

V-Buddy: A Learning Management System

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Abstract— The software we are going to build is useful for different users such as students, placement coordinator, academic coordinator, exam coordinator, faculties, etc. for fulfilling their requirements. The user who accesses the system through his unique log in id and password and then gets information according to the access rights established by the system. Students will be able to get information related to placements, holidays, announcements from faculties, events, timetable, etc. through android app. And another user type of the system will have access to the system through a web portal from which information will be shared.

Key words: V-buddy, Learning Management System

I. INTRODUCTION

A student is an important entity in college management. And other entities like exam coordinator, academic coordinator, placement coordinator, and faculty has to provide information to students on regular basis. This can be achieved only by efficient management of the available resources. Handling these data is very tedious and difficult task and requires proper control over the information. Using server (based on PHP using Laravel framework) and an android app, a system can be developed which does this job very efficiently. This project V-Buddy is the solution for handling the large database with ease and convenience. The project is made for solving the difficulties faced by a student, it makes work very easy by getting the information in few clicks, thus making his job simple, easier and more convenient. The V-buddy systems aim to give user-specific notification to the user. Student will get notifications depending on the branch, semester or division he belongs to. This saves user time by preventing them from unwanted notification and help the user to get an important notification. The v-buddy system helps students to get information in well-organized form so that students can access it easily. With the help of this system, faculties can send a notification related to exams, placements, lectures to the students. This helps students to get notified regarding current activities in college.

II. METHODOLOGY

A. Admin Panel

Admin logs into the system using admin credentials that are verified in the business logic. If the credentials are right the admin is given access to admin panel.

1) Admin Dashboard:

- 1) Admin can check the current feedback status of all the branches and all the semester. Admin can also see the number of students who have filled feedback form.
- 2) Admin can check the status of Placement Registrations by just hovering on the pie chart. It describes the number of students who have registered for a specific company.

- 3) Admin can also see the latest placement notice and its details such as issuer of an event, date, registration done etc.
- 4) Admin can also see the latest Event arranged and its details such as event information, issuer, date and registrations are done.
- 5) Admin can check the status of Event Registration for Events. This helps to get the information about trending events in the Institute.

2) Users:

Admin can check the users of the system such as students and Faculties. Admin can create new users or update the details of the users or delete the users. Admin can search the student by Student Name or Faculty Name.

3) Placement News:

Admin can check the placements activities that are arranged in the Institute. Placement activities are arranged in the latest order. Therefore, the latest event arranged is displayed at the top of the list. Admin can create, delete or edit the Placement Event. Admin can also check the details of students registered for a specific event. And can also search if a particular student has registered for placement activity.

4) Faculty Announcements:

Admin can access Faculty Announcements along with details such as year, branch, division for which the announcement is for, issuer and status. Admin can also create, edit or delete the announcements. While creating the announcement Admin can attach files to the announcement.

5) Feedback:

Admin can check the ratings of feedback submitted by the students but the identity of a student is kept hidden. Students Roll No is encrypted using bcrypt hashing function which follows one-way encryption. Admin needs to select the Branch, Semester, Division and Feedback to get the data submitted by students of the specific class.

6) Events:

Admin can check events arranged by the Institute. Admin can search an Event by its Name or can also search all events arranged by specific Committee. Admin can also create, delete or edit the Events. Admin can also check the event details and attach additional files or details required. Admin can check the number of students registered for a specific event. And can also get details of students registered for the event.

7) IA Timetable:

Admin can view the exam timetable by semester and branch. The exam timetable consists of date, start Time, end Time and subject. Admin can edit the timetable if there is any change in the timetable.

8) Timetable:

Admin can view the regular timetable of lectures and practical by just selecting the Branch, Semester and Division. The regular timetable consists of all the lectures and practical's from Monday to Friday. Admin can update the

timetable clicking the update button. Each slot has an updated logo above by clicking on which admin can update the specific lecture.

9) *Replacement Timetable:*

Admin can replace the specific lecture with another lecture if there is lecture substitution or if a specific class is not available. Admin has to select the semester, branch, division and date for which the replacement lecture is to be arranged. The substituted lecture will be only available for that day only. As the day comes to an end the timetable will be loaded with original data.

10) *Holidays:*

Admin can view the holidays by selecting Holidays menu. It displays the date for which there is holiday. Admin can create the holiday by clicking on create button or delete the holiday by clicking on delete icon. While creating the holiday admin need to specify the name of the festival and date.

11) *Profile:*

Admin can check his own profile and update his/her name, email or password. As soon the details are updated the pop up regarding to the update will be displayed.

12) *Other Settings:*

Admin can promote or demote the students by authenticating with admin credentials. Students can be promoted by semester or by year. Admin can also reset the database by selecting the table if the data is no longer required.

13) *Change Password:*

Admin can change the password by entering the old and new password. First, the new password will be compared with old hashed password, if it matches, then, the password will be updated.

B. *Faculty Panel*

Admin logs into the system using admin credentials that are verified in the business logic. If the credentials are right the admin is given access to admin panel.

1) *Announcements:*

Faculties can create new announcements by clicking on create announcements button. Faculties need to specify the year, division for which the announcements are intended. Faculties can also attach files to the announcements. Faculties can also view the announcements of their branch and can also search the announcements by name or year.

2) *Placements:*

The Placement Coordinator can create new placements activity. Faculties need to specify the details of placement activity and specify the date when the placement activity is organized. Placement coordinator can also edit the details of the placement activity created or attach the new or additional attachment. Other faculties can view the Placements news and its details.

3) *Placement Registration:*

Placement registration contains details of all the students registered for the placement activity or count of student registered for the specific activity. Faculties can search placement activity by activity name.

4) *Events:*

Event Coordinator can create new events. While creating new event faculty need to specify details of the event like name, details, committee name organizing event, year, branch, date, time, location, price, contact name, contact no and can also

attach multiple files. Other faculties can view the events and its details and count of students registered for the event. Other faculties cannot create or edit the details of an event.

5) *Events Registration:*

Event registration contains details of all the students registered for the specific event activity. It contains a count of student registered for each event activity.

6) *Exam Timetable:*

Faculty can check the exam timetable by branch and division. The timetable consists of the date, start time, end time and subject. The Exam coordinator can edit the details of exam timetable if it needs to be modified.

C. *Student Panel/Android App*

A student can log in to the system by using the Android app or by website portal. After login, the student will get access to the dashboard from where they can access various features such as announcements, placements, timetable, feedback, exam timetable, etc.

1) *Timetable:*

A student can access their respective timetable as per year, branch, and division. The timetable will be shown with respect to today's date. If certain replacement is available for a specific lecture then, a replacement will be shown instead of default timetable.

2) *Event Enrolment:*

In Android app, a student can access events by using the committee category. In this activity committee names will be displayed in grids. By selecting a specific committee app will show events organized by that committee. Then the student can open specific event can register to it by clicking on the register button. Also if the event has attached documents then the student can download those documents by clicking on download button.

In the website, events will be listed with respect to student's branch and year, a student can view specific event, and also they can download files if an event has attachments and can enrol into an event by clicking on the register button

3) *IA Timetable:*

A student can access their respective IA timetable. In this, a student will get IA timetable respective to their year and branch.

4) *Feedback Form:*

A student can submit the feedback form. A student can submit only two feedback forms throughout a semester. A student can give a rating to subject teachers, amenities provided by the Institute, study material provided by the Institute and faculties, etc.

5) *Placements:*

A student can access the placement related news. All data will be displayed as per year and branch. A student can register for a specific placement just by clicking a button.

6) *Announcements:*

The system will show announcements related to student's year, branch, and division. A student can select a specific announcement to view all information related to that announcement, from where the student can download attached files.

III. RESULTS

Admin can view, create, update various details like Users (Faculties and students), Events, Placements, Announcements, Academic Timetable, Exam Timetable, Holidays, etc.



Fig. 1: Faculty Users

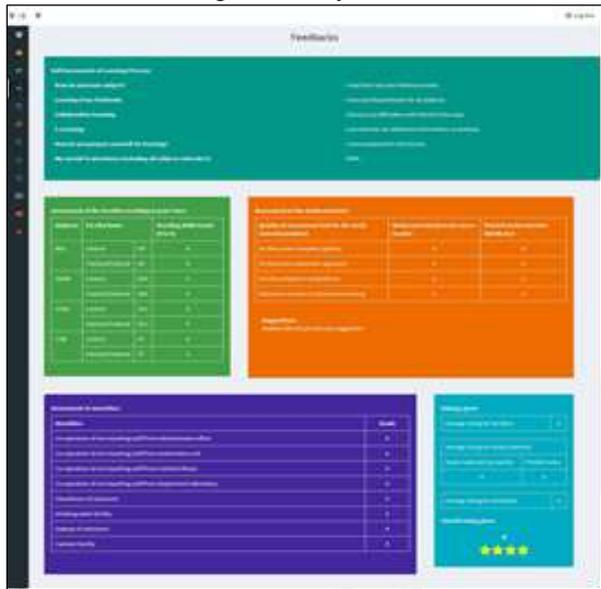


Fig. 2: Viewing Feedback form

Admin can access everything from the menu provided in the dashboard. Dashboard also provide details related to number of registrations done for placements, and events by using various graphs.

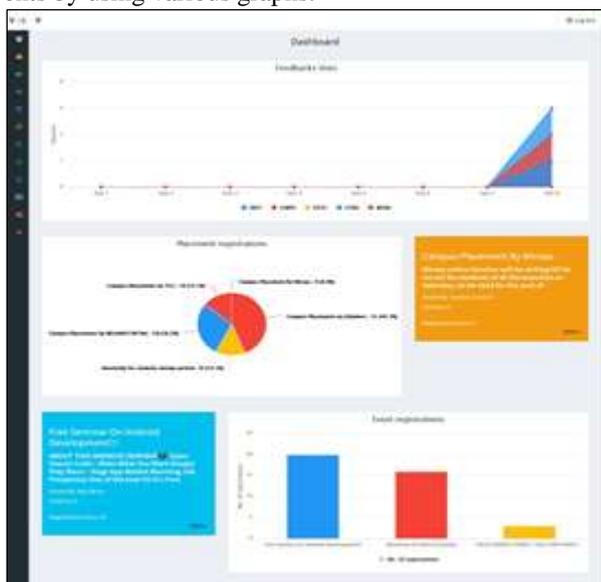


Fig. 3: Admin Homepage

Web portal also provide dashboard for faculty and students too. Following are some screen shots of the web portal for faculty and students:

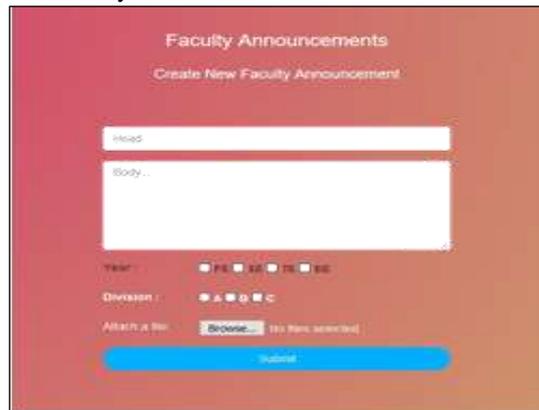


Fig. 4: Creating announcements

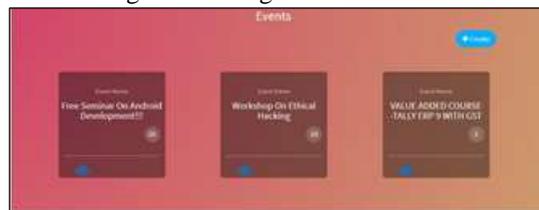


Fig. 5: Viewing event

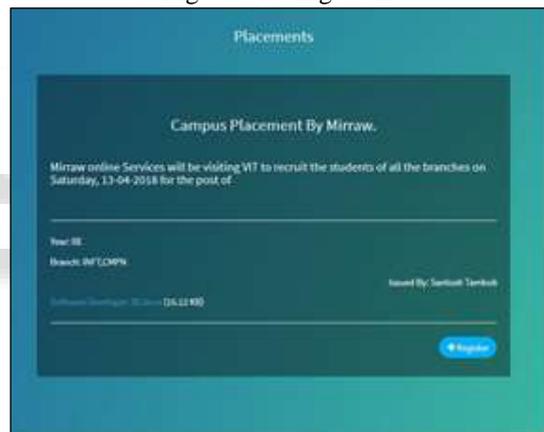


Fig. 6: Viewing placement details

Students can get access to the information to the system by using the android application. Following screen shots shows android application:



Fig. 7: Android Dashboard



Fig. 8: Viewing a placement

IV. CONCLUSION

We have developed the system that helps the Educational Institutes in their day to day activities. It helps students to get information only what is related to their academics and prevents students from losing any

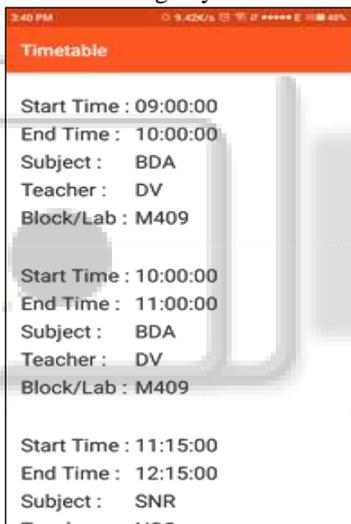


Fig. 9: Timetable

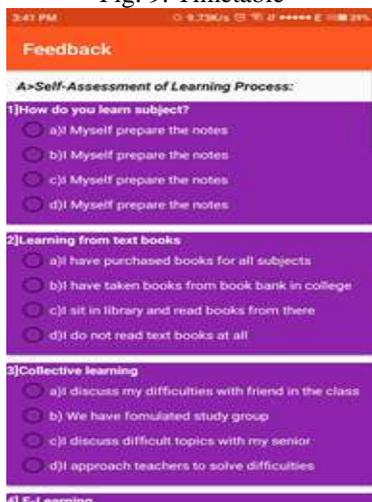


Fig. 10: Feedback form

Important announcement. It also helps faculty members to share important announcements with the students

quickly and reliable manner and thus it reduces the dependency on another person or third-party application for passing the information.

As all the data is managed in the system is the well-organized form it can be easily accessed by its users. This managed data can be also used to find inferences to take a particular decision. This application saves a lot of time of its user which can be utilized to arrange new activities which can help students to enhance their skills. All the activities which were previously paper-based are now managed by our system, therefore, it helps to save both paper and cost. The design of the system is user-friendly therefore the users of the system does not require any special training for operating the system.

The platforms and tools required for developing the system are open source, therefore, the cost required for designing the system is very low. The developed system can be accessed by Faculties and Students without any special Hardware requirement, therefore, the implementation cost of the system is very minimal such that it can be easily adopted by any Educational Institute.

REFERENCES

- [1] TANG Yu-fang ZHANG Yong-sheng. Design and Implementation of College Student Information Management, 2009.
- [2] LiangqiuMENG.College Student Management System Design Using Computer Aided System, 2016
- [3] Fu Yue. A Study of Student Information Management Software, 2016
- [4] Saad Bin Sajjad, Ahmed Imteaj. Smartphone based Teacher-Student Interaction Enhancement System , 2015
- [5] S.R.Bharamagoudar,GeetaR.B.,S.G.Totad.Web Based Student Information Management System, 2013
- [6] Diana M. Selfa, Maya Carrillo, Ma. del Roco Boone. A Database and Web Application Based on MVC Architecture, 2006
- [7] Ren Yanhua . On Construction of Information System in College Management based on Team Collaboration, 2009
- [8] Rosni Abu Kassim, Norlida Buniyamin . Evaluating Teaching Quality Using Data From Student Online Feedback System, 2015
- [9] Piotr Marciniak, Wojciech Zabierowski, Andrzej Napieralski. Application for managing school timetables, 2009
- [10]Tejashri Gosavi, Shraddha Gaikwad, Rohit Nazirkar, Amol Salke. ANDROID BASED TRAINING AND PLACEMENT AUTOMATION, 2015
- [11]Sanket R. Brahmankar, Rahul S. Ghule, Shubham K. Chavan, Landge D. Ashish, Pavan D. Borse. A Survey on Android App for Training and Placement cell , 2015
- [12]Sajana.T, Deepika.S, Rajita.M. Getting day to day updates using an Android App , 2014