A REPORT ON PROJECT BASED LEARNING (PBL)

Academic Year 2019-2020 (Semester III) Second Year Undergraduate Students of

IT Engineering Department

Objective—To enable the students to apply concepts of the present semester subjects (including those of previous semesters) in the form of a design project based on certain applications. It is hoped that it shall eventually lead to a better learning experience as opposed to textbook learning. Separate topics are assigned to all students in groups (maximum 4-6 students per group) of the same year to enable healthy competition among the different teams. The students work in groups and assign and distribute various aspects of work so as to realize the project based on a timeline of about 2 to 3 months. Queries and doubts are clarified by interactions with the PBL coordinators and subject experts. Student groups submit the PBL report during their demonstrations on a specified date in front of the faculty members.

Judges for the PBL Demonstrations

All Computer and IT Engineering Faculty of the concerned class.

PBL Coordinators

Division A	Prof. Deepti L.
Division B	Prof. Aju P.

PBL Topics:

1 | Society Management System

The software system can store the data of various flat owners and their family members, visiting servants along with their images. The system also maintains and calculates the society maintenance, cultural funds, emergency funds and other charges and adds them automatically in individual flat bills. The system needs an administrator to input various flat owner data and billing amounts into it. List of members with pending dues should be displayed, also the interest to be paid on pending amounts should be added to the monthly bill.

2 | I card generation for different events in College

The software should be able to generate ID cards for various events that are held in PCE. Generate different templates(should contain College name ,address and Logo) that can be used for different events. Generation of ID cards should contain the following information 1. Name of Candidate 2. Photo. 3. Name of Event 4. Event Date. Details of the events and registration should be stored and fetched from the database.

3 Inventory management system for College office stationeries

The software should be able to accept requests from staff and other college employees for stationeries. Provide dropdown for selection of stationary items and its quantity. The administrator should be able to view summarized requests from staff. While the items are issued, the details(item,quantity,date) should be entered in the software. On selection of staff it should list the items issued to him/her.

4 | Employee Leave Management System for department in college

The Leave Management System will allow the faculty of college to apply leave

through their system. Faculty will be able to see their current leave balance and will have the option of applying leave. Once the faculty applies for leave ,then his/her leave balance will be deducted. The HOD of the department will be able to see the details of faculty who are on leave today. Faculty window will allow faculty to apply for leave and check leave balance and data will be maintained in the database. The HOD window will allow the HOD to check-list of faculty who are on leave on the given day.

5 | Faculty finder in college

The software should store the list of faculty, seating location, extension number, office hours and time-table of the faculty. The software should be able to select a faculty based on department and name of faculty, display details of the faculty along with the current location (classroom/ lab/ seating room).

6 Tax Calculation through form 16

Form 16 is essentially a certificate employers issue their employees. It validates the fact that TDS has been deducted and deposited with the authorities on behalf of the employee. Create forms to enter details from form 16 and store it in a database. Calculate total tax payable/refund. Research for tax slabs and exemptions from ITR website.

7 | Hotel Management System

A hotel system manages information about rooms, reservations, customers, and customer billing. A clerk makes reservations, he/she needs to check if a room the customer wants to reserve is available. If a room is available, the clerk enters customers's information into the system. A clerk checks in a customer, changes the checkout date, and checks out the customer. A room is assigned to the customer at check-in time and a customer billing record is created at that time. The customer billing record is updated every day. When a customer checks out, the clerk prints

the bill. A customer can pay by cash, debit, credit card when he/she checks out.

Photos



Winners list:

Division A

Sr. No.	Roll No.	Name	PBL Topic
	33	Manuj Narayanaa Rajaram	
•	39	Harshvardhan Pandey	I card generation for
1	48	Hemant Rathod	different events in
	49	Taruna Rawat	College
	58	Surabhi Shinde	
	47	Ashwith Poojary	
•	54	Girish Shetiya	11 . 11
2	14	Pratik Gadge	Hotel Management System
	13	Dhanajay Epili	System
	4	Utkarsh Bhaskarwar	
	8	Shreedhar Chavan	
	10	Girish Dange	T. C.1. 1
3	34	Himanshu Marathe	Tax Calculation through form 16
	35	Nishad Marathe	Torin 10
	60	Prasad Thorat	
	3	Bhanushali Yukta	
4	12	Aakanksha Deshpande	Cariat Managanan
	56	Shetye Sayali	Society Management System
	20	Abhishek Joshi	
	44	Shrinidhi Patil	
	19	Hrithik Jain	Inventory management
5	1	Aakanksh Krishnan	Inventory management system for College office
	36	Ashna Maurya	stationeries

61	Manasi Variar
45	Ishita Patri