### MES's Pillai College of Engineering, New Panvel

# A REPORT ON PROJECT BASED LEARNING (PBL)

Academic Year 2019-2020 (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 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. Manasi Kulkarni
Division B	Prof. Gayatri Hegde

## PBL Topics:

SN	Topic Name	Abstract
1	Ambulance Services for medical emergencies	Ambulance services are important for Health & Medical facilities.  Requirement is to build a mobile app similar to Ola / Uber cab services. But it will be for Ambulance services. This app will have Ambulance driver's register their availability and location. Both Executive at Emergency Helpline and User's on the other hand on App's Client interface will book an ambulance. This will promise a fast and reliable ambulance service in case of emergency.
2	Alegria Event Manager App	This Web-App is built using HTML,CSS,Javascript and CSS framework like Bootstrap. This App will enable the user to select their choice of event category and join the particular event of their interest using Google Forms . Each and Every Event has a brief description about it . The user will also be able to enquire about any questions that arises by using the contact us page which consists of Phone Number and a Question Form. The user can also see the schedule of each and every event on the schedule page.
3	Scrape Project topics and its abstract for Computer and IT department	The project is all about scraping project titles from different websites and showing it in one place using requests, selenium and beautiful soup. We will also be implementing backend in Sqlite3 where we will be saving any topics bookmarked by the user
4	Create a web portal for conference system	The web page consists of the homepage ie. home, about us, password, login and register. The user can get themselves logged in, and if they don't have an account, they can get themselves signed up for the same.  After getting logged the user can enter the record and the records can be viewed later only by the admin for confidentiality. The user also has the facility to do video conference calls.  The site is accessible to the users who have registered anytime and they can update their information.  Software used- python3, sublime text editor. For designing framework we used django.
5	Predicting election on basis of news	This project mainly aims in predicting the Elections on news basis or news article/data. Election predictions are made by collecting quantitative data about the current state of the political parties at a given place or area and predictions are made using Python.
6	Image steganography	Image Steganography is a process to encode a message(text) by embedding it into an image and also to decode the message from the image. In our project we have created a cross platform application using python programming language for the same.  In our app we have provided the option to register and login for security, click on encode text and then select image you want to encode message into after that provide with the message and click on proceed. You will find that encoded image has been saved to folder you have provided with and it does not differ from original image, to decode the message from the image

			click on decode text navigate to encoded image and select it you will find the encoded message being displayed. Click on exit to close the application.
8	7	Extract news articles for given topic and show timeline	The software can extract news articles from a given website by using the py libraries beautifulSoup & Requests for scraping data. The extracted data was exbited using Django framework and HTML-CSS were used for proper pictorial presentation on the webpage. Also, the package Newsapi is used to particularize the search query and send it to the HTML framework for displaying the timeline of the news.
	8	Scrap cricket websites and show data analytics of player	Web scraping is the process of using bots to extract content and data from a website. Unlike screen scraping, which only copies pixels displayed on screen, web scraping extracts underlying HTML code and, with it, data stored in a database. In our project We have used eclipse-workspace. For this we used python language & beautifulsoup.it will escape the cricket website (Espn cricino.com) and display cricket teams along with players name, their debutedate.
	9	Online Sports Turf Playground & Badminton court Booking System for College	Online sports turf booking website is proposed for booking the turf in an easy and efficient way. It has three modules namely, Admin, Manager and User. Admin can login and can add turf locations, assign manager by creating login credentials for manager, add price details for the particular turf, manage turf and view the details of sports venues booking for all locations. Managers assigned by the Admin are different for different Turf playground locations. Managers will get login credentials from admin, he/she can login using credentials, he/she can check the rates, view the request for turf booking for the respective location, can accept booking, generate bill and can view the booking history. Users can check the availability of the turf, select timings, fill personal details, can pay by providing bank details or card details and he/she can also view previous turf booking history.