**Department of Computer Science & Engineering**





**TRAINING REPORT**

**OF**

**INDUSTRIAL TRAINING, UNDERTAKEN**

**AT**

**BEBO TECHNICAL EDUCATION SERVICES Pvt. Ltd.**

**IN**

**PYTHON AND MACHINE LEARNING**

**ON**

**BTES\_Academics**

**SUBMITTED IN PARTIAL FULFILLMENT OF THE DEGREE**

**OF**

**Bachelor of Engineering (CSE)**

**Under the Guidance of: Submitted By:**

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**Designation: Trainer University ID No:1611981282**

**Department: C.S.E**

# **ACKNOWLEDGEMENT**

This internship opportunity I had with BEBO Technical Education Services was a great chance for learning and professional development. Therefore, I consider myself a very lucky individual as I was provided with an opportunity to be apart of it.

My whole thanks go to Mr. Hemant for being so supportive and encouraging all the time as well as our manager Mr. Sumit Gill and Mr. Navdeep Singh (Customer Success Dept.) who gave me the golden opportunity to do this wonderful project on the topic Mentor’s Blog, which also has helped me in doing a lot of research and I came to know so many new things I am really thankful to them.

I take this opportunity as a big milestone in my career development. I will make every effort to use gained skills and knowledge in the best possible way, and will continue to work on their improvement, in order to attain desired career objectives.

I want to give my thanks to my **COMPUTER SCIENCE DEPARTMENT** of Chitkara University for always supporting me. The knowledge which they have imparted in me allowed me to perform the actions in a smooth and efficient manner. Along with that their contribution towards self-development skills helped me a lot.

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1. **Introduction**

Today, the use of web to teach and learn is inevitable for both teachers and students. Online courses are becoming more and more necessary for education to and for knowledge spread. Thus, teachers should consider this trend in education and get prepared technically and pedagogically to take online teaching in consideration. In turn, students need to get enough skills that will help them effectively benefit from the advantages e-learning is providing.

The main aim of our project “BTES\_ACADEMICS” is to provide study content to students. Through this website student can study any technical course, can give tests and can see his or her test results. Student can also like, comment and download the required contents in the form of PDF or document files if needed. By this, students will able to improve their skills in a very short time and will improve their skills that will further help them to grow in IT industry.

This website can run on any operating system, mobile phones and tabs. It offers GUI to its users and connects to a common database.

This website provides the following features:

1. Login to website.
2. Students can study courses related to IT and latest technologies.
3. Students can give tests.
4. Students can see results of their tests.
5. Instructor can upload study content.
6. Instructor can upload tests.
7. Instructor can also see test results of any student.

Technology used in project are Django, HTML, CSS, Bootstrap, Python, PostgreSQL.

* 1. **About Organization:**

Bebo Technologies Private Limited is a Private incorporated on 22 August 2002. It is classified as Non-govt company and is registered at Registrar of Companies, Chandigarh. Its authorized share capital is Rs. 400,000 and its paid-up capital is Rs. 400,000. It is involved in Software publishing, consultancy and supply. Software publishing includes production, supply and documentation of ready-made (non-customized) software, operating systems software, business & other applications software, computer games software for all platforms. Consultancy includes providing the best solution in the form of custom software after analyzing the user’s needs and problems. Custom software also includes made-to-order software based on orders from specific users. Also, included are writing of software of any kind following directives of the users; software maintenance, web-page design.

Bebo Technologies provides teams of dedicated software engineers who know how to satisfy client testing requirements with efficient management skills and software product engineering methodologies:

* Our India and Mexico teams overcome the challenges of sketchy specifications, 48-hour turnarounds and complicated end-user software needs.
* We maximize the benefits of each offshore and nearshore team by breaking the communication, cultural and time-difference barriers.
* We overcome the challenges of working with offshore and nearshore teams, and deliver quality applications while meeting time-to-market demands.
* We have more than 15 years’ experience in streamlining our outsource software product engineering practice
* We are adaptable to our customer's needs.
* We are an ISO 9001:2008 certified company, so we focus on international-standard quality, strict adherence to deadlines and total client/partner satisfaction.
  1. **Introduction to assigned job:**

1. Project Title: BTES\_ACADEMICS
2. Project In charge: Mr. Hemant Verma
3. Project Duration: 6 Months
4. Project Category: Web based application
   1. **Project Undertaken:**

The main aim of our project “BTES\_ACADEMICS” is to provide study content to students. Through this website student can study any technical course, can give tests and can see his or her test results. Student can also like, comment and download the required contents in the form of PDF or document files if needed. By this, students will able to improve their skills in a very short time and will improve their skills that will further help them to grow in IT industry.

This website can run on any operating system, mobile phones and tabs. It offers GUI to its users and connects to a common database.

This website provides the following features: -

1. Login to website.
2. Students can study courses related to IT and latest technologies.
3. Students can give tests.
4. Students can see results of their tests.
5. Instructor can upload study content.
6. Instructor can upload tests.
7. Instructor can also see test results of any student.
   1. **Hardware and Software requirements:**

* Hardware requirements:

|  |  |
| --- | --- |
| **Number** | **Description** |
| 1 | PC/Laptop |

* Software requirements:

|  |  |
| --- | --- |
| **Number** | **Description** |
| 1 | Windows 7/8/10 |
| 2 | PostgreSQL |
| 3 | PyCharm 2019.3.3 |
| 4 | Python 3.8 |

1. **Problem Definition:**

With the advent in technology and with the perpetual increase in the strength of the students and the number of departments in the educational institutions, it is laborious to exchange the study materials between the students and the faculties.

The main objective of our project “BTES\_ACADEMICS” is to help the students get over the traditional methods of learning and make them accustomed to the internet where the notes for their respective subjects are easily available. It provides an automation procedure of studying the notes online. The implementation of this project helps both the students and the teachers. The teachers can upload their notes on to the website by using their unique ID and the students can gain access to these notes by searching for the name of the file under their respective department.

This project not only helps to facilitate easier access to notes for the students but also helps to test their knowledge to improve their skills for future

This project uses python to write scripts which provide the website its functionality. PostgreSQL is used for databases, for frontend HTML, CSS, Bootstrap and JavaScript is used.

BTES\_ACADEMICS is an inexpensive, efficient and comfortable way for students to easily access study content and easier alternative to improve their skill in various languages like C, C++, Java, Python etc.

1. **Objectives:**

Following are the respective objectives of the system: -

1. A Student should be able to: -

* Login to the website.
* Student can see the study content.
* Student can download the study content.
* Student can like and comment on respective content.
* Student can give test.
* Student can see test marks.

1. An Instructor should be able to: -

* Login to the website.
* Instructor can upload study content.
* Instructor can make online tests.
* Instructor can see any student’s test result.

3. An Admin should be able to: -

* Login to the website.
* Can add and remove users.
* Can add user type like whether it’s a student or instructor
* Allots courses to students.
* Maintain the logs and keeps the privacy policies for the user.
* Provides the necessary details related to the courses.
* Answers the feedback.
* Can add new courses.

1. **Background:**

BTES\_ACADEMICS is a subset of education technology which offers an online learning and teaching platform to disperse knowledge with the help of internet technology. BTES\_ACADEMICS offers conceptual and experimental learning through machines, media platforms and network solutions. BTES\_ACADEMICS takes place both inside and outside of the classrooms. BTES\_ACADEMICS consists of both instructor-led synchronous learning tools as well self-paced asynchronous style e-learning platforms.

Target audience:

1. Students
2. Instructors

* All students and instructors have their own profiles in BTES\_ACADEMICS database.
* Students can access any course or study content, can give tests to improve their skills and can see their results.
* Instructor can upload study content for students, can upload tests to judge their skills and can see results of any student.
* Admin has authority to add/delete users, grant permissions, upload new courses for students, replying to feedback and to maintain logs and keep privacy for users.

1. **Implementation details:**

The project consists of following modules:

* Admin
* Instructor
* Student
* This project uses python to write scripts which provide the website its functionality.
* PostgreSQL is used for databases.
* For frontend HTML, CSS, Bootstrap and JavaScript is used.
* PyCharm 2019.3.3 edition is the main software that is used to implement the scripts at backend.
* Django framework is also used to implement this project. project.Django is a high-level Python Web framework that encourages rapid development and clean pragmatic design. Django’s primary goal is to ease the creation of complex database-driven websites.

1. **Contribution Summary:**

Key tasks:

* To prepare database.
* To prepare web pages
* Writing the code behind pages for the web pages.

1. Preet Singh : Student Interface , Instructor Interface( Home page, see/edit contents, upload contents pages), Main Homepage, Login Backend, Test Backend
2. Neeraj Bhatia : Testing , contact us, about us page
3. Tushar Sangwan : Instructor Interface( Test UI , Make Test ) , Download Content
4. **Conclusion:**

As a member of the team under the guidance of my trainer, I have been educated about the Python technologies. The particular area of to which my project serves extremely helpful. I am required to understand and learn the intricacy involved in this area. I would design input interfaces, design database, develop code, input test data, output interfaces, and output test data. Completion of the development process will result in a software package that will provide user friendly environment which is very easy to work with, even for people with very little knowledge of computer. Management of various tasks is incorporated in the package and will deliver the required information in a very easy to use and easy to access manner. This package will provide accuracy, efficiency, speed and easiness to the end user.

1. **Progress Till Date**













