

**A Project Report**

**On**

**“Box** Office (Ticket Booking System)”**”**

**Submitted in partial fulfillment of**

**Bachelor of Computer Applications (Semester V)**

SAVITRIBAI PHULE PUNE UNIVERSITY

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**CERTIFICATE**

This is to certify that Debankur Das University Seat No. \_\_\_\_\_\_\_ of MAEER’s MITSOM College have successfully completed the Project Term work in partial fulfillment of Bachelor of Computer Applications (BCA), Semester V as prescribed by the Savitribai Phule Pune University

**Date:         /     /**

**Project Guide                     Course-In-Charge**

**Internal Examiner                    External Examiner**

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**Introduction**

Computers have become part an integral part of our lives for accessing almost any kind of information.Life in the 21ts century is full of technological advancement and in this technological age it is very difficult for any organisation to survive without utilizing technology.The computer technology contributes greatly to the creation of an ecer increasing information database.It could also be used as a mechanism to maintain information within an enterprise.

This is project develops a computerised system to help cinema’s personnel to coordinate their activities and improve their functionality,and also for the management to track business growth and analyze future plans.

We have proposed a software project that can efficiently handle and manage various activities of Cinema and all these activities will be carried out by the admin or the area manager of the cinema.The number of screens which put up movies in a cinema hall are increasing tremendously as various movies are coming up with expertise talent.Also,a huge number of people wish to watch movies currently showing in a cinema.Hence we need to manage all the operations which take place at a box office from ticket booking to confirming tickets and various other activities.Today’s generation encourages high-tech and less time consuming services.Therefore,the project is developed proficiently to help cinema theaters automate their business operations.This project serves the best way of mainting records/information and caters the basic needs of a cinema theater fruitfully.

This projetc includes a number of features intended to simplify and improve the box office management in a well organised manner.

**Existing System**

Some cinema theaters can not afford to have a software to carry out all the operations and tasks.They have employees working manually for the ticket booking task.A written record is produced.If one has to search for a particular record or make changes,or modify the records, it is a very tiring job to go through each record manually.

The existing system is a manual system.All kinds of work is carried out manually by the employees of the organisation.Tickets are already printed and issues to the customers whcih demand for it.Here,if there are any technical problems like if the is being delayed,it can not be immediately displayed on the ticket which is already printed,Hence, causing inconvenience.

dfdsfgTo obtain an annual or monthly report, all the records need to be manually accessed one by one and also,they are not related properly as there is no existence of database.Hence,it is erroneous

**Introduction to the system**

The system covers all cinemas in a country, but depending upon needs, it can integrate cinemas of other countries as well. Any cinema has one or more screens, and each screen contains a set of seats. A screen can be built and integrated in the system through a screen designer interface, managed through a stand alone cinema manager interface.

The cinema manager/administrator should use our system to add vital information such as name of a movie,release date, duration of the movie,language,genre,format(2D,3D,etc) This information is added to the system depending on the ability of the theater to put up the shows according to the popularity of the movie

Then at the box office window,when a customer wishes to book a seat for a movie,the cinema manager allots a seat to the customer.The customer pays the amout payable and then the cinema manager prints the desired tickets.

Cinema managers schedule movie sessions through an interface. Sessions can be entered into and deleted from the system. Sessions can also be edited. All this is done through the cinema manager interface. If, for some reason a movie-session must be cancelled or rescheduled, this is straight forward while there are no bookings for the session.If the bookings are already made for the session then a refund of the amout paid is done.

The system provides functionality for a cinema manager to schedule future movies at his/her own cinema, i.e., entering sessions into the database.Thus the system has only one user: Cinema manager (persons who use the system for their cinema)

**Scope of the system**

**'Box-office** (ticket booking system)' is a ticket booking system designed for **the** use **of cinema** theatres to generate **cinema** tickets for customers who approach the ticket window before a show. The application is designed for quick, simple and hassle-free generation of movie tickets. The primary motive of the system is to keep the process minimalist, faster and efficient. It accommodates various real-life movie theatre scenarios like reserving house-seats and catering to refunds on show cancellation, which aren't usually included in a typical movie-booking software system. The software is also capable of generating reports related to the occupancy rate and gross ticket sales in order to help the management in planning the future shows according to the sale of tickets.

**Proposed System**

A simple solution to overcome the drawbacks of the existing system is to build a system that can convert the entire manual task into computerised work.The proposed system will be able to the same task in short time and very efficiently.

The features of the proposed system are as follows:

* The system is used to add shows to the database which consists of name of the movie,certification,duration,etc.
* It stores the names of all the movies which have already released and also which are yet to be released.
* The main task of the system is to generate a ticket to the customer according to his/her specific requirements after the customer has paid the desired amount.
* It also provides data security by providing authentication for the user of the system.
* All the records can be accessed by the administrator.The administator has the right to modify any records if required.
* Better control of corporate data through centralised data,systems and network management.

**System Analysis**

Systems analysis is a problem solving technique that decomposes a system into its component pieces for the purpose of the studying how well those component parts work and interact to accomplish their purpose". According to the Merriam-Webster dictionary, systems analysis is "the process of studying a procedure or business in order to identify its goals and purposes and create systems and procedures that will achieve them in an efficient way". Analysis and synthesis, as scientific methods, always go hand in hand; they complement one another. Every synthesis is built upon the results of a preceding analysis, and every analysis requires a subsequent synthesis in order to verify and correct its results.

This field is closely related to [requirements analysis](https://en.wikipedia.org/wiki/Requirement_analysis) or [operations research](https://en.wikipedia.org/wiki/Operations_research). It is also "an explicit formal inquiry carried out to help someone (referred to as the decision maker) identify a better course of action and make a better decision than she might otherwise have made."

**Fact Finding Techniques**

To study any system the analyst needs to collect facts and all relevant information. The facts when expressed in quantitative form are termed as data. The success of any project is dependent upon the accuracy of available data. Accurate information can be collected with help of certain methods/ techniques. These specific methods for finding information of the system are termed as fact finding techniques. Interview, Questionnaire, Record View and Observations are the different fact finding techniques used by the analyst. The analyst may use more than one technique for investigation.

Following are the most commonly used fact finding techniques:

* **Interview**

This method is used to collect the information from groups or individuals. Analyst selects the people who are related with the system for the interview such as the adminnistator of the cineam theater, owner, other staff,etc. In this method the analyst sits face to face with the people and records their responses. The interviewer must plan in advance the type of questions he/ she is going to ask and should be ready to answer any type of question. He should also choose a suitable place and time which will be comfortable for the respondent.   
  
The information collected is quite accurate and reliable as the interviewer can clear and cross check the doubts there itself. This method also helps gap the areas of misunderstandings and help to discuss about the future problems. Structured and unstructured are the two sub categories of Interview. Structured interview is more formal interview where fixed questions are asked and specific information is collected whereas unstructured interview is more or less like a casual conversation where in-depth areas topics are covered and other information apart from the topic may also be obtained.

* **Questionnaire**

It is the technique used to extract information from number of people. This method can be adopted and used only by any skillful analyst. The Questionnaire consists of series of questions framed together in logical manner. The questions are simple, clear and to the point. This method is very useful for attaining information from people who are concerned with the woking of the cinema theater and also who are related to the cinema theater i.e the owner, directors,managers,etc. The questionnaire can be mailed or sent to people by post. This is the cheapest source of fact finding.

* **Record View**

The information related to the cinema theater is published in the sources like newspapers, magazines, journals, documents etc. This record review helps the analyst to get valuable information about the cinema theater and it’s organization.

* **Observation**

Unlike the other fact finding techniques, in this method the analyst himself visits the cinema theater and observes and understand the flow of documents, working of the existing system, the users of the system etc. For this method to be adopted it takes an analyst to perform this job as he knows which points should be noticed and highlighted. The analyst may observe the unwanted things as well and develop the software accordingly.

**Feasibilty Study**

A feasibility study aims to objectively and rationally uncover the strengths and weaknesses of an existing business or proposed venture, opportunities and threats present in the [environment](https://en.wikipedia.org/wiki/Natural_environment), the [resources](https://en.wikipedia.org/wiki/Resources) required to carry through, and ultimately the prospects for success. In its simplest terms, the two criteria to judge feasibility are [cost](https://en.wikipedia.org/wiki/Cost) required and [value](https://en.wikipedia.org/wiki/Value_%28economics%29) to be attained.

A well-designed feasibility study should provide a historical background of the business or project, a description of the [product](https://en.wikipedia.org/wiki/Product_%28business%29) or [service](https://en.wikipedia.org/wiki/Service_%28economics%29), accounting statements, details of the [operations](https://en.wikipedia.org/wiki/Business_operations) and [management](https://en.wikipedia.org/wiki/Management), [marketing research](https://en.wikipedia.org/wiki/Marketing_research) and policies, financial data, legal requirements and tax obligations. Generally, feasibility studies precede technical development and [project](https://en.wikipedia.org/wiki/Project) implementation.

A feasibility study evaluates the project's potential for success; therefore, perceived objectivity is an important factor in the credibility of the study for potential investors and lending institutions.It must therefore be conducted with an objective, unbiased approach to provide information upon which decisions can be based.

The acronym [**TELOS**](https://en.wikipedia.org/wiki/TELOS_%28project_management%29) refers to the five areas of feasibility - Technical, Economic, Legal, Operational, and Scheduling.

* **Technical feasibility**

This assessment is based on an outline design of system requirements, to determine whether the company has the technical expertise to handle completion of the project. When writing a feasibility report, the following should be taken to consideration:

* A brief description of the business to assess more possible factors which could affect the study
* The part of the business being examined
* The human and economic factor
* The possible solutions to the problem

At this level, the concern is whether the proposal is both *technically* and [*legally*](https://en.wikipedia.org/wiki/Legally) feasible (assuming moderate cost).

The [technical feasibility](https://en.wikipedia.org/wiki/Technical_feasibility) assessment is focused on gaining an understanding of the present technical resources of the organization and their applicability to the expected needs of the proposed system. It is an evaluation of the hardware and software and how it meets the need of the proposed system

* **Economic feasibility**

The purpose of the economic feasibility assessment is to determine the positive economic benefits to the organization that the proposed system will provide. It includes quantification and identification of all the benefits expected. This assessment typically involves a cost/ benefits analysis.

* **Legal feasibility**

Determines whether the proposed system conflicts with legal requirements, e.g. a data processing system must comply with the local data protection regulations.

* **Operational feasibility**

Operational feasibility is a measure of how well a proposed system 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.

The operational feasibility assessment focuses on the degree to which the proposed development projects fits in with the existing business environment and objectives with regard to development schedule, delivery date, [corporate culture](https://en.wikipedia.org/wiki/Corporate_culture), and existing business processes.

To ensure success, desired operational outcomes must be imparted during design and development. These include such design-dependent parameters such as reliability, maintainability, supportability, usability, producibility, disposability, sustainability, affordability and others. These parameters are required to be considered at the early stages of design if desired operational behaviors are to be realized. A system design and development requires appropriate and timely application of engineering and management efforts to meet the previously mentioned parameters. A system may serve its intended purpose most effectively when its technical and operating characteristics are engineered into the design. Therefore, operational feasibility is a critical aspect of systems engineering that needs to be an integral part of the early design phases.[6

* **Schedule feasibility**

A project will fail if it takes too long to be completed before it is useful. Typically this means estimating how long the system will take to develop, and if it can be completed in a given time period using some methods like payback period. Schedule feasibility is a measure of how reasonable the project timetable is. Given our technical expertise, are the project deadlines reasonable? Some projects are initiated with specific deadlines. It is necessary to determine whether the deadlines are mandatory or desirable.

**Other feasibility factors are:**

* **Market and real estate feasibility**

Market feasibility studies typically involve testing geographic locations for a real estate development project, and usually involve parcels of real estate land. Developers often conduct market studies to determine the best location within a jurisdiction, and to test alternative land uses for given parcels. Jurisdictions often require developers to complete feasibility studies before they will approve a permit application for retail, commercial, industrial, manufacturing, housing, office or mixed-use project. Market Feasibility takes into account the importance of the business in the selected area.

* **Resource feasibility**

This involves questions such as how much time is available to build the new system, when it can be built, whether it interferes with normal business operations, type and amount of resources required, dependencies, and developmental procedures with company revenue prospectus.

* **Cultural feasibility**

In this stage, the project's alternatives are evaluated for their impact on the local and general [culture](https://en.wikipedia.org/wiki/Culture).For example, environmental factors need to be considered and these factors are to be well known. Further an enterprise's own culture can clash with the results of the project.

**Hardware & Software Requirements**

* **Hardware Specification**

Processor : Intel Dual based System

Processor Speed : 1GHz to 2GHz

RAM : 512MB to 1GB

Hard Disk : 4GB to 30GB

Keyboard : 104 keys

* **Software Specification**

Language : Microsoft Visual Studio 2008

Database : Microsoft Access 2003/7/10

Operating System : Windows NT / XP / Vista / 7

* **Network Specification.**

This software work stand alone system as well as network based system.

**Data Dictionary**

The overall objective in the development of the database technology has been to treat data as an organizational resource and as an integrated whole. Database management system allows data to be protected and organize separately from other resources. Database is an integrated collection of data. The most significant of data as seen by the programs and data as stored on the direct storage access storage devices. This is the difference between logical and physical data. The organization of data in the database aims to achieve free major objectives:

* Data Integration
* Data Integrity
* Data Independence

The databases are implemented using a DBMS package. Each particular DBMS has unique characteristics and general techniques for Database Design.

The proposed Management Information System stores the information relevant for processing in the Microsoft Access Database. This MS Access contains tables, where each table is called a field or column. A table also contains records which is a set of fields. All records, in a table the same set of fields with different information. Each table contains key fields that establish relationships in a MS Access database and how the records are stored. There are primary key fields that uniquely identify a record in a table. There are also fields that contain the primary key from another table called foreign keys.

It is a known fact that the program cannot be written until the data are defined, so the database must be defined. The starting point for this process is data dictionary. The records data structures and elements to be stored in each database are identified and extracted.

*The tables included are:*

**Table name : user\_details**

int emp\_id

char full\_name

char email\_id

char contactno

char username

char password

**Table name : movdetails**

int id

char MOVIE\_NAME

char DIRECTOR

int rating

char duration

char cirtificate

char time1

char time2

char time3

char time4

char ticket\_price

**Table name : show\_timing**

int MOVIE\_ID

char MOVIE\_NAME

int show\_timing

int seat

**Cardinality:**

1 movie - M shows

1 show - M booking

1 employee - M booking

**Advantages and Disadvantages**

**Advantages**

Following are the advantages:

* The system has a user-friendly user interface.
* Reports are generated for future reference.Hence, business analysis can be done.
* Cost and time saving, legal compliance and on top of all you stay updated on the latest technology tools of ticket booking system.

**Disadvantages**

Following are the disadvantages:

* Risk of the employee feeding wrong information
* As it is purely machine dependent, if any technical problem occur in machine, all the records can be lost, if the manager doesn’t kept a backup with him.

Future Enhancements

* **User Requirements**
* Administrator should be able to navigate the system without any difficulty.
* System supports native language of the country and other commonly spoken languages.
* Administrator should be able to make payment using cash/credit/debit card.
* **User Interface Requirements**
* The system must be a graphical user interface for easy use and understanding.
* The system must be able to prompt the user for the next step to be performed during the process of using the system.
* The system must display the bill and final order for confirmation

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