MES's Pillai College of Engineering, New Panvel

A REPORT ON
PROJECT BASED LEARNING (PBL)

Academic Year 2017-2018 (Semester IV)
Second Year Undergraduate Students of

Information Technology 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

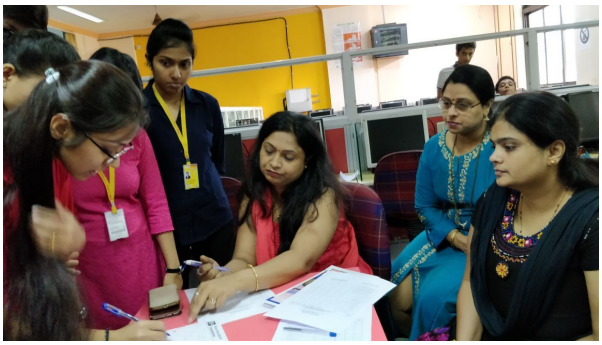
Division A	Prof. Gayatri Hegde
Division B	Prof. Dhiraj Amin

PBL Topics:

1	Predictive Student Analysis	In-depth look at the psychometric and performance analyses of the students through onlinesystem that analyses the students' data to identify students on the verge of dropping out of college and allowing college to take corrective measures to ensure students remain in college. All the students and teachers teaching the students would be required to fill online questionnaires at regular intervals (after every month/twice in a semester) The analysis would also incorporate Teachers Feedback regarding individual student for complete profiling and based on the class/academic performance would predicts what grade students will receive.
2	Automatic Subjective Answer Checker System	An automatic answer checker application that checks and marks written answers similar to a human being. This software application is built to check subjective answers in an online examination and allocate marks to the user after verifying the answer. The system requires you to store the original answer for the system. This facility is provided to the admin. The admin may insert questions and respective subjective answers in the system. When a user takes the test he is provided with questions and area to type his answers. Once the user enters his/her answers the system then compares this answer to original answer written in database and allocates marks accordingly. Both the answers need not be exactly same word to word.
3	Simulator for Page Replacement and CPU Scheduling in Operating System	Page replacement algorithms decide which memory pages to page out, sometimes called swap out, or write to disk, when a page of memory needs to be allocated. A simulator needs to be created where users can visualize in real time how different page replacement algorithm works. CPU Scheduling Algorithm decides which process should be scheduled next according the algorithm.
4	Waste Management	Day by day the problem of garbage is increasing leading to the overflow of of garbage and causes multiple diseases. To reduce the overflow of the garbage of segregated dry and wet waste create a system which senses the level of garbage, contact the garbage collector. Dry waste will be collected by dry waste collector and wet by wet waste collector
5	Stealth Application	Small application which can be installed copied through weblink, Bluetooth transfer etc on any android mobile phone. Application should be in the mode of invisible (No icon), hidden from the user. Application should contact the main server as per the programmed time and receive the instructions such as sending call logs, SMS's, current Lat, Lang location coordinates. In case of non-availability internet

		should send the information through SMS in stealth mode.
6	Personalized analysis of colleges for selecting the best college for medical/engineering graduate course	The need and importance of extracting data from the web is becoming increasingly loud and clear. Through web scraping data need to be scrapped out from the college websites. The extracted data can be of various features of the college like no. faculty, students intake, placement activity, social and sports achievement and other. Through this a dataset needs to be prepared which will aid the students in deciding which college is best suited for them for taking admission as per their area of interest.

Photos :



Winners list:

B	Tejas Patil	**Predictive Student Analysis**
	Vineet Rajkumar Tiwari	
	Pratheesh Shivaprasad	
	Ojas Thale	
	Rushikesh Pokharkar	

B	ROHAN GORE	**Personalized analysis of colleges for selecting the best college**
	VIGNESH IYER	
	MAHESH MAHAJAN	
	SOHAM MORE	
	DIVYANSH GUPTA	

B	Pooja Zagade	**Automatic Subjective Answer Checker System**
	Gitanjali Singh	
	Sonali Patil	
	Sakshi Singh	
	Vaishnavi Shetty	

B	AKHIL SUNILKUMAR G.	**Waste Management**
	SHAIKH SADDAM	
	HARVINDER SINGH	
	UTHALE JAYANT	
	NIKUMBH SUBODH	

B	Manish Udayabhanu	**Stealth Application**
	Faisal Shaikh	
	Ankit Shetty	
	Saket Shetty	

	Varun Shetty	

B	Atharv Phadnis	**Simulator for Page Replacement and CPU Scheduling in Operating System**
	Nikhil Nimbalkar	
	Mustafa Shaikh	
	Shubham Pagar	
	Mayur Kachare	

A	AISHWARYA SUNDARESAN	**Stealth Application**
	ANINDITA BHAJAN	
	ARYA GOPINATH	
	ABHISHEK DHEKANE	
	AKSHAY CHAVAN	
	SOURABH KULKARNI	

A	Navin Joshi	**Automatic Subjective Answer Checker System**
	Nayan Joshi	
	Darshan Kadam	
	Sahil Kadu	
	Vyas Kumar	

A	Pratik Singh	**Personalized analysis of colleges for selecting the best college**
	Vishal Mahendra Singh	
	Sharan Thanneeru	
	Vipul Sharma	
	Sahil Yadav	

Photos Certificate Distribution: