BASELIOS POULOSE II CATHOLICOS COLLEGE BASELIOS MOUNT, PIRAVOM

Re-accredited with 'A' Grade by NAAC (Affiliated to Mahatma Gandhi University)

DEPARTMENT OF COMPUTER APPLICATIONS



2023-24

PROJECT REPORT

ON

MELOLINK
(ONLINE MUSIC CLASS)

BASELIOS POULOSE II CATHOLICOS COLLEGE

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PIRAVOM

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DEPARTMENT OF COMPUTER APPLICATIONS



PROJECT REPORT ON MELOLINK(ONLINE MUSIC CLASS)

Submitted in partial fulfillment of the Requirements for the award of the degree of

BACHELOR OF COMPUTER APPLICATIONS

Guided By: Submitted By:

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CERTIFICATE

This is to certify that the project entitled "MELOLINK" submitted in partial fulfillment for the award of the degree of BACHELOR OF COMPUTER APPLICATION is a bonafide report of the project done by R. Gayathri (Reg no: 210021093793) during the year 2023-24.

Internal Guide: Head Of the Department

Prof. Leeja Mathew Dr. Anu Paul

Examiner: 1.

College Seal Department seal

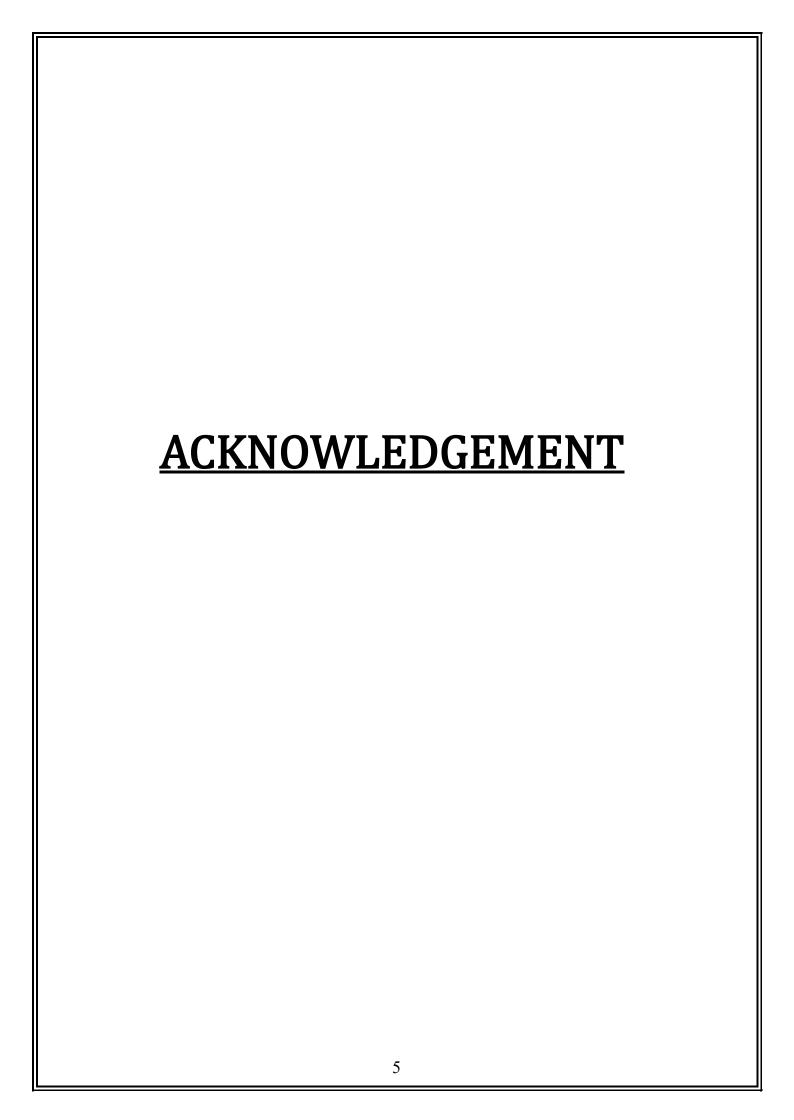
DECLARATION

I hereby declare that this project work entitled "MELOLINK" is a record of original work done by me under the guidance of **Prof**. Leeja Mathew, Assistant Professor, Department of Computer Applications and the work has not formed the basis for the award of any degree or diploma or similar title to any candidate of any university subject.

Internal Guide

Signature of Student

Prof. Leeja Mathew



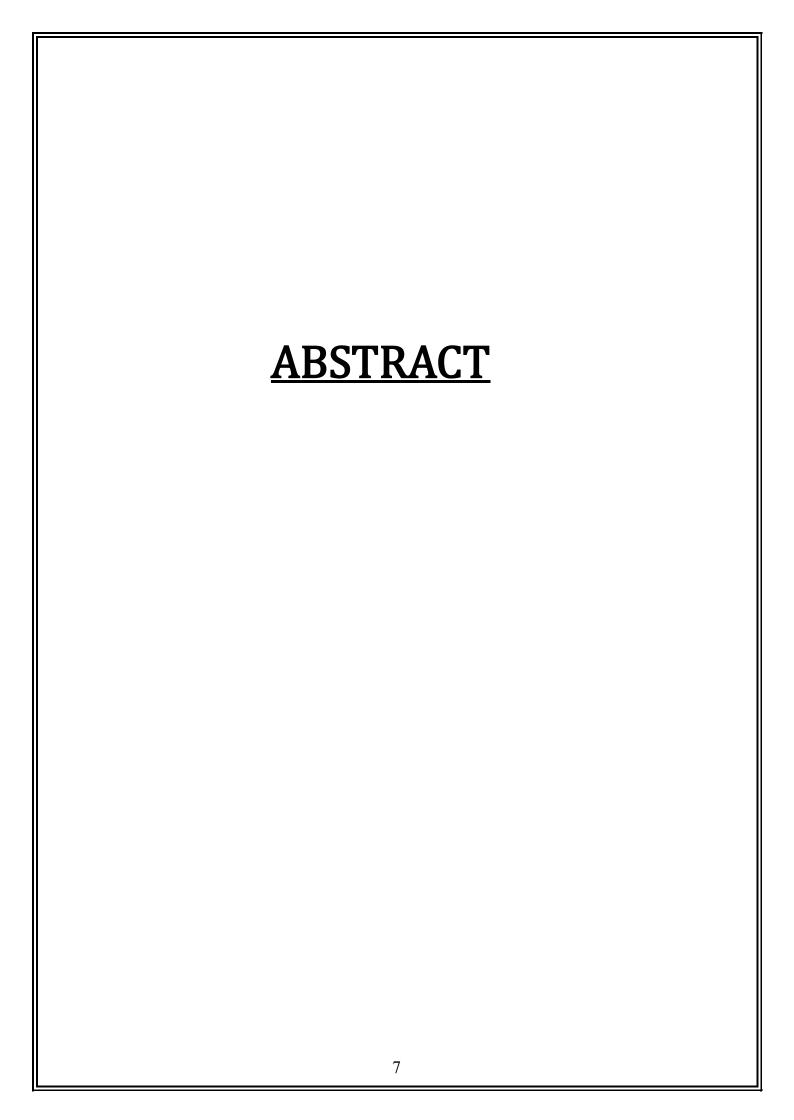
ACKNOWLEDGMENT

At the outset, I thank God Almighty for making endeavor a success.

I express my gratitude to **Dr. Santhosh Potharay Kuruvilla**, Principal, Baselios Poulose II Catholicos College, for providing me with adequate facilities, ways and means by which I was able to complete the project work. I express my sincere thanks to my internal guide, **Prof. Leeja Mathew** who guide me properly from the beginning to the end of my project. With immense pleasure I take this opportunity to record out sincere thanks to my Guide and Head of the Computer Department **Dr. Anu Paul,** Associate Professor, Department of Computer Applications in examining the draft of this project and suggestions and modifications.

Last but not the least, I also express my gratitude to all other members of the faculty and well-wishers who assisted me in various occasions during this project work.

R. Gayathri



ABSTRACT

MeloLink is an innovative online music learning platform designed to bridge the gap between music enthusiasts and skilled instructors. The platform caters to a diverse user base, including registered users, staff members, and guests. Users and staff can seamlessly register and log in to unlock a plethora of features tailored to enhance the music learning experience.

Registered users gain access to a user-friendly interface where they can explore and connect with qualified staff members based on their preferred music types. The platform's search functionality allows users to efficiently discover courses that align with their musical interests. Users can further enhance their learning journey by booking courses that suit their schedules and preferences.

On the staff side, MeloLink empowers instructors to manage and organize their courses with ease. Staff members have the capability to add courses, schedule classes, upload learning materials, and create tutorials. This comprehensive set of tools ensures that instructors can provide a rich and engaging learning experience for their students.

Administrative functions play a pivotal role in ensuring the smooth operation of MeloLink. Admins have the authority to manage staff accounts, oversee user registrations, and address user complaints promptly.

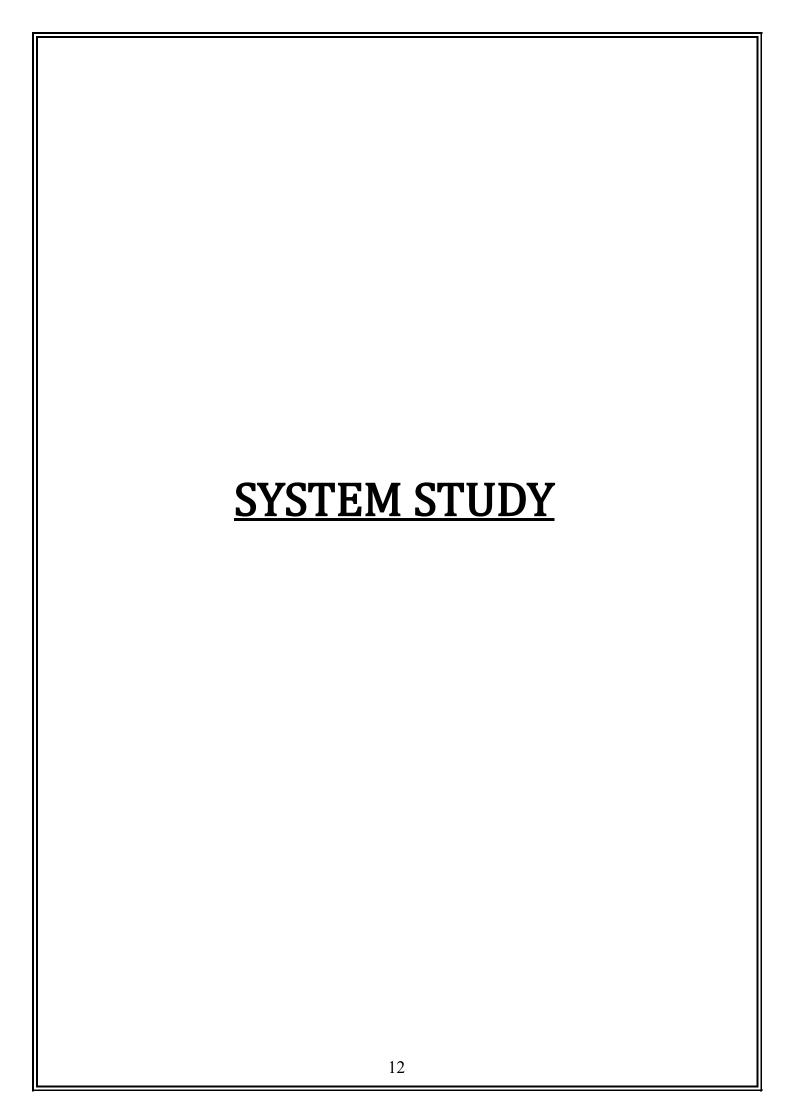
Additionally, the platform provides robust reporting features to assist administrators in monitoring and analyzing user engagement and feedback.

MeloLink's commitment to creating a vibrant online music community is evident in its user-centric design and feature-rich environment. By fostering connections between passionate learners and knowledgeable instructors, MeloLink aims to elevate the online music learning experience, making it accessible and enjoyable for users worldwide.

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1. SYSTEM STUDY

1.1 EXISTING SYSTEM

The study about the existing system helps to know as much as possible about the system. We can find many faults in the existing system. The existing system runs under manual sections. Its include a lot of paper works, scheduling tasks, equipment issues, classroom distractions etc. This may consume a lot of time for both the staff and the users.

The main limitation of the system is time consuming process. In the existing system the data entry is made on paper and it become a tedious process; resulting over use of manpower. There is no security and a great chance for loss of valuable data stored in paper files due to hazards life fire and improper storage. Error detection is very difficult in this system. While carrying out error correction methods, the whole process may have to be repeated. All accounting processes are done on paper, this often leads to inaccurate result and cash mismatch. So an alternative solution is needed.

1.1.1 DRAWBACKS OF EXISTING SYSTEM

1. **Limited Individual Attention**: In a group setting, it can be challenging for instructors to provide individualized attention to each student. This limitation may hinder the progress of individual learners.

- **2**. **Scheduling Challenges:** Traditional classes often follow fixed schedules, which may not accommodate the varying availability of students. This can be a constraint for individuals with busy schedules or other commitments.
- **3. Inadequate Practice Time:** Students may struggle to find sufficient time for practice outside of class, hindering their progress and overall skill development.
- **4. Differing Skill Levels:** Classes may have students with varying skill levels. Balancing the needs of beginners and more advanced students in the same class can be challenging for instructors.
- **5. Limited Flexibility:** The traditional structure of offline classes may limit flexibility in terms of learning styles, pace, and the inclusion of diverse musical genres.
- **6.Equipment Issues:** Technical problems with instruments, amplifiers, or other equipment can disrupt the flow of the class. These issues may require time-consuming troubleshooting or repairs.
- **7. Class Size:** Larger class sizes can lead to challenges in managing and catering to the needs of each student. Individual attention may be further limited in such cases.
- **8. Communication Barriers:** In larger classes or classes with diverse student backgrounds, there may be communication barriers that hinder effective interaction between students and instructors.

- **9. Evaluation Challenges:** Assessing individual progress and providing constructive feedback to each student can be challenging, especially in larger classes where time for evaluation is limited.
- **10. Limited Resources:** Music classes may have limited resources such as instruments, sheet music, or practice rooms. This can impact the ability of students to fully engage with the learning process.
- **11. Reliance on Physical Materials:** Instructors may rely on physical materials like printed sheet music and textbooks, limiting the integration of digital resources and technology in the learning process.

1.1.2 SYSTEM ANALYSIS

1.1.2.1 IDENTIFYING NEEDS OF SYSTEM

The work that was being carried out with the help of the manual system has to be transferred to that of an automated one for a variety of reasons,

- 1. The manual system is slowly being phased out and all the activities that are being carried out by the manual system could easily and efficiently been alone by the automated system.
- 2. There are many functions that demanded computerization, but were not being covered by the manual system.
- 3. The throughout time is high for processing.
- 4. As information is very voluminous and it is not possible to run systematically and accurately considering the time factor.

The system also needs easy access with a computer system we can easily access any records in it. But when it is in manual systems it is difficult to find it using its serial numbers or something like that. So now a day the need of the automated system is important.

1.1.2.2 PRELIMINARY INVESTIGATION

In the initial stages of designing any system, conducting a thorough preliminary investigation is crucial. This phase is an integral part of the requirement analysis, serving to clarify issues in the existing system while fortifying the analyst's understanding and background in the problem area. During my system investigation, I explored numerous websites that offer online music classes across various genres.

It became evident that, while there is a plethora of online learning platforms, there is a noticeable gap when it comes to those specifically dedicated to music education. Therefore, this system is designed with a focus on the music category, making it considerably easier for individuals to discover and connect with proficient music instructors

1.2 PROPOSED SYSTEM

The proposed online music class system aims to optimize data storage and retrieval while facilitating the decision-making process. The system is designed to be user-friendly through a menu-driven interface, enhancing convenience for users and minimizing errors in data entry. It prioritizes efficiency in both storage and retrieval of information, ensuring a seamless experience for users. The system offers distinct features for data entry and

report generation, streamlining the process of searching for music courses offered by teachers worldwide.

The system's primary focus is on music courses, providing a specialized platform for users to discover and enroll in classes tailored to their preferences. The administration role involves monitoring user-provided data and verifying user accounts before they can engage in any transactions or processes within the system, ensuring security and reliability. This online music class system is poised to revolutionize the way users access and participate in music education, combining functionality with user-friendly design for an enhanced learning experience.

1.2.1 ADVANTAGE OF PROPOSED SYSTEM

The data entry interfaces for the online music class system are meticulously designed to require minimal user typing, ensuring a user-friendly experience with little to no training required.

- The system offers swift and accurate generation of various information reports in easily understandable formats, enhancing the overall efficiency of the platform.
- The new web application boasts enhanced user-friendliness, providing an intuitive interface for seamless navigation.
- Security is a top priority at the operational level, granting access to view and manipulate information based on user logins to ensure data confidentiality.

- The menu-driven interface further simplifies user interaction, making the platform easy to navigate.
- Users can access previous data for future reference, promoting continuity and informed decision-making within the online music class environment.

1.3 FEASIBIITY STUDY

During the system analysis, a comprehensive feasibility study was conducted to assess the viability and benefits of transitioning from the existing manual system to the proposed online music class system. The current manual system involves recording data in physical books, requiring constant reference for tasks such as adding or removing items. A thorough comparison was made between the existing system and the merits of the proposed system to determine its financial feasibility.

The results of the feasibility study are:-

- 1. Economic feasibility
- 2. Technical feasibility
- **3.** Behavioural feasibility

1.3.1 ECONOMIC FEASIBILITY

The economic analysis, commonly referred to as cost-benefit analysis, stands as the primary method for assessing the viability of the proposed online music class system. This process involves determining the expected benefits and savings of the proposed system and comparing them with the costs associated with the existing manual system. If the benefits prove to outweigh the costs, a decision is made to proceed with the design and implementation of the new system. Otherwise, adjustments are made to enhance the cost-effectiveness of the proposed system.

Upon examination, the proposed online music class system demonstrates technical feasibility and remains beneficial for the organization. The estimated costs are found to be lower than the anticipated benefits, indicating a favourable economic feasibility. Additionally, the system's implementation is expected to significantly reduce the user's workload, halving the current level of effort required.

Therefore, based on the economic analysis, the proposed online music class system is deemed economically feasible and holds the potential to bring substantial benefits to the organization.

1.3.2 TECHNICAL FEASIBILITY

Technical study is a study of hardware and software requirements. Technical feasibility concentrates on the organization to what extend it and support the proposed system. The question to be answered is whether the organization is technically capable to operate the system.

1.3.2.1 HARDWARE REQUIREMENTS:

• Processor: Intel Core i5 or equivalent

• RAM: 8GB

• Storage: 1TB HDD or SSD

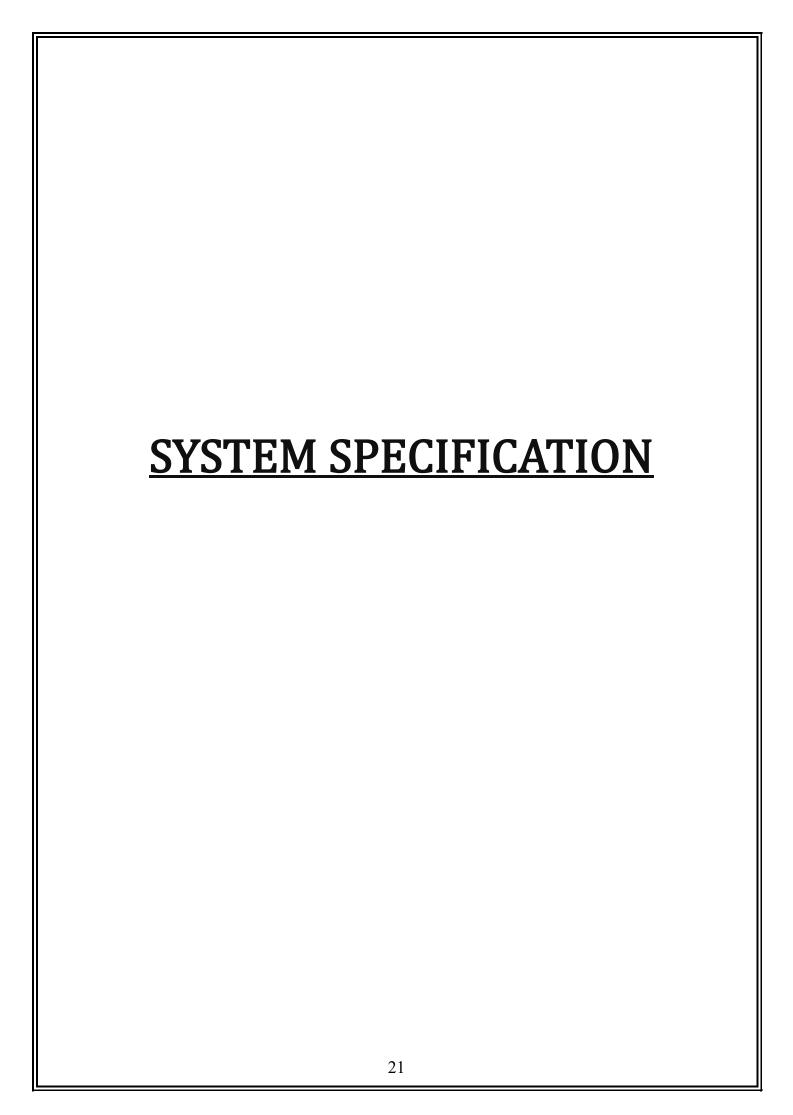
1.3.2.2 SOFTWARE REQUIREMENTS:

• Operating System: Windows 10 or macOS

 Web Browser: Latest version of Chrome, Firefox, or Safari with active Internet connectivity

1.3.3 BEHAVIOURAL FEASIBILITY:

The developed system is completely driven and user friendly. Also the system is developed using HTML, CSS and JavaScript as front end, which is user interface. There is no need of skill for new user to open this Website and use it. Reports will be exactly as per our requirements.



2. SYSTEM SPECIFICATION

2.1 ABOUT THE FRONT END

The system is created using HTML, CSS, Ajax, jQuery, Bootstrap and JavaScript as front end.

HTML

HTML is a computer language devised to allow Website creation. These Websites can then be viewed by anyone else connected to the Internet. It is relatively easy to learn, with the basics being accessible to most people in one sitting; and quite powerful in what it allows you to create. It is constantly undergoing revision and evolution to meet the demands and requirements of the growing Internet audience under the direction of the W3C, the organization charged with designing and maintaining the language.

HTML consists of a series of short codes typed into a text-file by the site author these are the tags. The text is then saved as a HTML file, and viewed through a browser, like Internet Explorer. This browser reads the file and translates the text into a visible form, hopefully rendering the page as the author had intended. Writing your own HTML entails using tags correctly to create your vision. You can use anything from a rudimentary text editor to a powerful graphical editor to create HTML pages.

CSS

Stands for "Cascading Style Sheet." Cascading style sheets are used to format the layout of Web pages. They can be used to define text styles, table sizes, and other aspects of Web pages that previously could only be defined in a page's HTML. CSS helps Web developers create a uniform look across several pages of a Web site. Instead of defining the style of each table and each block

of text within a page's HTML, commonly used styles need to be defined only once in a CSS document. Once the style is defined in cascading style sheet, it can be used by any page that references the CSS file. Plus, CSS makes it easy to change styles across several pages at once. For example, a Web developer may want to increase the default text size from 10pt to 12pt for fifty pages of a Web site. If the pages all reference the same style sheet, the text size only needs to be changed on the style sheet and all the pages will show the larger text.

While CSS is great for creating text styles, it is helpful for formatting other aspects of Web page layout as well. For example, CSS can be used to define the cell padding of table cells, the style, thickness, and colour of a table's border, and the padding around images or other objects. CSS gives Web developers more exact control over how Web pages will look than HTML does. This is why most Web pages today incorporate cascading style sheets.

AJAX

Ajax is a set of web development techniques using many web technologies on the client side to create asynchronous web applications. With Ajax, web applications can send and retrieve data from a server asynchronously (in the background) without interfering with the display and behaviour of the existing page. By decoupling the data interchange layer from the presentation layer, Ajax allows web pages and, by extension, web applications, to change content dynamically without the need to reload the entire page. In practice, modern implementations commonly utilize JSON instead of XML.

JQUERY

jQuery is a JavaScript library designed to simplify HTML DOM tree traversal and manipulation, as well as event handling, CSS animation, and Ajax. It is free, opensource software using the permissive MIT License. As of May 2019, jQuery is used by 73% of the 10 million most popular websites. Web analysis indicates that it is the most widely deployed JavaScript library by a large margin, having 3 to 4 times more usage than any other JavaScript library.

BOOTSTRAP

Bootstrap is a free and open-source CSS framework directed at responsive, mobile first front-end web development. It contains CSS- and (optionally) JavaScript-based design templates for typography, forms, buttons, navigation and other interface components.

JAVASCRIPT

JavaScript is a dynamic computer programming language. It is lightweight and most commonly used as a part of Web pages, whose implementations allow client-side script to interact with the user and make dynamic pages. It is an interpreted programming language with object-oriented capabilities.

JavaScript was first known as LiveScript, but Netscape changed its name to JavaScript, possibly because of the excitement being generated by Java. JavaScript made its first appearance in Netscape 2.0 in 1995 with the name LiveScript. The general-purpose core of the language has been embedded in Netscape, Internet Explorer, and other Web browsers.

2.2 ABOUT THE BACK END

The system is created with PHP, MySQL and XAMPP Server as back end.

PHP

PHP started out as a small open source project that evolved as more and more people found out how useful it was. Rasmus Lerdorf unleashed the first version of PHP way back in 1994.

PHP is a MUST for students and working professionals to become a great Software Engineer specially when they are working in Web Development Domain. The key advantages of learning PHP are:

PHP is a recursive acronym for "PHP: Hypertext Preprocessor". PHP is a server-side scripting language that is embedded in HTML. It is used to manage dynamic content, databases, session tracking, even build entire ecommerce sites. It is integrated with a number of popular databases, including MySQL, PostgreSQL, Oracle, Sybase, Informix, and Microsoft SQL Server. PHP is pleasingly zippy in its execution, especially when compiled as an Apache module on the Unix side. The MySQL server, once started, executes even very complex queries with huge result sets in record-setting time. PHP supports a large number of major protocols such as POP3, IMAP, and LDAP.PHP4 added support for Java and distributed object architectures (COM and CORBA), making n-tier development a possibility for the first time. PHP is forgiving: PHP language tries to be as forgiving as possible. PHP Syntax is C-Like.

MySQL

MySQL is an open-source relational database management system (RDBMS). It's name is a combination of "My", the name of co-founder Michael Widenius's daughter and "SQL", the abbreviation for Structured Query

Language. MySQL is free and open-source software under the terms of the GNU General Public License, and is also available under a variety of proprietary licenses. MySQL was owned and sponsored by the Swedish company MySQL AB, which was bought by Sun Microsystems (now Oracle Corporation). In 2010, when Oracle acquired Sun, Widenius forked the open-source MySQL project to create MariaDB. MySQL is a component of the LAMP web application software stack (and others), which is an acronym for Linux, Apache, MySQL, Perl/PHP/Python. MySQL is used by many database-driven web applications, including Drupal, Joomla, phpBB, and WordPress. MySQL is also used by many popular websites, including Facebook, Flickr, MediaWiki, Twitter, and YouTube.

XAMPP SERVER

XAMPP is a free and open-source cross-platform web server solution stack package developed by Apache Friends, consisting mainly of the Apache HTTP Server, MariaDB database, and interpreters for scripts written in the PHP and Perl programming languages. Since most actual web server deployments use the same components as XAMPP, it makes transitioning from a local test server to a live server possible.

XAMPP's ease of deployment means a WAMP or LAMP stack can be installed quickly and simply on an operating system by a developer. With the advantage of common add-in applications such as WordPress and Joomla! can also be installed with similar ease using Bitnami. A database system is an overall collection of different database software components and database containing the part viz. Database application programs, front-end components, Database management systems and Database.

A database system must provide the following features:

- A variety of user interfaces
- Physical data independence
- Logical data independence
- Query optimization
- Data integrity
- Concurrency control
- Backup and recovery
- Security and authentication

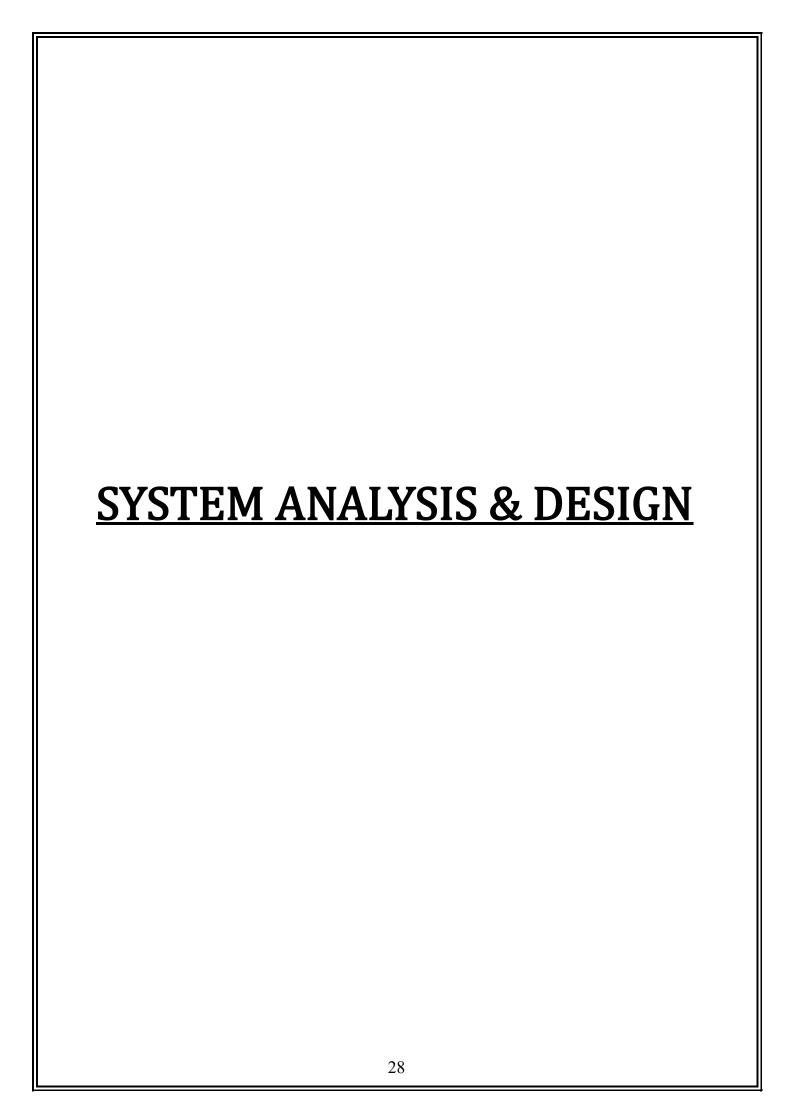
When creating a database, the main concept is to know how the database is structured in SQL. SQL stands for Structured Query Language. It is a language that enables us to create and operate on relational database, which are sets of related information stored in tables. Because of its elegance and independence.

2.3 ABOUT THE OS

The OS used is Windows Operating System.

WINDOWS OS

Windows 11 introduces anew dimension to the computer operations, offering seamless connectivity to the vast information network, including Internet, through modems, rending it an indispensable software. In today's technological landscape, it's become a common practice for new software releases to offer Window11 versions.



3. SYSTEM ANALYSIS AND DESIGN

System design's main aim is to identify the modules that should be in the system, and the specifications of these modules and how they interact with each other to produce the desired results. At the end of the system design all the major data structures, file formats and the major modules in the system and their specification are decided.

3.1 DATA FLOW DIAGRAM

These symbols are used in the DFD:

A DFD has the purpose of clarifying system requirements and identifying major transformations that will become programs in system design.

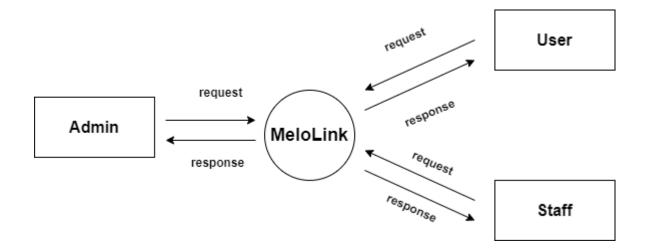
Source or Destination of Data

Data Flow

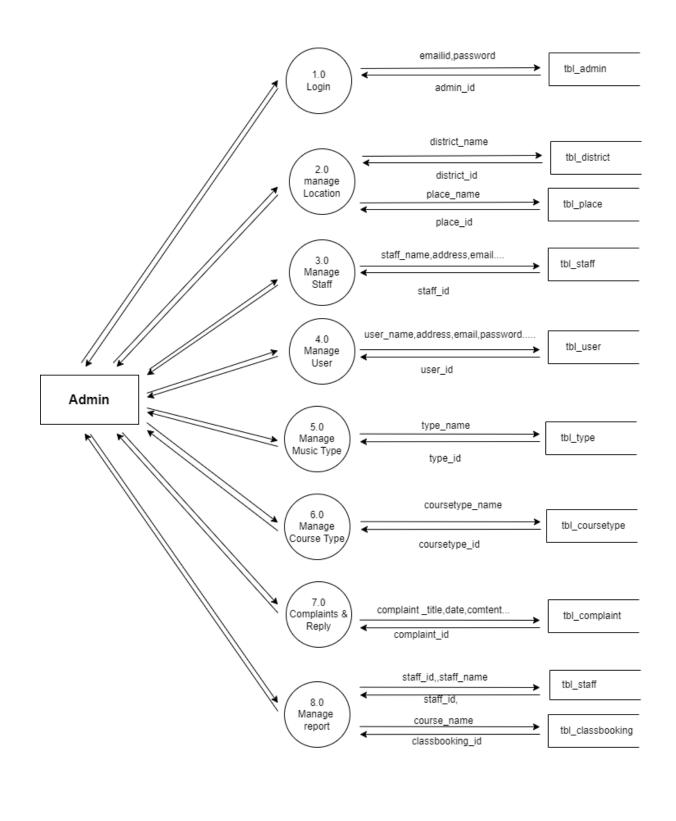
Process that transforms data flow

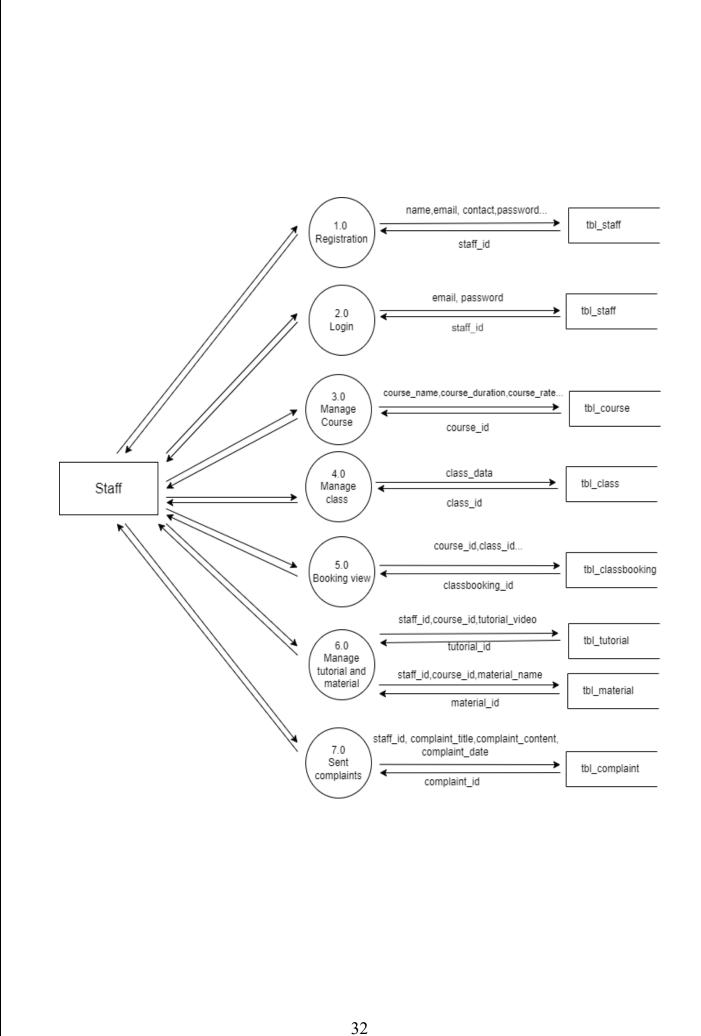


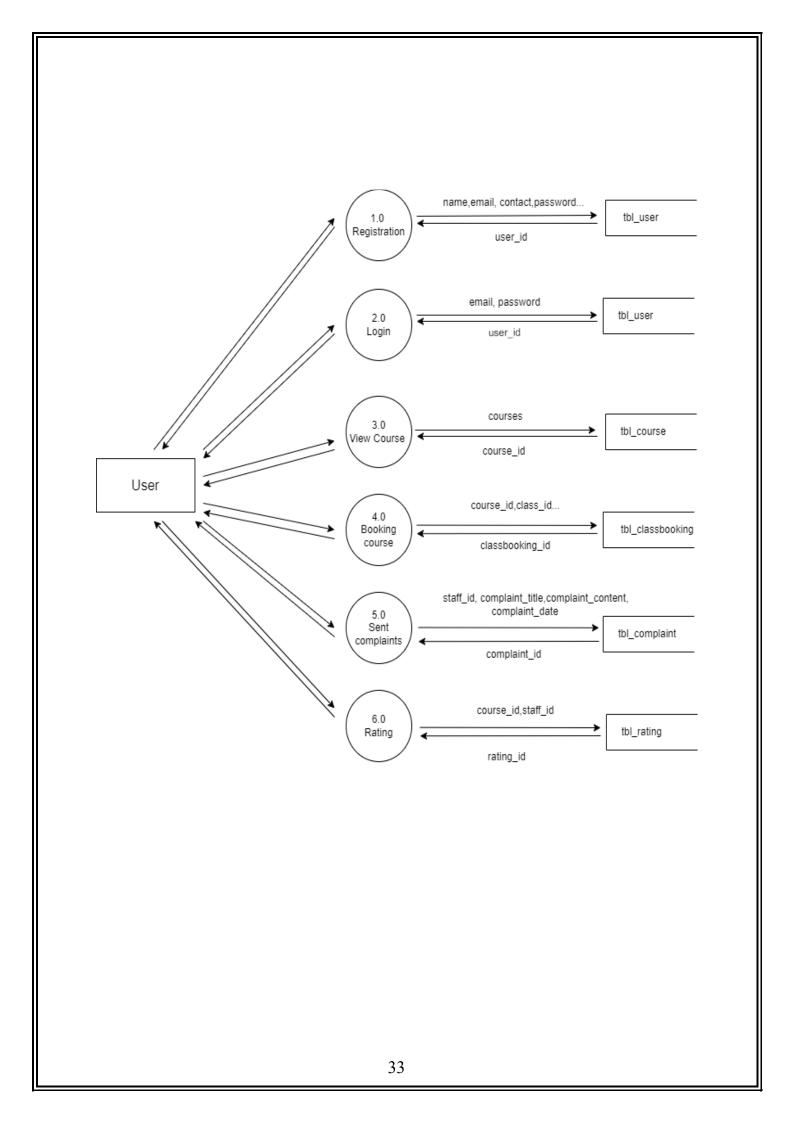
CONTEXT LEVEL DFD



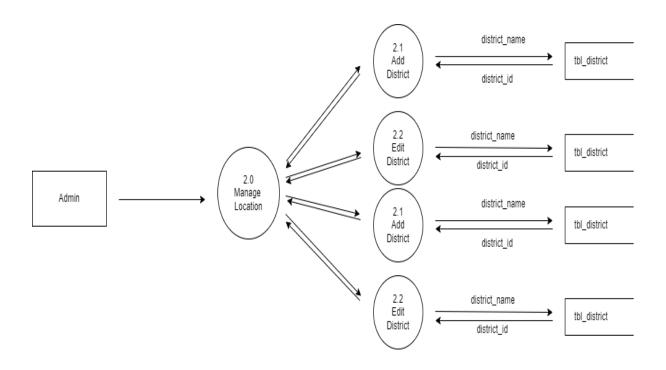
LEVEL 1.0 DFD

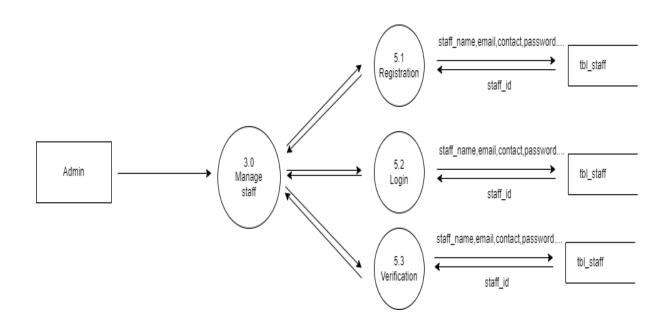


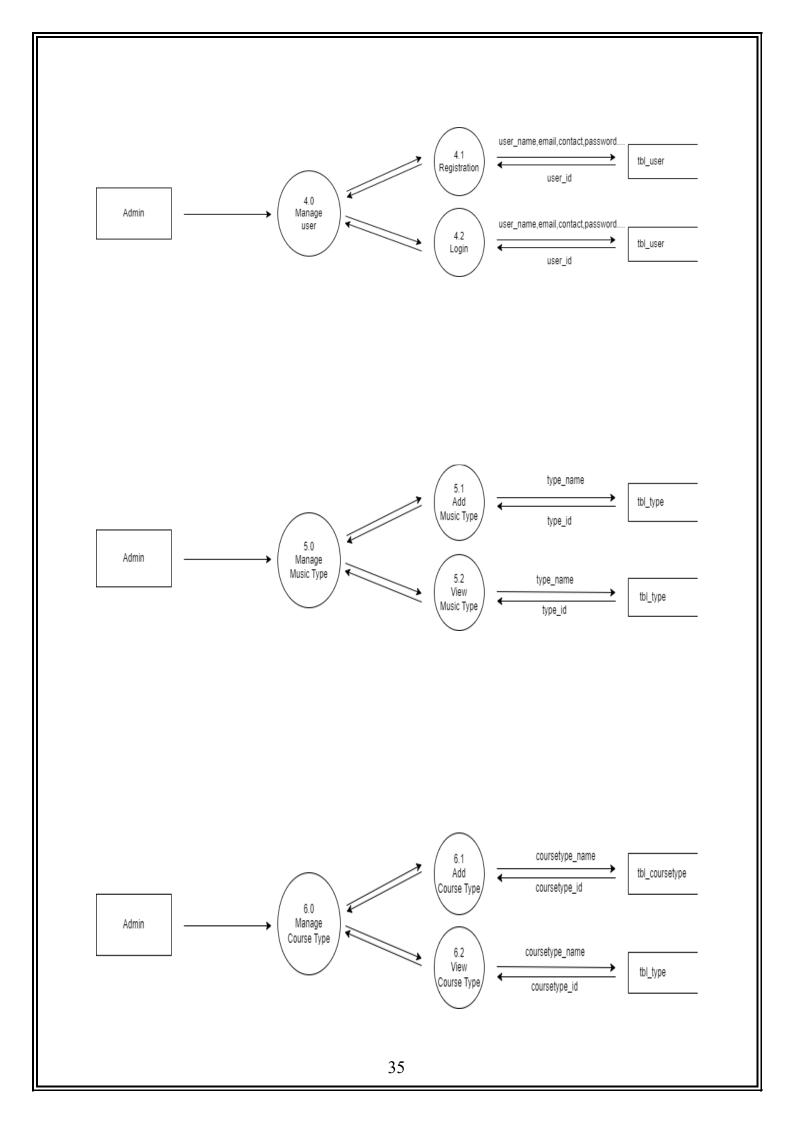


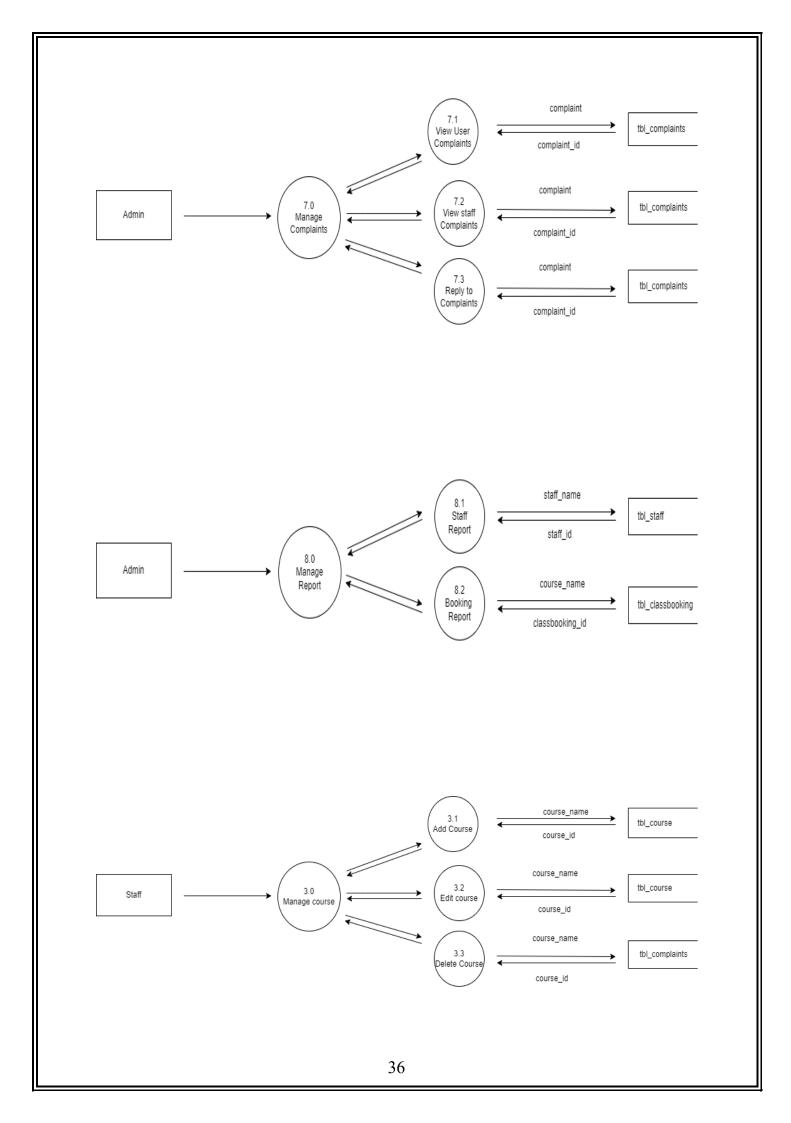


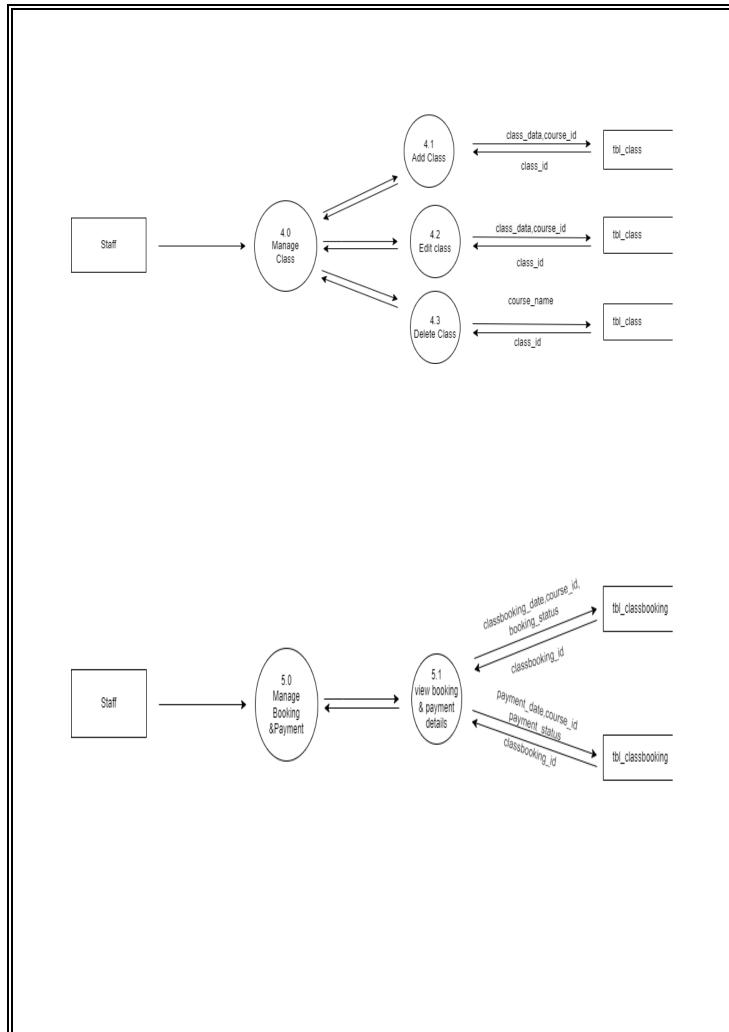
LEVEL 2.0 DFD

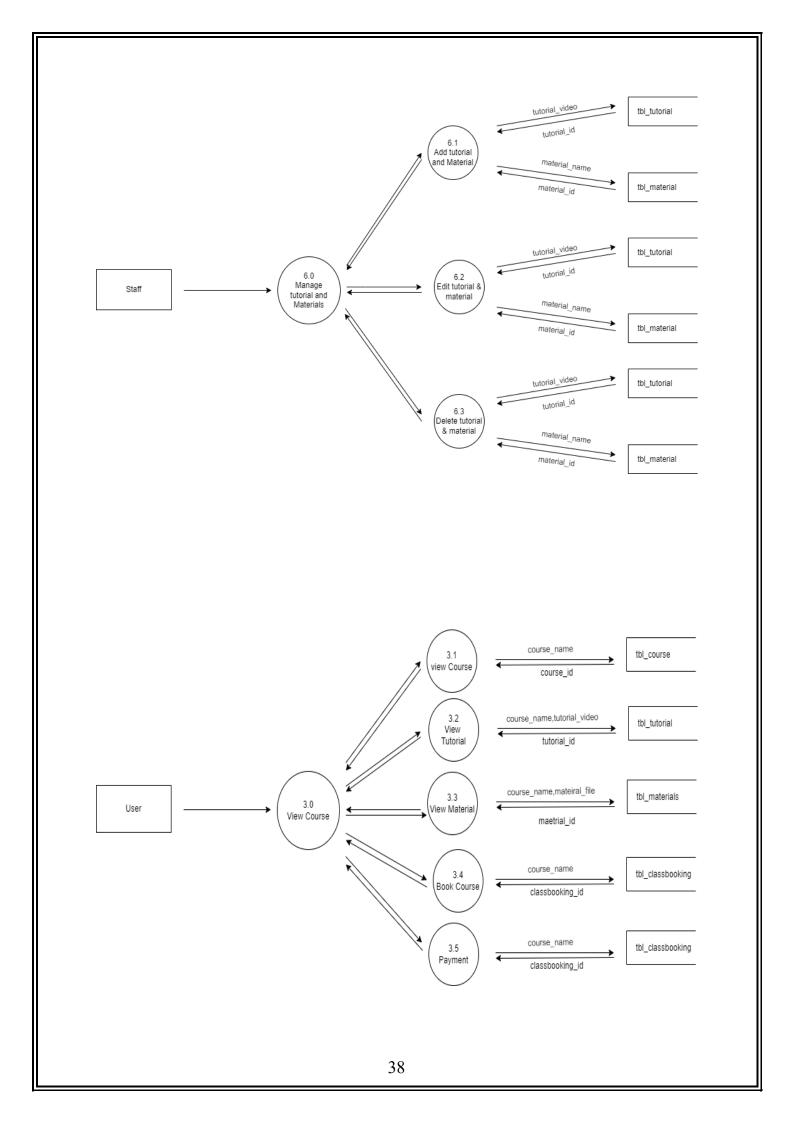


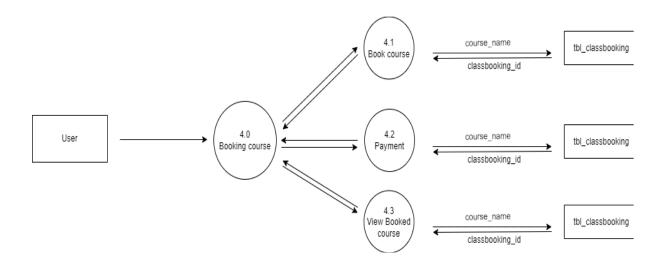












3.2 TABLE DESIGN

The general theme behind a database is to handle information as an integrated whole. A database is a collection of interrelated data stored with minimum redundancy to serve quick access and effective storage. The database is a collection of stored data organized in such a way that all the data requirements are satisfied by the database.

The aim of database design is to improve the existing system situation. A number of database files were designed to hold the data requirements for running their systems. Here we have 10 major tables, described below:

DATABASE: melolink

TABLE OVERVIEW

Sl. No	Table Name	Description
1.	tbl_admin	To store admin details
2.	tbl_user	To store user details
3.	tbl_staff	To store staff details
4.	tbl_district	To store district details
5.	tbl_place	To store place details
6.	tbl_type	To store music type details
7.	tbl_coursetype	To store course type details
8.	tbl_course	To store course details
9.	tbl_class	To store class details
10.	tbl_tutorial	To store tutorial details
11.	tbl_material	To store material details
12.	tbl_classbooking	To store booking details
13.	tbl_complaint	To store complaint details
14.	tbl_rating	To store rating details

 $1. TABLE\ NAME: tbl_admin$

PRIMARY KEY : admin_id

DESCRIPTION :Used to store Admin details

Sl. No	Field Name	Datatype	Description
1.	admin_id	INT(11)	Id of Admin
1.	admin_name	VARCHAR(30)	Name of Admin
2.	admin_contact	VARCHAR(10)	Phone number of admin
3.	admin_email	VARCHAR(30)	Email of Admin
4.	admin_password	VARCHAR(15)	Password of Admin

 $2.\ TABLE\ NAME: tbl_user$

PRIMARY KEY : user_id

FOREIGN KEY : place_id

DESCRIPTION :Used to store user details

Sl. No	Field Name	Datatype	Description
1.	user_id	INT(11)	Id of user
2.	user_name	VARCHAR(30)	Name of user
3.	user_contact	VARCHAR(10)	Phone number of user
4.	user_email	VARCHAR(30)	Email id of user
5.	user_gender	VARCHAR(10)	Gender of user
5.	user_address	VARCHAR(100)	Address of user
6.	place_id	INT(11)	Id of user place
7.	user_photo	VARCHAR(500)	Photo of user
8.	user_doj	DATE	Date of join
9.	user_proof	VARCHAR(500)	Proof of user
10.	user_password	VARCHAR(12)	Password
11.	user_confirmpswd	VARCHAR(12)	Confirm password
12.	user_status	INT(11)	Status of user

3. TABLE NAME: tbl_staff

PRIMARY KEY : staff_id

FOREIGN KEY : place_id

DESCRIPTION :Used to store staff details

Sl. No	Field Name	Datatype	Description
1.	staff_id	INT(11)	Id of staff
2.	staff _name	VARCHAR(30)	Name of staff
3.	staff_contact	VARCHAR(10)	Phone number of staff
4.	staff_email	VARCHAR(30)	Email of staff
5.	staff _gender	VARCHAR(10)	Gender of staff
6.	staff_address	VARCHAR(100)	Address of staff
7.	place_id	INT(11)	Id of place
8.	staff_doj	VARCHAR(10)	Date of join
9.	staff_password	VARCHAR(12)	Password
10.	staff_confirmpswd	VARCHAR(12)	Confirm password
11.	staff_photo	VARCHAR(200)	Photo of staff
12.	staff_proof	VARCHAR(200)	Proof of staff
13.	staff_status	INT(11)	Staff status

4. TABLE NAME: tbl_district

PRIMARY KEY: district_id

DESCRIPTION: Used to store district details

Sl. No	Field Name	Datatype	Description
1.	district_id	INT	Id of district
2.	district_name	VARCHAR(50)	Name of district

5.TABLE NAME :tbl_place

PRIMARY KEY:place_id

FOREIGN KEY :district_id

DESCRIPTION: Used to store place details

Sl. No	Field Name	Datatype	Description
1.	place_id	INT(11)	Id of Place
2.	place_name	VARCHAR(50)	Place Name
3.	place_pincode	INT(11)	Pincode of Place
4.	district_id	INT(11)	Id of District

6. TABLE NAME: tbl_type

PRIMARY KEY : type_id

DESCRIPTION :Used to store types of music

Sl. No	Field Name	Datatype	Description
1.	type_id	INT(11)	Id of music type
2.	type_name	VARCHAR(50)	Name of music type

7. TABLE NAME: tbl_coursetype

PRIMARY KEY : course_id

DESCRIPTION :Used to store course type details

Sl. No	Field Name	Datatype	Description
1.	coursetype_id	INT(11)	Id of Course Type
2.	coursetype_name	VARCHAR(30)	Name of course type

8. TABLE NAME: tbl_course

PRIMARY KEY : course_id ,staff_id,type_id

FOREIGN KEY :course_type

DESCRIPTION :Used to store course details

Sl. No	Field Name	Datatype	Description
1.	course_id	INT(11)	Id of course
2.	course_name	VARCHAR(50)	Name of course
3.	course_rate	VARCHAR(10)	Rate of Course
4.	course_duration	INT(11)	Course Duration
5.	type_id	INT(11)	Id of music type
6.	coursetype_id	INT(11)	Type of Course
7.	staff_id	INT(11)	Id of Staff
8.	course_photo	VARCHAR(500)	Photo of Courses

9. TABLE NAME :tbl_class

PRIMARY KEY :class_id

FOREIGN KEY :course_id, staff_id

DESCRIPTION: Used to store details of classes

Sl. No	Field Name	Datatype	Description
1.	class_id	INT(11)	Id of Class
2.	class_data	VARCHAR(500)	Short note about Class
3.	course_id	INT(11)	Id of course
4.	staff_id	INT(11)	Id of Staff

10. TABLE NAME:tbl_tutorial

PRIMARY KEY :tutorial_id

FOREIGN KEY :course_id ,staff_id

DESCRIPTION: Used to store tutorial videos

Sl. No	Field Name	Datatype	Description
1.	tutorial_id	INT(11)	Id of tutorial
2.	tutorial_video	VARCHAR(500)	Video of Tutorial
3.	course_id	INT(11)	Id of course
4.	staff_id	INT(11)	Id of Staff

11.TABLE NAME :tbl_material

PRIMARY KEY: material_id

FOREIGN KEY :course_id ,staff_id

DESCRIPTION :Used to store material details

Sl. No	Field Name	Datatype	Description
1.	material_id	INT(11)	Id of Material
2.	material_name	VARCHAR(100)	Name of Material
3.	course_id	INT(11)	Id of course
4.	staff_id	INT(11)	Id of Staff
5.	material_name	VARCHAR(50)	Material Name

12.TABLE NAME :tbl_classbooking

PRIMARY KEY :classbooking_id

FOREIGN KEY :class_id,user_id

DESCRIPTION: Used to store booking details

Sl. No	Field Name	Datatype	Description
1.	classbooking_id	INT(11)	Id of class booking
2.	class_id	INT(11)	Id of class
3.	user_id	INT(11)	Id of user
4.	booking_status	INT(11)	Status of booking
5.	payment_date	VARCHAR(11)	Date of Payment
6.	payment_status	INT(11)	Status of payment
7.	booking_date	INT(11)	Date of Booking

13.TABLE NAME :tbl_complaints

PRIMARY KEY: cmp_id

FOREIGN KEY: user_id, staff_id

 $\label{lem:details} DESCRIPTION: Used \ to \ store \ complaint \ details$

Sl. No	Field Name	Datatype	Description
1.	cmp _id	INT(11)	Id of complaints
2.	cmp_title	VARCHAR(100)	Title of complaints
3.	cmp_content	VARCHAR(500)	Content of complaints
4.	user_id	INT(11)	Id of user
5.	staff_id	INT(11)	Id of staff
6.	cmp_date	VARCHAR(10)	Date of complaint
7.	cmp_status	INT(11)	Status of complaint
8.	cmp_reply	VARCHAR(500)	Reply to compaint

14.TABLE NAME :tbl_rating

PRIMARY KEY :rating_id

FOREIGN KEY :course_id

DESCRIPTION: Used to store rating details

Sl. No	Field Name	Datatype	Description
1.	rating_id	INT(11)	Id of rating
2.	user_name	VARCHAR(50)	Name of user
3.	user_review	VARCHAR(500)	Review of User
4.	course_id	INT(11)	Id of course
5.	user_rating	INT(11)	Rating by user
6.	review_datetime	DATE	Date of Review

3.3 INPUT DESIGN

Input is the process of converting user inputs computerbased format. The project requires a set of information from the user to prepare a report. In the order, when organized input data are needed.

In the system design phase, the expanded DFD identifies logical data flow, data stores and destination. Input data is collected and organized into groups of similar data. The goal behind designing input data is to make the data entry easy and make it free from logical error. So, the input screens in the system should be really flexible and faster to use. The input entry to all type of user is the Email and password. If they are valid the user is allowed to enter into the Web page.

Objectives:

- To produce a cost-effective method of input
- To achieve the highest possible level of accuracy.
- To ensure that the input is acceptable and understandable
- To make clutter free screens
- The prevention of irrelevant data entry
- To make a user-friendly input screen

Here in my system, 'MeloLink, interactive input screens ensure the reliability and accuracy of the system. The intended input details, user details, course details, class details, fees details, profile details, booking details, etc.

Entry and modification of personal details can be done easily. All data entry screens should be interactive nature. The input design determines whether the user can interact directly with the computer. Without input design, we can say that it is more user friendly as compared to the existing manual system containing paper operations.

3.4 OUTPUT DESIGN

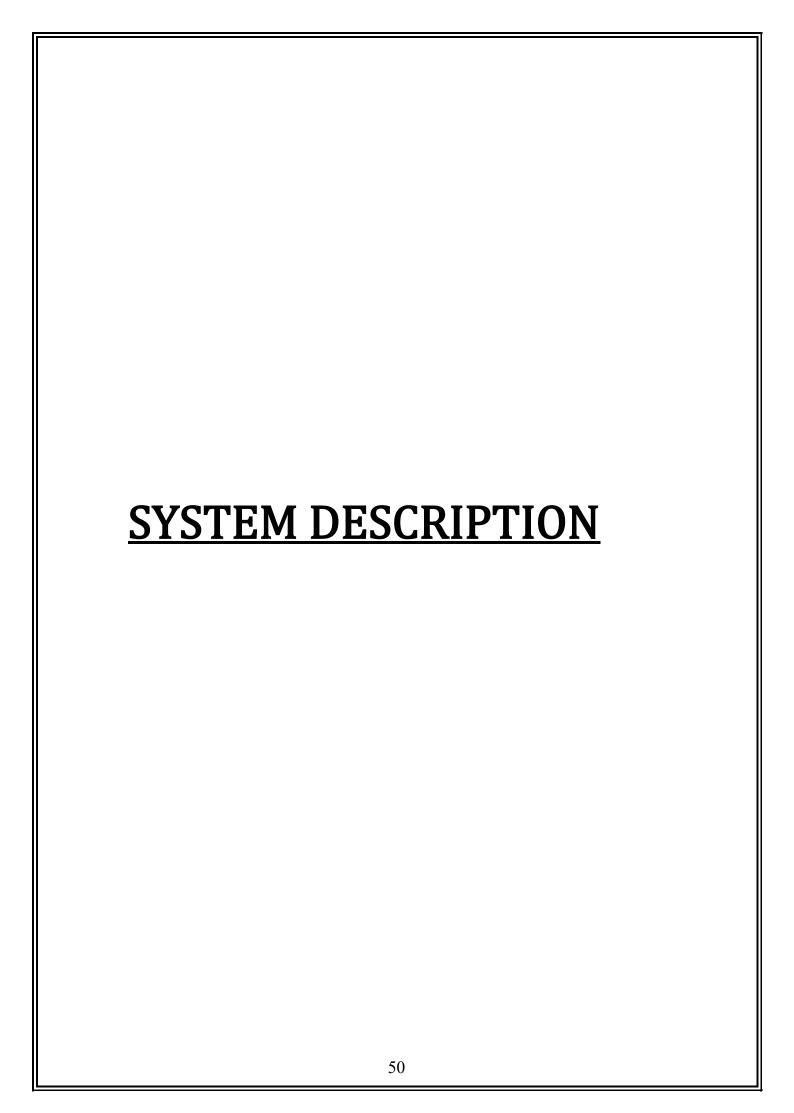
Outputs are the most important direct source of information to the user and to the management. Efficient and eligible output design should improve the system's relationship with the user and help in decision making ..

Output design generally deals with the results generated by the system i.e, reports. These reports can be generated from stored or calculated values. Reports are displayed either as screen window preview or printed form. Most end users will not actually operate the information system or enter data through workstation, but they will use the output from the system.

3.5 MENU DESIGN

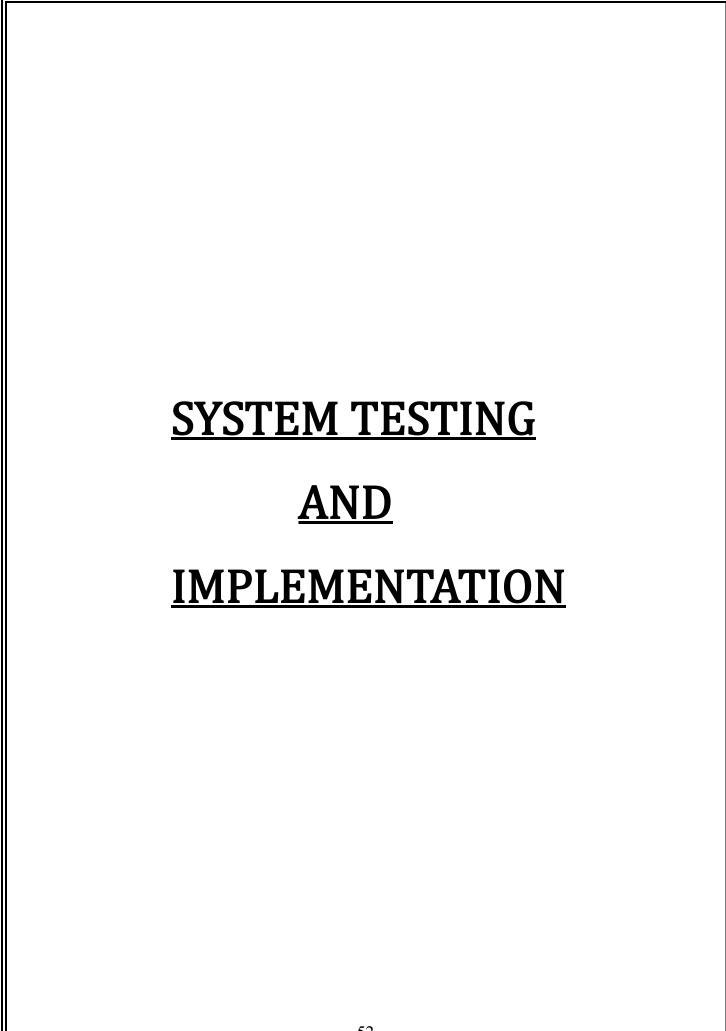
Menus are designed for the manipulation of the screen. Menu is universal interface for any type of environment. The menu allows the user's choice of response but reduce the chances of error in data.

There is a main window, which contain main menu. By using the appropriate menu option we select screens or windows for input data entry. Access protection is achieved through the password. The user can enter into main window only by giving the correct email and password. Menu provides a set of options on the screen. Cursor movements can select the options. The application consists of number of data manipulation screens. By clicking in the options or menu items we can go to the desired form.



4. SYSTEM DESCRIPTION

- Enhanced Online Music Class Experience: Streamline and optimize the process for adding courses and classes by allowing staff members to handle these tasks.
- **Staff Verification**: Admin verifies staff members; approved staff receive email notifications and gain access to add and manage music courses and classes.
- Class Management: Staff members add and manage music classes. Class organizers can edit class details, and students can view relevant information.
- **Virtual Studio Booking**: Users can book available virtual studio slots, and staff members handle the scheduling and billing.
- Music Gallery: Access a gallery for music class and courses, with staff members responsible for updating content.
- Rating and Review Submission: Students can submit rating and Review about the course and teaching techniques.



5. SYSTEM TESTING AND IMPLEMETATION

Software testing is a critical element of system quality assurance and represents the ultimate reviews of specification, design and coding. Testing presents an interesting anomaly for the software. Testing is vital to the success of the system. Errors can be injected at any stage during development. System testing makes a logical assumption that if all the parts of the system are correct, the goal will be successfully achieved.

During testing, the program to be tested is executed with set of test data and the output of the program for the test data is evaluated to determine if the program is performing as expected. A series of testing are performed for the proposed system before the system is ready for the user acceptance testing.

TYPES OF TESTING

- Unit Testing
- Integration Testing
- Validation Testing
- Output Testing

5.1 **SYSTEM TESTING**

5.1.1 UNIT TESTING

Unit testing focuses verification effort on the smallest unit of the software design, the module this is known as module testing. Since the proposed system has modules, the testing is individually performed on each module. Using the details description as a guide, important control paths are tested to uncover errors within the boundary of the modules. This testing was carried out during programming stage itself. In This testing step each module is found to be working satisfactorily as regards to the expected output from the module. In our system, we want to check the information like whether the inputs are saved to back end correctly. So every form includes this testing because we want to maintain our database because information like document to be saved, the personal information, security features are so sensitive and should check it perfectly by each module from the beginning. These are checked in the programming step itself.

5.1.2 INTEGRATION TESTING

Data can be test across an interface, one module can have adverse effect on another, sub function when combined may not produced the desired function. Integration testing is a systematic technique for constructing the program structure while at the same time conducting test to uncover errors associated within the interface. The objective is to take unit tested modules and built a program structure that has been dictated by design. All modules are combined in this testing step. The entire program is tested as a whole. Correction is difficult at this stage because the isolation of causes is

complicated by the vast expense of the program. Thus, in the integration testing step all the errors uncover are corrected for the next testing step. Primarily we have met with several errors like data save and table linking. These are corrected well.

5.1.3 VALIDATION TESTING

At the culmination of integration testing, software is completely assembled as a package. Interfacing errors have been uncovered and corrected and a final series of software test-validation testing begins. Validation testing can be defined in many ways, but a simple definition is that validation succeeds when the software functions in manner that is reasonably expected by the user. Software validation is achieved through a series of tests that demonstrate conformity with requirement. After validation test has been conducted, one of two conditions exists

- The function or performance characteristics confirm to specifications and are accepted.
- A validation from specification is uncovered and a deficiency created.

Deviation or error discovered at this step in this project is corrected prior to completion of the project with the help of the user. Thus, the proposed system under consideration has been tested by using validation testing and found to be working satisfactorily.

5.1.4 OUTPUT TESTING

After performing the validation testing, the next step is output testing of the proposed system since no system could be useful if it does not produce the required output in the specific format. The output generated or displayed by the system under consideration is tested asking the users about the format required by them.

In the first test, we saw that our services are disordered and not interactive. We made it in this step. The output format on the screen is found to be correct as the format designed according to the user needs. For the hard copy also, the output comes out as specified by the user. Hence output testing doesn't result in any connection in the system.

5.2 SYSTEM IMPLEMENTATION

Implementation is the stage in the project where the theoretical design is turned into a working system and is giving confidence on the new system for the users, that it will work efficiently and effectively. It involves careful planning, investigation of the current system and its constraints implementation, design of methods to achieve the change over, an evaluation, of change over methods.

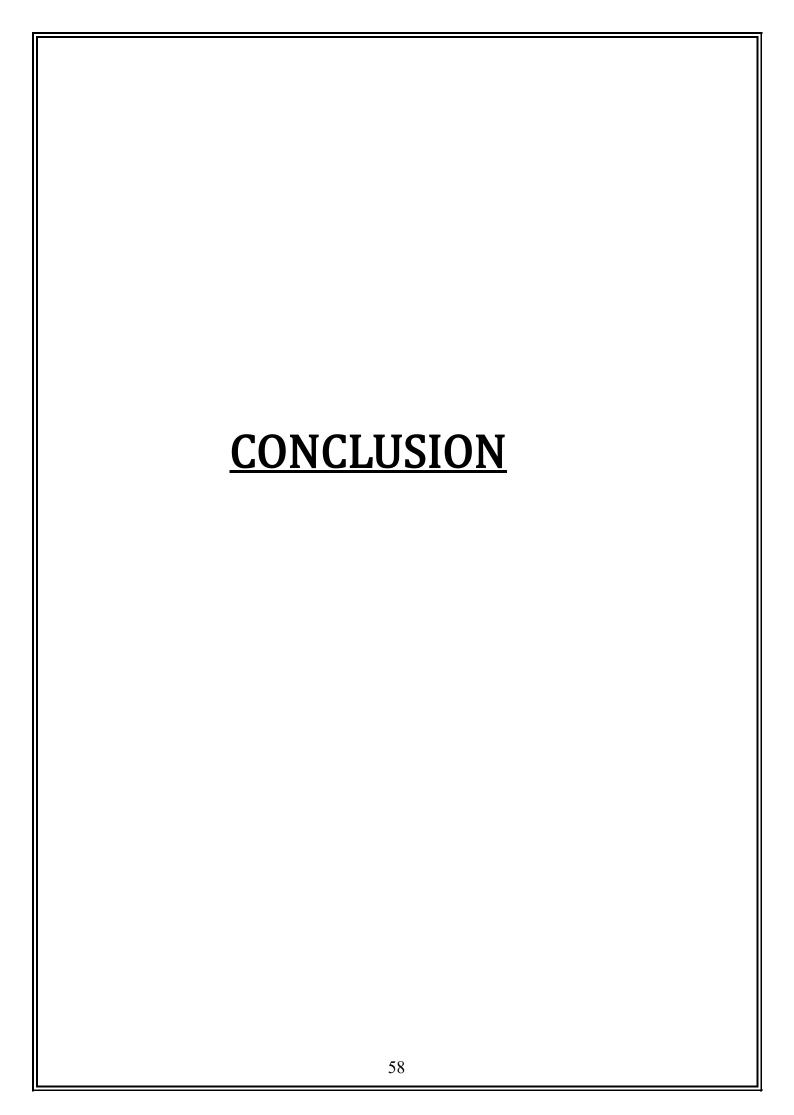
Implementation is the final and important phase. The most critical stage in achieving a successful new system and in giving the users confidence that the new system will work and be effective. The system can be implemented only after through testing is done and if it found to working according to the specification. This method also offers the greatest security since the old system can take over if the errors are

found or inability to handle certain type of transactions while using the new system.

At the beginning of the development phase a preliminary implementation plan is created to schedule and manage the many different activities must be integrated into plan. The implementation plan is updated throughout the development phase, culminating in a changeover plan for the operation phase. The major elements of implementation plan are test plan, training plan, equipment installation plan and a conversion plan.

There are three types of implementations:

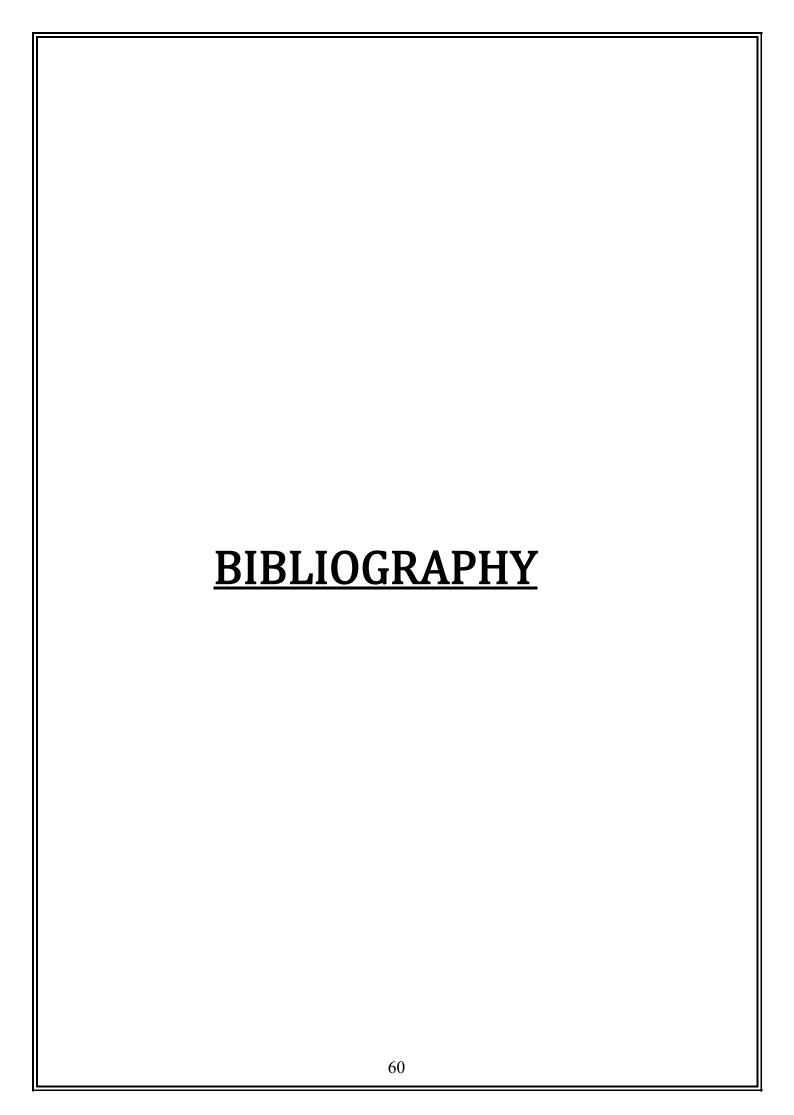
- Implementation of a computer system to replace a manual system.
- Implementation of a new computer system to replace an existing one.
- Implementation of a modified application to replace an existing one, using the same computer.



6. CONCLUSION

The project entitled "MeloLink" was completed on time. This project provided maximum interaction and flexibility. The system was tested and the performance of the system was provided to be much efficient and data maintenance is achieved partially. The system has been developed in attractive fashion. The modules in the system help in faster development, implementation and maintenance of the software. This system has been developed as versatile and user friendly as possible keeping in mind the advanced features. Using HTML, CSS, JavaScript, PHP and MySQL, the system was developed and tested with all possible samples of data. As a whole, the system was well planned and designed. The performance of the system is proved to be efficient. And it already provides all the objectives we have identified before. All modules are tested separately and put together to form the main system. Finally, the system is tested with the real data and everything worked successfully. Thus, the system has fulfilled the entire objective identified. The system required least hardware requirement to work on. So, we can state, we have developed such a good environment for communication, to connect with more people. And it provides a number of advantages too as we described in the previous sections.

To conclude this, we thank all people who help us to complete this project work successfully.



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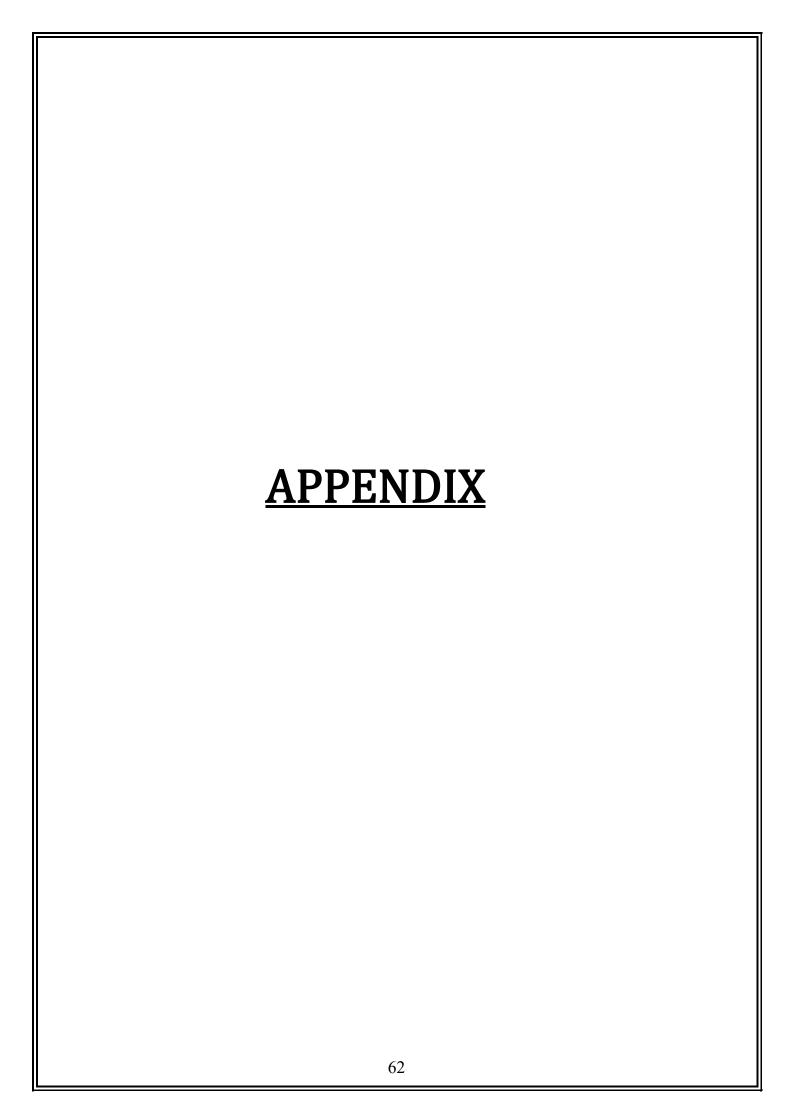
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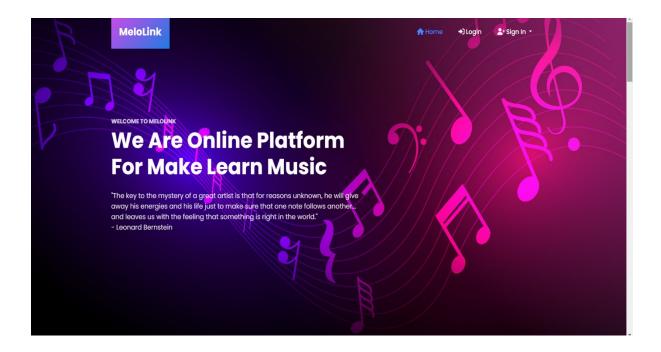
Kalyani publications.



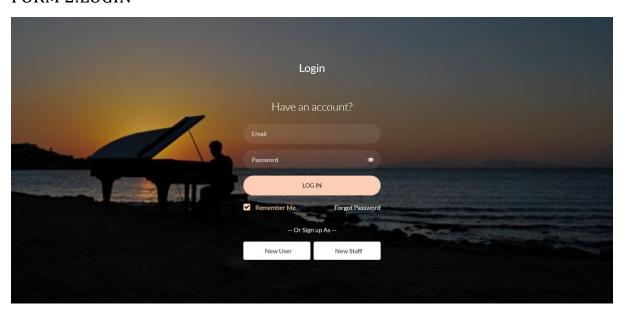
8. APPENDIX

8.1 INPUT FORM DESIGN

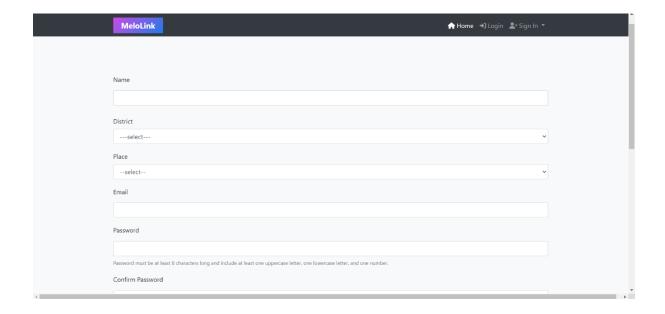
FORM 1: HOMEPAGE



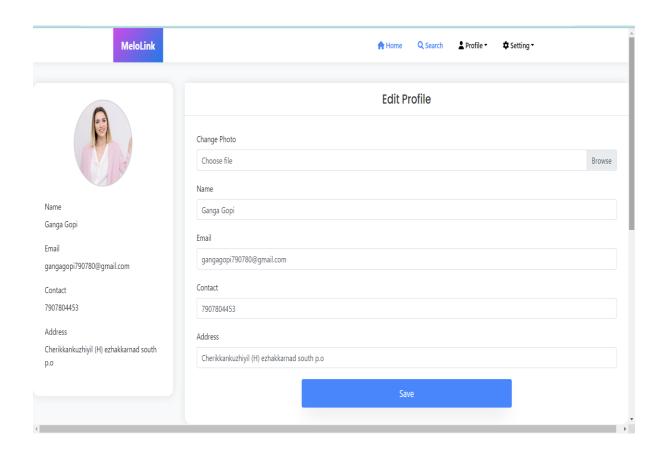
FORM 2:LOGIN



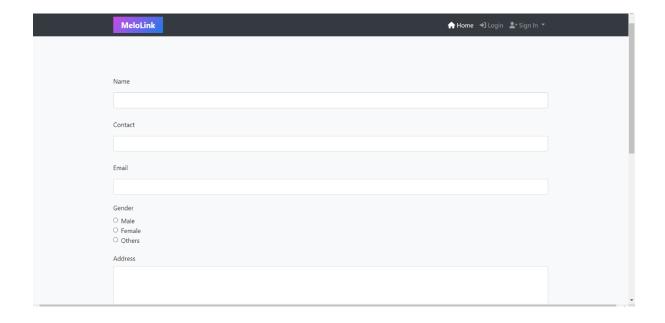
FORM 3: USER REGISTRATION



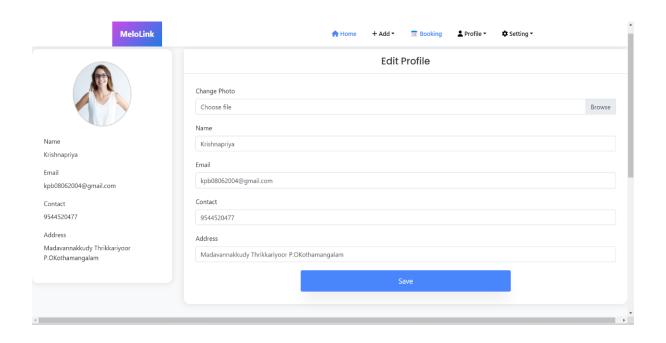
FORM 4: USER EDIT PROFILE



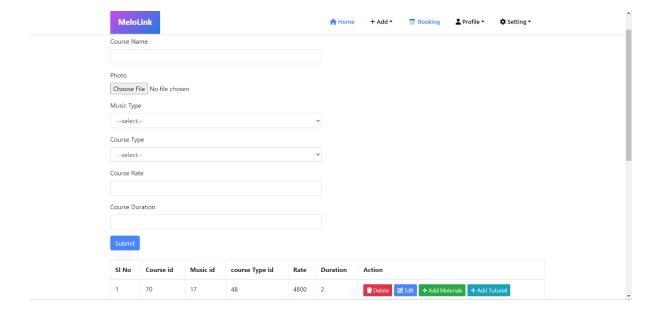
FORM 5: STAFF REGISTRATION



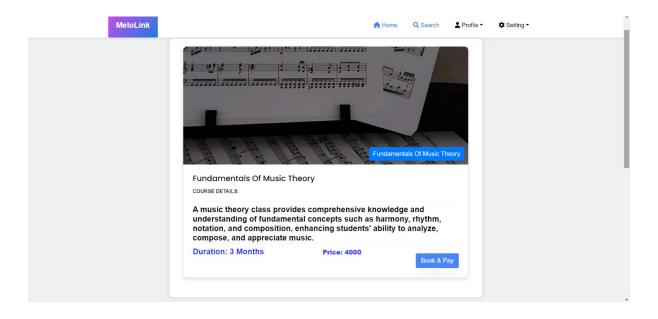
FORM 6: STAFF EDIT PROFILE



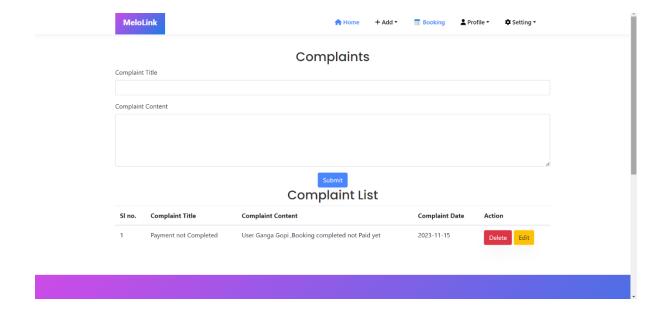
FORM 7: ADD COURSE



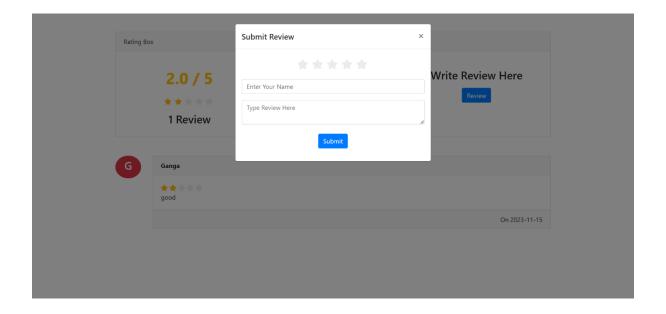
FORM 8: BOOKING



FORM 9: COMPLAINTS



FORM 10: RATING & REVIEW

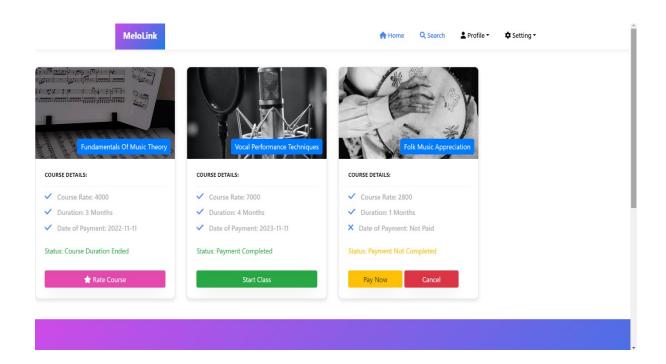


8.1 OUTPUT FORM DESIGN

1: USER HOME PAGE



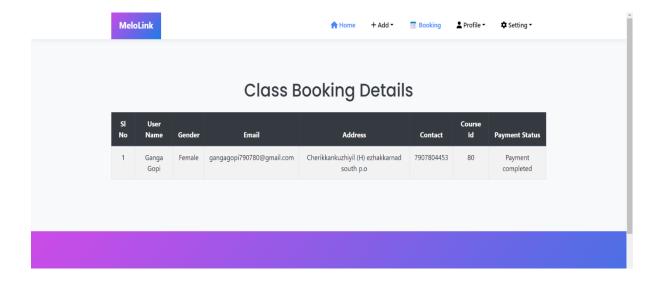
3: MY BOOKING



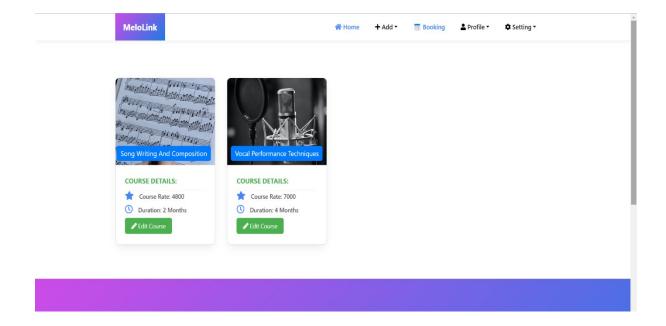
4: STAFF HOME PAGE



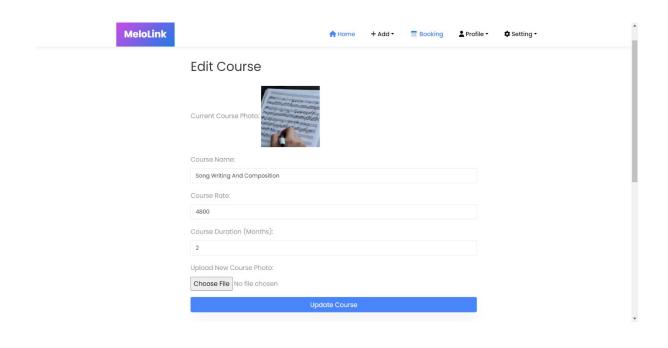
5: BOOKING VIEW



7: MY COURSES



8: EDIT COURSE



9: ADMIN DASHBOARD

