A REPORT ON PROJECT BASED LEARNING (PBL)

Academic Year 2018-2019 (Semester 3) 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 application. 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	1 Certificate generator System		
	The certificate generation system should be able to generate certificates for events held in PCE such as Alegria, PBL, CSI workshop etc. The application should be developed using Java as front		

end and MYSQL/ POSTGRESQL as backend. Develop different templates for different certificates. The application should generate ready to print certificate. **Admission Process/ Merit List generator System** The increasing numbers of students seeking admission in the Academic Institutes (School, Colleges, Universities) are causing tremendous pressure on the administrative body of the institutes to manage and arrange the admission process manually. It is difficult now to conduct the process accurately and in timely manner. Hence, the need for automated admission is inevitable. The system should generate three merit lists based on following criteria: 1. PCM marks 2. CET marks 3. Reservation category. The application should be developed using Java as front end and MYSQL/POSTGRESQL as backend. 3 | Shopping mall Inventory Management System Generating inventory management system for Shopping mall where the user will be able to store the details of various items available in store room as well as see the complete inventory of all the items available in store room. The application should be developed using Java as front end and MYSQL/ POSTGRESQL as backend. **Toll Plaza using Queue operation** The application will accept the number of vehicles passing through toll plaza. The number of vehicle, its type and registration number should be accepted and stored in the database.. Concept of queue will be used to redirect the vehicle to another toll booth if the queue is full. Display the result of which vehicles passed through which queue. All the details of vehicle passing the toll plaza will be stored in Database. The application should be developed using Java as front end and MYSQL/ POSTGRESQL as backend **Quiz application** Quiz application which will provide students to take quiz for a specific topic. Teachers will add the quiz data in the system and enable the quiz for the students. Once student attempt the quiz his/her final score will be displayed. Quiz will be of MCQ type. Project should be implemented in

java where student and teacher will have different login and student will be able to take quiz and teacher will be able to add questions and answers for the quiz. Data should be stored and retrieved from the database. The application should be developed using Java as front end and MYSQL/ POSTGRESQL as backend

6 | Simulation of a race between two object with dice roll

Simulating race between two people/object from start to end point. Here from start to end point there will be 15(5 vertical and 10 horizontal) steps. And each step the object moves is equivalent to dice number. When user one will roll the dice and he gets the value as 5 then user1 will move 5 steps ahead. Same way if the user 2 roll the dice and gets the value as 2 then user2 will move for 2 steps. So when any user reaches the 15 step it will be declared as winner. Details of player's win loss records should be maintained in database. Projet should be implemented in Java and applet should be used for simulation of dice and movement of object from start to end point.

Photos







Winners list:

Division A

Group Number	Roll No.	Group Members	Topics
	ITA317	GAVAS SAMRUDDHI SATYAVAN	
1	ITA307	CHAUDHARY NISHITA HARISHANKAR	Shopping mall
	ITA343	SANGHAVI PARTH HARESH	Inventory Management
	ITA350	SHARMA NAKUL GOPAL	
	ITA301	ACHARE YOGESH VISHNU	System
	ITA345	SAYYED ABDULLAH	
2	ITA326	KANNAN SNEHAL SURESH	Certificate generator

	ITA347	SAYYED HUSAIN ABBAS SHABIHUL HASAN ABDI	System
	ITA318	GAWADE SWAPNIL	
	ITA353	SONI GANESH RAJESH	
	ITA357	VARPETI AVINASH SHIVSHANPPA	
	ITA356	UMREDKAR NIKITA NARHARI	
	ITA312	DESHMUKH RITU SUNIL	
3	ITA313	DESHMUKH SAMRUDDHI PRADEEP	Quiz application
	ITA344	SAPKAL KINJAL BALIRAM	
	ITA320	JADHAV SNEHAL MANGESH	
	ITA309	CHAVAN TEJAS MANOHAR	
	ITA316	GANESH PADMAKAR DASH	T 11 D1
4	ITA346	SAWANT AKSHAY RAJAN	Toll Plaza using Queue operation
	ITA328	MAINKAR OMKAR SHANKAR	Quous operation
	ITA302	ADARSH MISHRA	
	ITA329	MALOOR ROHAN HEMANT	
	ITA355	TELI ATHARVA	Simulation of a race between two object with
5	ITA339	PATEL YASH DILIP	
	ITA324	KADAM TEJAS SANJAY	dice roll
	ITA354	MIDHUN V.M.	

Division B

Group Number	Roll No.	Group Members	Topics
	36	PIMPARKAR ROHINI SUBHASH	
	47	SHINDE NEHAL KRISHNAKANT	Certificate
1	50	SINGH ANKITA KAMALKISHOR	generator
		RACHANA BEHERA	System
	48	SHIRKE SHIVANI SHARAD	
	25	MHATRE ADITYA GANESH	Quiz
2	51	SINGH ASHOK RUSTAM	application

	44	SHILLARE ABHISHEK ARVIND	
	57	VETHEKAR SAHIL HARISH	
	24	KOTHARI RONAK BHAWARLAL	
	29	MOHAMMED SAMEEL	
	33	PATIL PRANAV LALIT	Shopping mall Inventory Management System
3	38	PREETAM B A	
	52	SINGH GARIMA	
	26	UTKARSHA TALELE	
	7	CHORMUNGE GAURI SHRIKANT	Admission
4	12	GHATUGADE RUCHA VIKAS	Process/ Merit List generator System
4	56	TIWARI AAYUSHI VINAI	
	43	SHETTY SHREYAS GANGADHAR	
	30	NILEKANI YOGITHA YASHAVANT	
5	34	PAWALE SAYALI PANDURANG	Toll Plaza using Queue
3	46	SHINDE HARSHADA PRAVIN	operation
	45	SHINDE DNYANESHWARI VIJAY	
	58	VIJAY SAGAR SEKAR	Simulation of
6	4	KARAN BHOIR	a race
	60	VISHWAKARMA RAJKUMAR RAMESH	between two object with
	14	GOVEKAR PARTH SANJAY	dice roll

Photos for Certificate Distribution:







