

# Automated Building Drawings

## Project Synopsis

**Bachelor of Technology**  
(Computer Science and Engineering)



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## 1.1 Introduction

Automated Building Drawing is .

The traditional application of an LMS is in educational institutions. Learning management systems have been used for several years to deliver courseware in schools and popularize e-learning. In the last few decades, Institutes have been using learning management systems to deliver training to internal employees and students. The LMS has become a powerful tool for staffing and training, extension schools, and any corporation looking to get a better grasp on the continuing education of its workforce. Its impact has been felt mostly outside of traditional education institutions, though the same technological and market forces are dramatically changing today's classroom as well.

Elearning is intended to provide methods or solutions to help our teachers as well as students to improve internal processes, save time and increase efficiency. The use of computer systems to execute a variety of operations, such as adding downloadable material, online quiz and tests, uploading and giving grades for assignments through internet refers to what we call Elearning. The flexible nature of elearning means that we are likely to encounter it in everyday life. Some people seek it out in for additional learning opportunities, and for career advancement. While others may accidentally stumble upon it when watching a short training on their smartphone about their latest application. The old adage still rings true, and e-Learning brings with it new dimensions in education.

Elearning System is a user friendly system which can be used to access all the details about class by logging in. One can easily understand the website and use it for their convenience. After login (using their roll number or name), several options for the students and teachers are available. As internet is used by nearly all the students and teachers so it is very easy to use the system by the students as well as the teachers. It would be very helpful to the all the important people like teachers and students who waste a lot of time and money by giving assignments and tests using pen and paper. Thus, using this system will add great relief in their busy life. Along with the users, it is also very helpful for the institute administrator in the sense that they do not have to carry all the student records everywhere, because everything will be available online, so they can

access any information anytime.

## 1.2 Problem Formulation

Keeping track of daily work and performance of students and by the teachers is not an easy task in the current system, as they are not connected to the database in any way. The traditional way of giving students assignments and other class related work is not very successful in today's era as students mostly copy each other's assignments and other class work. Also the resources are being wasted at each institute on manually updating data of students and teachers at various levels. There is no information about the previous grades scores or assignments submitted by the students. Also, there is no proper track record recently pass out students. The teachers have to do a lot of pen and paper work on keeping record of students that who have completed the class work assigned among all the students and who have not completed the work. Also the students have to wait for a significant amount of time after the submission of quizzes or assignments to know their grade or marks.

The pen and paper work can be reduced to a great extent by doing work online and saving paper thus making it environment friendly. Thus, making it automated process. Lot of time was wasted by the teachers in giving the assignments and later in collecting them from every student. The previous process was quite complicated and long process. The students which have not submitted the work given to them can now be easily formulated by using this system. Also it will be easy and less time consuming process to give students grades after any quiz they have completed. Now with system, we can easily know the status of students who have completed the given work and who have not.

## 1.3 Objectives

- To put views of your models in a 2D window and to insert that window in a drawing,.
- Automatically creates orthographic views of an object.

## 1.4 Feasibility Analysis

Feasibility analysis aims to uncover the strengths and weaknesses of a project. In its simplest term, the two criteria to judge feasibility are cost required and value to be attained. As such, a well-designed feasibility analysis should provide a historical background of the project, description of the project or service, details of the operations and management and legal requirements. Generally, feasibility analysis precedes technical development and project implementation. There is some feasibility factors by which we can determine that project is feasible or not:

- **Technical feasibility:** Technological feasibility is carried out to determine whether the project has the capability, in terms of software, hardware, personnel to handle and fulfill the user requirements. The assessment is based on an outline design of system requirements in terms of Input, Processes, Output and Procedures. Automated Building Drawings system is technically feasible as it is built up in Open Source Environment and thus it can be run on any Open Source platform.

- **Economic feasibility:** Economic analysis is the most frequently used method to determine the cost/benefit factor for evaluating the effectiveness of a new system. In this analysis we determine whether the benefit is gained according to the cost invested to develop the project or not. If benefits outweigh costs, only then the decision is made to design and implement the system. It is important to identify cost and benefit factors, which can be categorized as follows:
  1. Development costs.
  2. Operating costs.

Automated Building Drawings is also Economically feasible with 0 Development and Operating Charges as it is developed using open source technologies and the software is operated on Open Source platform.

- **Legal feasibility:** In this type of feasibility study, we basically determine whether the project conflicts with legal requirements, e.g. a data processing system must comply with the local Data Protection Acts. But the software has been developed with properly Licensed technologies. Thus is the legal process.
- **Operational feasibility:** Operational feasibility is a measure of how well a project solves the problems, and takes advantage of the opportunities identified during scope definition and how it satisfies the requirements identified in the requirements analysis phase of system development. All the operations performed in the system are very quick and satisfy all the requirements.
- **Behaviour Feasibility:** In this feasibility, we check about the behavior of the proposed system software i.e. whether the proposed project is user friendly or not, whether users can use the project without any training because of the user friendliness or not. Automated building drawings is very user friendly as its users interact with it through web.

## 1.5 Methodology/Planning of work

- Studying the current existing system and its problems.
- Proposing solutions for various problems in the existing system.
- Implementing the solutions and keeping in mind the benefits of the Automated building drawings system.

## 1.6 Facilities required for proposed work

### 1.6.1 Hardware Requirements

- Operating System: ubuntu 12.04 or windows 7
- Processor Speed: 512KHz or more
- RAM: Minimum 256MB

**1.6.2 Software Requirements**

- Software: Xampp or lampp(in case of ubuntu)
- Programming Language: C++, Python, Qt
- Database: MySql

- [1] Bootstrap, <http://getbootstrap.com/getting-started/#download>
- [2] PHP, <http://www.tutorialspoint.com/php/>
- [3] Elearning, <http://github.com/navdeep300/Elearning/>
- [4] Wikipedia, <http://en.wikipedia.org/wiki/>
- [5] JQuery, <https://jquery.com/download/>
- [6] Leslie Lamport (April 23, 2007). The Writings of Leslie Lamport: LaTeX: A Document Preparation System.