (in hours) to complete the project:**
3. **Proposed Project In charge:**
4. **Team Members along with roll no's:**
   - **a.**
   - **b.**
   - **c.**
   - **d.**
5. **Check Points:**
   a. Does the project statement result in a product? If yes, what type of product?
   b. If it is a product, can a prototype be made, if not, what is it, which we can produce that our teachers can evaluate.
   c. Does the project statement use multiple concepts to achieve the outcome? (yes/no)
   d. Does it have enough for our team members to do sufficient amount of work? (yes / no)

6. **Technical Nodes** (*add more rows in the table below, if required)*

| Subject / Area / Topic | Technical Nodes |
|---|---|
| | |
| | |

7. **Prerequisites (in terms of knowledge, concepts and material) for doing the Project:**

8. **Material that may be required to make the project and where it might be available**

9. **What could the total cost of the project?**

10. **Resources available to us:**

# Annexure II

**RUBRICS FOR BEE Evaluation (22CS026)**

| Components | Assessment | Marks |
|---|---|---|
| Viva | Rubric1 | **20** |
| Presentation | Rubric 2 | **15** |
| File work | Rubric 3 | **15** |
| | **Total** | **50** |

**Rubric 1:**

| Criteria/Recommended Scores | Excellent (17-20) | Very Good (13-16) | Good (10-12) | Satisfactory (6-9) |
|---|---|---|---|---|
| Understanding of the use case/Task assigned | Excellent understanding with original/unique features | Good understanding | Average understanding | Less understanding |
| Demonstration skill | Able to explain the work performed in a proper sequence with clarity | Able to explain the major part of the work performed ina proper sequence with a appropriate clarity | Able to explain onlypart of the work performed with less clarity. | Not able to explain the work |
| Techniques Used | Excellent field application of extension techniques | Very good field application of extension techniques | Good field application of extension techniques | Less field application ofextension techniques |
| Level of engagement | Excellent level of engagement in terms of team workand contributed equally. | Good level of engagement in team work and contributed moderately. | Average level of engagement in team work and contributed low. | Lack of engagement in team work with no contribution. |

**Rubrics 2:**

| Criteria/Recommended Scores | Excellent (13-15) | Very Good (10-12) | Good (8-9) | Satisfactory (6-7) |
|---|---|---|---|---|
| Content | Content is highly relevant, well-researched, and comprehensive. | Content is mostly relevant, well-researched, and covers the main | Content is somewhat relevant, but may lack depth | Content is somewhat relevant but lacks depth and |

| | | | | |
|---|---|---|---|---|
| | | points. | or have minor inaccuracies. Additional research or explanation is needed. | is inadequately researched |
| Organization and Structure | Presentation is exceptionally well-organized with a clear and logical structure. | Presentation is well-organized with a clear structure, though minor improvements are possible. | Presentation is adequately organized, but some sections may need better structure or transitions. | Presentation is disorganized with a lack of clear structure or transitions. |
| Delivery and Engagement | Confident, articulate, and engaging delivery. Maintains excellent eye contact and body language. | Generally confident and engaging delivery but with occasional lapses in eye contact or body language. | Adequate delivery, but may lack confidence or engagement. Some improvement needed in eye contact and body language. | Delivery is unconvincing or monotone. Consistently poor eye contact and body language. |
| Visual Aids | Visual aids are highly effective, enhancing the presentation. They are clear, relevant, and well-integrated. | Visual aids are generally effective but could benefit from minor improvements in clarity or relevance. | Visual aids are adequate but may lack clarity, relevance, or integration. | Visual aids are ineffective and do not enhance the presentation. |

**Rubric 3:**

| Criteria | Excellent (12-15) | Good (9-11) | Satisfactory (below 8) |
|---|---|---|---|
| Project Report | • Project report is according to the specified format | • Project report is according to the specified format but some mistakes | • Project report not prepared according to the specified format |

| | | | |
|---|---|---|---|
| Description of Concepts and Technical Details | • Strong description of the technical requirements of the project | • In-sufficient description of the technical requirements of the project | • Poor description of the technical requirements of the project |
| Conclusion and Discussion | • Results are presented in very appropriate manner<br>• Project work is well summarized and concluded | • Results presented are not much satisfactory<br>• Project work summary and conclusion not very appropriate | • Results are not presented properly<br>• Project work is not summarized and concluded |

Annexure-III

# PROJECT SYNOPSIS REPORT

**ON**

**<PROJECT TITLE>**

**SUBMITTED**

**TO**

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**FOR**

**Back End Engineering(22CS026)**

**Submitted By:**
**Name(s):**
**University Roll No(s).:**
**Semester:**
**Session:**

# Index

**Problem Statement**

Consider an unbounded (infinite) buffer where producer writes data to buffer and Consumer reads data from the buffer. There is a need to coordinate the activities of depositing and retrieval performed by producers and consumers respectively. Develop an application to provide a bounded-buffer solution to the client-server environment.

**Title of project:**

To develop a Bounded-buffer solution for client-server environment.

**Objective & Key Learnings:**

- To enable the students to understand the concept of sharing of data between client and server machine without loss of any information.
- To ensure that the producer won't try to add data into the buffer if it's full and that the consumer won't try to remove data from an empty buffer.

# REFERENCES


[1] Krit Somkantha, Nipon Theera-Umpo, "Boundary Detection in Medical Images Using Edge Following Algorithm Based on Intensity Gradient and Texture Gradient Features".

[2] H.Chidiac, D.Ziou, "Classification of Image Edges",Vision Interface'99, Troise-Rivieres, Canada, 1999.pp. 17-24.

[3] Q.Ji, R.M.Haralick, "Quantitative Evaluation of Edge Detectors using the Minimum Kernel Variance Criterion", ICIP 99. IEEE International Conference on Image Processing volume: 2, 1999, pp.705-709

[4] M.Woodhall, C.Linquist, " New Edge Detection Algorithms Based on Adaptive Estimation Filters", Conference Record of the 31st Asilomar IEEE Conference on Signals Systems & Computers, volume: 2, 1997, pp. 1695-1699

[5] C. Harris and M.J. Stephens. A combined corner and edge detector. In Alvey Vision Conference, pages 147–152, 1988.

[6] C. Schmid, R. Mohr, and C. Bauckhage. Evaluation of interest point detectors. International Journal of Computer Vision, 37(2):151–172, June 2000.

[7] Thomas B. Moeslund. Image and Video Processing. August 2008.

## Annexure - IV

**PROJECT REPORT**

**On**

# NAME OF TOPIC

Submitted in partial fulfilment of the requirement for the
Course BEE (22CS026) of

**COMPUTER SCIENCE AND ENGINEERING**
**B.E. Batch-2022**

**in**

**Jan -2025**

**Under the Guidance of**
**Name of the Project Guide**
**Designation of the Project Guide**

**Submitted By**

**Name of the Student**
**Roll. No. _____**
**Name of the Student**
**Roll. No. _____**
**Name of the Student**
**Roll. No. _____**
**Name of the Student**
**Roll. No. _____**

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**
**CHITKARA UNIVERSITY**
**PUNJAB**

**(Annexure –C)**

# CERTIFICATE

*(16 Times New Roman)*

This is to be certified that the project entitled "Title of the Major Project" has been submitted for the Bachelor of Computer Science Engineering at Chitkara University, Punjab during the academic semester January 2024-May-2024 is a bonafide piece of project work carried out by "Name's and roll no's of the students group" towards the partial fulfillment for the award of the course Integrated Project (CS 203) under the guidance of "Project Guide Name" and supervision.

**Sign. of Project Guide** :

Name of Project Guide

(Designation & Department)

**(Annexure –D)**

# CANDIDATE'S DECLARATION

*(16 Times New Roman)*

We, **NAME AND Roll No's OF THE STUDENTS GROUP,** B.E.-2021 of the Chitkara University, Punjab hereby declare that the Integrated Project Report entitled **"TITLE OF PROJECT"** is an original work and data provided in the study is authentic to the best of our knowledge. This report has not been submitted to any other Institute for the award of any other course.

| **Sign. of Student 1** | **Sign. of Student 2** | **Sign. of Student 3** |
|---|---|---|
| Name of the Student | Name of the Student | Name of the Student |
| ID No……. | ID No…….. | ID No…… |

**Place:**
**Date:**

**(Annexure -E)**

# ACKNOWLEDGEMENT

*(16 Times New Roman)*

It is our pleasure to be indebted to various people, who directly or indirectly contributed in the development of this work and who influenced my thinking, behavior and acts during the course of study.

We express our sincere gratitude to all for providing me an opportunity to undergo Integrated Project as the part of the curriculum.

We are thankful to "Project Guide Name" for his support, cooperation, and motivation provided to us during the training for constant inspiration, presence and blessings.

We also extend our sincere appreciation to ***"Project Guide name and External Guide name (if any)*** who provided his valuable suggestions and precious time in accomplishing our Integrated project report.

Lastly, We would like to thank the almighty and our parents for their moral support and friends with whom we shared our day-to day experience and received lots of suggestions that improve our quality of work.

**Name of the Student** **Name of the Student** **Name of the Student**

**ID No…….** **ID No……..** **ID No……**

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# (Annexure –F)

**The report must consist of following chapters:**

1. **Abstract/Keywords**
2. **Introduction to the project**
    - **2.1 Background**
    - **2.2 Problem Statement**
3. **Software and Hardware Requirement Specification**
    - **3.1 Methods**
    - **3.2 Programming/Working Environment**
    - **3.3 Requirements to run the application**
4. **Database Analyzing, design and implementation (If any)**
5. **Program's Structure Analyzing and GUI Constructing (Project Snapshots)**
6. **Code-Implementation and Database Connections (If any)**
7. **System Testing (if any)**
8. **Limitations (if any)**
9. **Conclusion**
10. **Future Scope**
11. **Bibliography/References**

**( Annexure V )**

**Project Presentation of Back End Engineering Project (BEE) (22CS026)**

On

# <Title of the Project>

<Name of the Student>

<Roll Number>

Supervised By

<Name of the Mentor/Team Lead/Manager>

Department of Computer Science and Engineering,

Chitkara University, Punjab

# Contents to be covered

Introduction
S/W, H/W Requirement
Feasibility study
Techniques Used /Tools Used
Design/Flowchart/ER Diagram/DFD
Results
Conclusion

# Introduction

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# Thank You