

ONLINE PLACEMENT ZONE

A.Anisha¹
AP/CSE,
St.Xavier's Catholic
College of Engineering,

C.Renit²
AP/ECE,
St.Xavier's Catholic
Collge of Engineering.

ABSTRACT

The main aim of this paper is to develop a web application for the Placement. This is a web application which will help students as well as the companies to recruit the students easily. The company HR can view all the student lists. Companies can conduct online exams for students to test their aptitude/technical skills. They can also conduct programming examination online. Students will be able to run their programs from the web application itself. It supports four programming languages, C, C++, Java, python for compiling online. Registered students can also attend any type of mock tests anytime. Students will be able to update their curriculum vitae details. This application includes all the personal information of the students, like their personal details, their aggregate marks, their skill set and their technical skills that are required in the curriculum vitae to be sent to a company. The company HR can view all the student profile and their curriculum vitae. This application helps to have selections to be made easy for a company for the recruitment process.

1. INTRODUCTION

Cloud computing, refers to sharing resources, software, and information via a network, for example the Internet. The information is stored on physical servers maintained and controlled by a cloud computing provider.

By using cloud storage, you don't have to store the information on your own hard drive. Instead, you can access it from any location and download it onto any device of your choice, including laptops, tablets, or smartphones. Moreover, you can also edit files, such as Word documents or PowerPoint presentations, simultaneously with other users, making it easier to work away from the office.

This is a web-based project for the placement and Training. This project is developed using PHP, MySQL. PHP is a server-side scripting language that is embedded in HTML. It is used to

manage the dynamic content of the website. It can be integrated with MySQL database. PHP code is usually processed by a PHP interpreter implemented as a module in a web server. The web server combines the results of the interpreted PHP code, which may be any type of data, including images, with the dynamically generated web page.

PHP will reduce the time to create large websites and for the creation of customized user experience website for visitors based on information that you have gathered from them. PHP allows to add, delete, modify elements within your database. It also supports sessions, cookies variables and set cookies. PHP is highly compatible with leading operating systems and web servers such as Linux, Windows, Solaris, OpenBSD, Mac OSX etc. therefore it is easy to deploy across various different platforms. PHP scripts can run can support for all major web servers such as Apache, IIS etc.

Being an open source language, a large number of libraries and extensions, to extend its core functionalities, are available for download. The source code of PHP can be changed and we can make many other changes accordingly which increases the extensibility of that code. Scripts written in PHP usually execute or run faster than those written in other scripting languages like ASP, Ruby, Python, Java, etc. PHP offers security for code as well as helps to prevent from attackers. These security levels can be adjusted in the ".ini" file format.

MySQL is a database system, used for developing web-based software applications. It is fast reliable and flexible and easy to use. It supports standard SQL. MySQL has a high-speed thread-based memory allocation system. MySQL can be used with PHP.

This application enables students and companies to manage the placement process with the active involvement of the Placement Coordinator. This led to a unique web-based placement management system. It provides information on placement providers and the

placements they offer so that students may view their opportunities. This web site is used to inform the students about vacancies and to attend the placement exams online. It is an application to facilitate students to register, and to attend the placement exams. The users can access easily to this and the data can be retrieved easily. The job details of the placed students will be provided by the administrator. The job provider and the placements coordinator to take effective actions on the web as follow-on from the information they have viewed. The admin can add notifications for the new job opportunities. He can edit and view all the student details. It helps in fast access procedures in placement related activities and the facility of maintaining the details of the students. It is used for finding out the list of eligible students for company training and placement.

2. LITERATURE REVIEW

2.1 Cloud-based Java Compiler for Smart Devices

The system developed will have a built-in editor where a user can edit his created java programs. A cloud-based server is to be developed and deployed as Software-as-a-Service (SaaS) to host the compiler that compiles and executes user codes. For this research, an existing online compiler (Sphere Engine) will be used. The system will be developed for the android operating system, with a web-based user interface that can be accessed via a browser on a PC or any device not running on the android operating system.

2.2 Online Training and Exam System

The system includes five modules which are System Management Module, Item Bank Management Module, Online Training Module, Online Exam Module and Statistical Analysis Module. And the design idea, the system architecture as well as the realizing methods of the system are also introduced in detail.

2.3 Online C/C++ compiler using cloud computing

Cloud computing is a model for enabling convenient, on-demand network access to a shared pool of configurable computing resources that can be rapidly provisioned and released with minimal management effort. The paper aims to describe an online compiler which helps to reduce the problems of portability and storage space by making use of the concept of cloud computing.

2.4 Online Compiler as a Cloud Service

The online compiler provides service for compiling programs written in either C, C++ or Java. The user need not have a compiler installed in his system. He has to just submit the program to the user interface provided by either typing the code in the text box provided or uploading the text file. The user will get the output after compilation. If compilation is not successful, the errors are shown else the output is given.

2.5 Online training effect on employee skills

Online training has become one of alternative media that can be used in order to develop and increase individual skills and competencies. Online training (e-training) is a part of online learning (e-learning). It's a collection of training (content, curriculum, and instructional design) that can be used to help participants or employees in order to achieve the institution learning objective, so they can transfer the knowledge gotten into a performance improvement in their work task accomplishment. According to The Chronicle of Higher Education, higher learning institutions have announced a nearly 25 percent increase in online enrollment over the past four years. This phenomenon has risen not only the demand for online learning, but so does the demand of online training.

2.6 Automated Online Exam Proctoring

To detect a wide variety of cheating behaviors during an online exam session. Our proposed online exam process includes two phases, the preparation phase and exam phase. In the preparation phase, the test taker has to authenticate himself before beginning the exam, by using a password and face authentication. This phase also includes calibration steps to ensure that all sensors are connected and functioning properly. Further, the test taker learns and verbally acknowledges the rules of using the OEP system, such as, no second person is allowed in the same room, the test taker should not leave the room during the exam phase, etc. In the exam phase, the test taker takes the exam, under the continuous "monitoring" of our OEP system for real-time cheating behavior detection. The components are: user verification, text detection, speech detection, active window detection, gaze estimation, and phone detection. After that, the middle-level features within a temporal window are fused to generate high-level features, which are then

used for training and testing a cheat classifier. The high-level features include the component-dependent features, such as the mean and standard deviation within a window, and features based on the correlation among the components, such as the covariance features. It is crucial to use a diverse and rich set of features to improve the overall detection performance of the OEP system, since the detection of some cheating behaviors relies on the ignition of multiple behavior cues.

2.7 ViPLab - an Online Programming Lab

ViPLab is a virtual online programming laboratory for the ILIAS learning management system, developed by the University of Stuttgart and in active use for many years. ViPLab allows students to conduct their homeworks or electronic exams on personal devices in multiple programming languages requiring a browser as only local software installation. ViPLab also enables teachers to grade submitted solutions automatically. It supports multiple programming languages, MatLab/Octave, Java, C, C++ and DuMuX, with the option of adding additional languages when required.

2.8 Web-Based Evaluation System

The system consists of a set of programs written in Microsoft ASP (Active Server Pages) on a Web server running on the Windows NT operating system. The system works with Microsoft SQL database to maintain evaluation results reported by the participants. And it has shown fairly stable condition experiencing no noticeable problems such as communication delay.

2.9 On-line Learning Environment

To provide students an on-line learning environment for java programming language anytime and anywhere, the proposed system employs an online java compiler to compile the students java source code. The output of the online java compiler will be written into the learning database. Then, the error of java source code will be feedback to the students. Therefore, the teacher can analyze the information from the learning database to improve their instruction. Furthermore, the instruction/learning environment provides an active agent to monitor and manage the students learning. The proposed system uses the JavaServlet, JavaServer Pages and Java Database Connectivity (JDBC) to access the MySQL database server.

2.10 Analysis of a Virtual Programming Lab

The idea to provide a web-based access for programming exercises is not new, and earlier work in this area exists. For example, the VPL module for moodle provides a similar programming lab that depends, however, specifically on the moodle architecture and cannot be integrated into other Learning Management Systems (LMS), quite unlike the SCORM based ViPLab that depends on an established eLearning standard offered by most LMS's. Professional solutions from commercial vendors like MapleTA are also available on the market, but are typically constraint to fill-in exercises in Mathematics, using the Maple or Matlab syntax, and do not allow free programming. While most of these tools claim to be useful and effective, and even likely be so in practical applications, a truly quantitative and systematic study on their usefulness is rarely found. It is the purpose of this article to fill this gap by providing the results a systematic.

3. PROPOSED SYSTEM

The proposed system is fully online and computerized, which removes the drawbacks of existing system. It is a web application that can be accessed throughout the organization and outside as well with proper login provided.

The Students are able to update their information. The HR will be able to view all the student details who are registered and they can conduct the aptitude and the Technical exams online. In the technical round the students will be able to compile their programs from the website itself.

In all the existing systems, the HR cannot conduct aptitude and the technical rounds online. In our proposed system, the HR can conduct aptitude and the technical rounds online. It also allows the students to attend mock tests online.

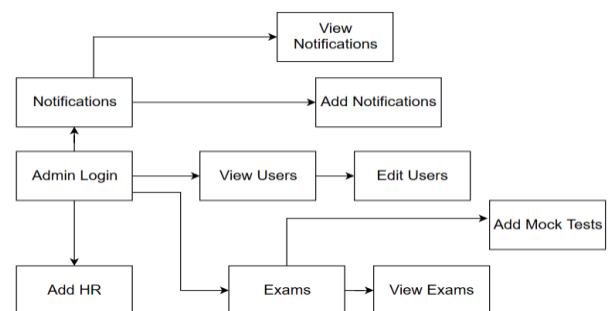


Fig.1. Architecture of the Admin Module

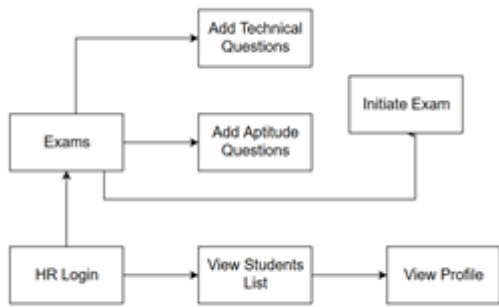


Fig.2. Architecture of the HR Module

4. RESULTS AND DISCUSSION



Fig. 3. Login page for the user

The login page allows the student to enter into the system with their proper login. The student need to enter their email address and the password to enter in the dashboard.



Fig.4. Registration page for the user

The registration page provides the facility to enter a new user into access the system. Recruiter and the students for the first time to the system would use it. All the registration fields are mandatory

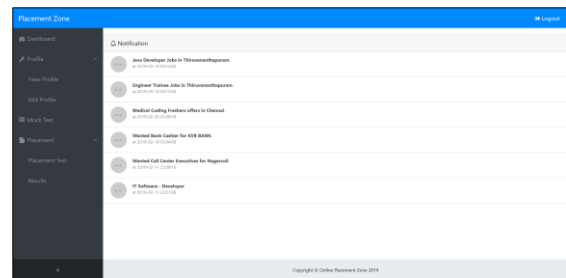


Fig.5. Student Dashboard

The student home page contains the notification lists and the menu sidebar to navigate to other pages of the dashboard. In this the student can view their profile and placement details. And the students can also view the placement results in this section.

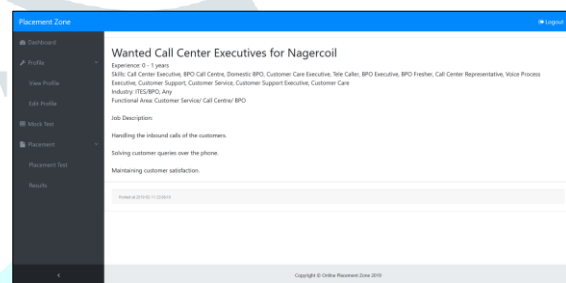


Fig.6. Notification window for the user

The notification page contains the Interview Details which are added by the Admin. The off campus and on campus placement drive are stored in this section. In this the student can view the entire details of that company.

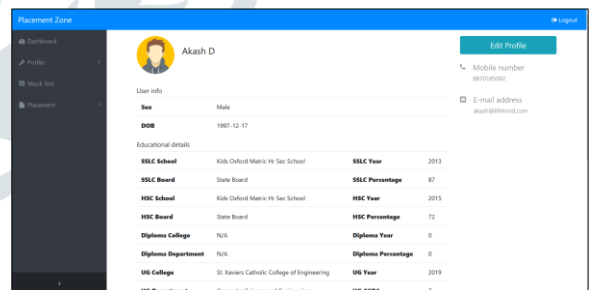


Fig.7. user profile window

5. CONCLUSION AND FUTURE WORK

This application makes all the works automated. The Students are able to update their profile information. The administrator can view the user information and edit it, and generate the student list based on the company criteria, company details can be provided to the user. The HR will be able to view all the student details who are registered and they can conduct the aptitude and the Technical exams online. In the technical round the students

will be able to compile their programs from the website itself.

The system has been designed at the maximum possible excellence. Still we accept drawbacks, as it is a human effort. In the technical rounds of exam different programming languages can be added. This application can be made more users friendly. There is a scope for improvement of the application. More detailed notification fields can be added. Different categories for the placement drives can be implemented in future. There can be many more future enhancement and improvement in this system.

REFERENCES

- 1.Aamir Nizam Ansari, Arundhati Navada and Siddharth Patil, "Online C/C++ compiler using cloud computing", Open Source Software Computing (OSSCOM) 2015 International Conference on, pp. 1-6, 2015.
2. Liying Bian, Hua Pang and Shu Yang "A Web Services Based Online Training and Exam System", Proceedings of the 2008 4th International Conference on Wireless Communications, Networking and Mobile Computing on, pp. 1-16.
- 3.Mohammed Hamada and Tanko Y. Mohammed, "Online C/C++ compiler using cloud computing", 2011 International Conference on Multimedia Technology on, pp. 1-4, 2016.
- 4.Amab Kumar Paue and Arjun Dattal, "Online compiler as a cloud service", Cloud Computing and Services Science, July 2011 International Conference, pp. 91-94.
- 5.Andy Effendi, Titan and Trivena, "Online training effect on employee skills development", Information Technology Systems and Innovation (ICITSI) 2016 International Conference on, pp. 1-6, 2016.
- 6.Alex X. Liu, Liping Chen and Yousef Atoum, "Automated Online Exam Proctoring", IEEE Transactions on Multimedia, Vol.19 , Issue: 7 , July 2017.
- 7.David Boehringer and Thomas Richter, "ViPLab — An online programming lab", J. of Interactive Technology for Smart Education, vol. 9, 2012.
- 8.Gyo Sik Moon, "A web-based training system for evaluating online educational resources"

International Conference on Computers in Education, 2002. Proceedings.

9.Kuan-Cheng Lin, "An On-line Instruction/Learning Environment for Supporting Individualized Learning in Java Programming", Turner James, "MySQL and JSP Web Applications" in , Sams Publishing, U. S A, 2002.

10.Christoph Gruninger, Claus-Justus Heine and Jan Vanvinkenroye, "A Quantitative Analysis of a Virtual Programming Lab", Remote Engineering and Virtual Instrumentation (REV) 2014 11th International Conference on, pp. 31-34, 2014.

