

ONLINE GAMESTORE MANAGEMENT SYSTEM

A Report of the Mini Project Work submitted in Partial fulfilment of the
Requirements for the Degree of
BACHELOR OF COMPUTER APPLICATIONS

Submitted By:

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Under the guidance of

Mr. SHIBU KALLARACKAL, MCA

(Associate Professor-Department of Computer Science)



Department of Computer Science

MAR AUGUSTINOSE COLLEGE

(Affiliated to Mahatma Gandhi University)

Ramapuram-686576

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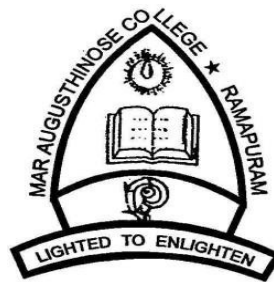
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CERTIFICATE

This is to certify that this Project work entitled **“ONLINE GAMESTORE MANAGEMENT SYSTEM”** is a Bonafede report of the mini project done by **MATHEWS SHAJI, MUZAMMIL IBRAHIM P M, NANDAKISHORE P PRASANAN** under the guidance of Mr. **SHIBU KALLARACKAL, MCA** during the academic year 2020-2023 for the partial fulfilment for the award of the Degree of **Bachelor of Computer Applications (BCA)** from Mahatma Gandhi University, Kottayam.

Mr. Prakash Joseph, MCA (Head of the Department)

Project Guide: Mr. SHIBU KALLARACKAL, MCA

Viva-voice Examination conducted on.....at

Mar Augusthinose College, Ramapuram

Internal Examine

External Examine

Place: Ramapuram

Date: 02/03/2023

DECLARATION

We, the undersigned, **Mathews Shaji, Muzammil Ibrahim P M, and Nandakishore P Prasannan**, declare with utmost sincerity and honesty that the project work entitled "**Online Game Store Management**" was carried out by us under the guidance and supervision of **Mr. Shibu Kallarackal, MCA Associate Professor, Department of Computer Science, Mar Augusthinose College, Ramapuram**. We attest that this project has not been submitted previously to any university or similar institution for the purpose of awarding any degree, diploma, or similar title. We affirm that the content of this project is a true and accurate reflection of our own work, and we take full responsibility for the integrity of the project.

PALCE: RAMAPURAM

DATE: 02/03/2023

ACKNOWLEDGEMENT

Firstly, I thank **God Almighty** whose blessing were always with me and helped me to complete this project work successfully.

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INTRODUCTION

1.1 PROJECT OVERVIEW

Online Game Store Management is the project which allows users to purchase to engage in playing Games. The system is meant to resemble the Gaming platform. The fundamental idea is to have a database where several users can purchase games.

There are mainly 2 modules in this project

- Administrator Module
- User Module.

The main content of the webpage will consist of a list of games with their respective subscription options. Each game will have a thumbnail image, game title, and a brief description. Below each game will be a button for the user to click on to subscribe to that game.

In addition to subscribing to games, the webpage will also allow users to view their current game subscriptions. This section will display a list of the user's subscribed games with options to manage or cancel their subscriptions.

This project provides an admin interface to manage the online game store. The admin is authorized to add new games, edit details about the existing games, and manage sales data. In addition, the admin can manage user accounts and access information about their purchases. This ensures that the admin has full control over the online game store and can make informed decisions to improve user experience and sales.

1.2 ORGANIZATION PROFILE

An Online game store management system is a website designed to help game developers and publishers to manage and sell their video games online. It allows them to share details about their game and sell it through an online platform.

The system typically includes modules for user management, game management, order management. User management allows the administrator to create and manage user accounts. Game management includes features for adding, editing, and deleting games, as well as managing game information, images. Order management allows for tracking and processing of customer orders, and reporting provides sales, user, and game reports.

The system can be accessed through a web-based interface. It is built using PHP, HTML, CSS, JavaScript, and a database management system, such as MySQL.

In summary, an online game store management system provides a comprehensive solution for game developers and publishers to sell and manage their games online, streamlining the process and providing valuable insights into store operations.

SYSTEM CONFIGURATION

System configuration mainly refers to the specification of a given computer system, from its hardware components to the software and various processes that are run within that system. It refers to what types and models of devices are installed and what specific software is being used to run the various parts of the computer system. By extension, system configuration also refers to the specific operating system settings that have been set by default automatically or manually by a given program or the user.

2.1 HARDWARE SPECIFICATION

Minimum Hardware requirement are specified below:

- CPU : Intel(R) Celeron(R) CPU N2820 @ 2.13GHz2.13GHz
- MEMORY : 2GB
- HDD : 500GB
- MONITOR : 15.6 INCH LED MONITOR
- KEYBOARD: 105 KEYBOARD
- MOUSE : 3 BUTTON

2.2 SOFTWARE SPECIFICATION

The Software specifications are:

- OPERATING SYSTEM : Any popular OS
- FRONT-END: HTML, JavaScript, CSS
- BACK-END: MySQL, Apache, PHP
- WEBSERVER: Localhost
- WEB BROWSER: Any Chromium Browser

Operating system is the software responsible for allocating resources, including memory, processor, timer, disk space and peripheral devices such as printer and monitor. All application programs are using the operating system to gain access to the resources, as they are needed. Popular operating systems are WINDOWS, UNIX, and LINUX etc.

The operating system provides certain services to program and to users of these programs such as program execution, input-output operation, calculation, resources allocation etc

SYSTEM ANALYSIS

System analysis is a general term that refers to an orderly, structure process for identifying and solving problems. We call system analysis process lifecycle methodology, since it relates to four significant phases in the lifecycle of all business information system. The life cycle is divided into four phases. They are:

- Study phase
- Design phase
- Development phase
- Implementation phase

Analysis implies the process of breaking something into parts so that the whole may be understood. The definition of the system analysis includes the process of putting together to form a new whole. All active associated with each life cycle phase must be performed, managed, and documented. Hence, we define system analysis as the performance, management, documentation of the activities related to the life cycle phases of a computer-based business system. In the study phase a detailed study of the project is made and clear picture of the project should be in mind by this time. In the design phase the designing of the input, output and table designs are made. Development phase is where the physical designing of the input-output screens and coding of the system is done. System implementation actually implements the system by making necessary testing.

3.1 PRELIMINARY INVESTIGATION

The first stage of any project, sometimes called the preliminary assessment, is a brief investigation of the system under consideration. This is the critical process of information development.

Preliminary investigation is a problem-solving activity that requires intensive communications between the system users and system developers. It does various feasibility studies. In these studies, a rough figure of the system activities can be obtained, from which decisions about the strategies to be followed for effective system study and analysis can be taken

At preliminary investigation an initial picture about the system working is got from the information got from the study, the data collection methods were identified. Right from the investigation about the system many existing drawbacks of the system could be identified, which helped a lot in the later stages of more rigorous study and analysis of the manual system.

The most critical phase of managing system projects is planning. To launch a system investigation, we need a master plan detailing the steps to be taken, the people to be questioned and the outcome expected.

For the "Online Game Store Management" project, the following are the steps involved in the preliminary investigation:

1. Identify the problem: The first step is to identify the problem and determine the need for an online game store management system. This involves conducting a thorough analysis of the gaming industry, identifying the gaps in the market, and determining the potential benefits

of an online game store management system.

2. Define the objectives: The next step is to define the objectives of the project. This involves identifying the goals that the project intends to achieve, such as improving sales, providing better customer service, and streamlining business processes.
3. Determine the scope: The scope of the project defines the boundaries of the project. This involves determining the specific functionalities of the online game store management system, such as game subscription management, game catalog, and sales management.
4. Identify the constraints: The constraints refer to the limitations and challenges that the project team may encounter during the project. These constraints can include time, budget, technical expertise, and resources.
5. Analyze the stakeholders: Finally, the preliminary investigation involves analyzing the stakeholders of the project. This involves identifying the different groups of people who will be impacted by the project, such as customers, game developers, and the project team. It is essential to understand their needs, interests, and concerns to ensure the success of the project.

Overall, the preliminary investigation provides a clear understanding of the project's feasibility and helps to define the project's scope, objectives, and constraints. It is an important step that sets the foundation for the project and

helps to ensure that the project is aligned with the needs of the stakeholders and the business goals.

3.2 EXISTING SYSTEM

System Analysis is a detailed study of the various operations performed by a system and their relationships within and outside of the system. Here the key question is- what all problems exist in the present system? What must be done to solve the problem? Analysis begins when a user or manager begins a study of the program using existing system.

During analysis, data collected on the various files, decision points and transactions handled by the present system. The commonly used tools in the system are Data Flow Diagram, interviews, etc. Training, experience and common sense are required for collection of relevant information needed to develop the system. The success of the system depends largely on how clearly the problem is defined, thoroughly investigated and properly carried out through the choice of solution. A good analysis model should provide not only the mechanisms of problem understanding but also the framework of the solution. Thus, it should be studied thoroughly by collecting data about the system. Then the proposed system should be analysed thoroughly in accordance with the needs.

System analysis can be categorized into four parts.

- System planning and initial investigation
- Information Gathering
- Applying analysis tools for structured analysis
- Feasibility study
- Cost/ Benefit analysis.

The existing system for the Online Game Store includes physical and online game stores that are not integrated into a centralized system. Offline stores are not accessible to all due to geographical limitations. To solve this problem, the proposed system aims to create an online game store that provides a centralized platform for customers to purchase games from anywhere in the world. The system will allow users to browse a list of games, subscribe to their preferred games, and view their subscription history. The proposed system will also provide the store admin with a platform to manage game inventory, track sales data, and manage user subscriptions.

The lack of a centralized system in the existing system leads to difficulty in managing game inventory and sales data. The proposed system will utilize the existing online game store infrastructure and integrate it into a centralized system. This will provide customers with a more efficient and convenient way to purchase games while also allowing the store admin to manage inventory and sales data more effectively. Overall, the proposed system aims to improve the user experience while also increasing the efficiency and effectiveness of the store's operations.

3.3 PROPOSED SYSTEM

In our proposed system we have the provision for adding the details of the user by himself. So, the overhead of the entering the game details becomes less. Another advantage of the system is that it is very easy to edit the details of the games and delete the details when it is found unnecessary. The game details are added in the database and so the agency can also view the game details whenever they want.

Our proposed system has several advantages

- User friendly interface
- Fast access to database
- Less error
- Look and Feel Environment
- Quick transaction

All the manual difficulties in managing the game details in a game store have been rectified by implementing computerization.

3.4 FEASIBILITY ANALYSIS

Whatever we think need not be feasible. It is wise to think about the feasibility of any problem we undertake. Feasibility is the study of impact, which happens in the organization by the development of a system. The impact can be either positive or negative. When the positives nominate the negatives, then the system is considered feasible. Here the feasibility study can be performed in three ways such as technical feasibility and Economical Feasibility.

3.4.1 Technical Feasibility:

We can strongly say that it is technically feasible, since there will not be much difficulty in getting required resources for the development and maintaining the system as well. All the resources needed for the development of the software as well as the maintenance of the same is available in the organization here we are utilizing the resources which are available already.

Technical feasibility centres around the existing system and to what extend it can support the proposal addition. It involves manual consideration to accommodate technical enhancements. If the budget is serious constraint, then the project is judged not feasible. The development of system in technology will have the following advantages.

1. New system needs less storage space.
2. It can produce quick and up-to-date error free reports.
3. It avoids data inconsistency.
4. It provides full security on confidential data.

3.4.2 Economic Feasibility

Development of this application is highly economically feasible. The organization needed not spend much money for the development of the system already available. The only thing is to be done is making an environment for the development with an effective supervision. If we are doing so, we can attain the maximum usability of the corresponding resources. Even after the development, the organization will not be in condition to invest more in the organization. Therefore, the system is economically feasible

3.4.3 Behavioural Feasibility

People are inherently resistant to the changes and the computers have been made of how strong a reaction the user staff is likely to have towards the development of a computerized system. The hierarchy of the

new system is very easier than the existing system. The new system is user friendly and operational cost is bearable. The maintenance and working of the new system need less effort

3.5 ADVANTAGES OF PROPOSED SYSTEM

- ❖ Improved User Experience
- ❖ Increased Efficiency
- ❖ Enhanced Security
- ❖ Better Data Analytics
- ❖ Increased Sales
- ❖ Improved Inventory Management
- ❖ Scalability

3.5 REQUIREMENT SPECIFICATION

The software requirement specification is produced at the culmination of the analysis task. The function and performance allocated to software as a part of system engineering and refined by establishing a complete information description, a detailed functional description a representation of system behavioural indication of performance requirements and design constraints, appropriate validation criteria, and other information pertinent to requirements. The introduction of the software requirements specification states the goal and objectives of the software, describing in the context of the computer-based system. The information description provides a detailed description of the problem that the software must solve. Information content,

flow and structure are documented. Hardware, software and human interfaces are described for external system elements and internal software functions. A description of each function required to solve the problem is presented in the function description. A processing narrative is provided for each function, designs constraints are stated and justified, performance characteristics are stated, and one or more diagrams are included to graphically represent the overall structure of the software and interplay among Software Functions and other system elements. The behavioural description section of the specification examines the operation of the software a consequence of external events and internally generated control characteristics. Validation criteria is probably the most important and, ironically the most often neglected section of the software requirement specification of validation criteria acts as an implicit review of all other requirements.

Finally, the specification includes a bibliography and appendix. This bibliography contains references to documentation that relate to the software. The Appendix contains information that supplements the specification

PHP

PHP means - Personal Home Page, but it now stands for the recursive backronym PHP: Hypertext Pre-processor is a widely used open-source general-purpose scripting language that is especially suited for web development and can be embedded into HTML.

The best things in using PHP are that it is extremely simple for a newcomer but offers many advanced features for a professional programmer. Although PHP's development is focused on server-side scripting.

PHP is a server-side scripting language that is used to develop Static websites or Dynamic websites or Web applications. PHP code may be embedded into HTML code, or it can be used in combination with various web template systems, web content management system and web frameworks. Following are some of the benefits or features of PHP:

- PHP is open source and free.
- Short learning curve compared to other languages such as JSP, ASP etc.
- Large community document.
- Most web hosting servers support PHP by default unlike other languages such as ASP that need IIS. This makes PHP a cost-effective choice.
- PHP is regular updated to keep abreast with the latest technology trends.
- Other benefit of PHP is that it's a server-side scripting language; this means we only need to install it on the server and client computers requesting for resources from the server do not need to have PHP installed; only a web browser would be enough.
- PHP is cross platform; this means we can deploy our application on a number of different operating systems such as windows, Linux, Mac OS etc.
- PHP has in built support for working hand in hand with MySQL; this doesn't mean we can't use PHP with other database management systems. We can still use PHP with
 - Postgres
 - Oracle
 - MS SQL Server
 - ODBC etc.

MySQL Server

MySQL is an open-source relational database management system (RDBMS). Its name is a combination of "My", the name of co-founder Michael Wideness'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, Wideness 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, php, and WordPress. MySQL is also used by many popular websites, including Facebook, Flickr, Media-Wiki, Twitter, and YouTube.

SYSTEM DESIGN

4.1 INTRODUCTION

System design is the solution for the creation of a new system. This phase focuses on the detailed implementation of the feasible system. It emphasizes on translating design specifications to performance specification. System design has two phases of development

- Logical design
- Physical design

During logical design phase the analyst describes inputs (sources), outputs (destinations), databases (data stores) and procedures (data flows) all in a format that meets the user requirements. The analyst also specifies the needs of the user at a level that virtually determines the information flow in and out of the system and the data resources. Here the logical design is done through data flow diagrams and database design. The physical design is followed by physical design or coding. Physical design produces the working system by defining the design specifications, which specify exactly what the candidate system must do. The programmers write the necessary programs that accept input from the user, perform System design is the process of defining the architecture, components, modules, interface and data for a system to satisfy specified requirements. It is a solution to an approach compared to system analysis which is "what is" orientation. System requirements into way of making them operational. The design phase focuses on detailed implementation of the system recommended in the feasibility study. Planning of system or to replace or complement an existing system. But before this, planning should be done. It must be thoroughly understood about the old system and determine how computers can make its operations more effective. The importance of system design is the quality. Design is the place where quality is fostered in the software

development. Design representation of software provides us with that can be assessed for quality. System design is a transaction from a user-oriented documents to a programmer or database personal. It is a creative activity in both art and technology. It involves the following procedures, they are

1. Database Design
2. Input Design
3. Output Design

4.2 DATABASE DESIGN

A database is a collection of interrelated data stored with minimum redundancy to serve many users quickly and efficiently. It is the process of designing the database file, which is the key source of the information in the system. The general objective of database design is to make the data access easy; storage and it contribute to the overall efficiency of the system.

Database design is one of the important parts on developing software. It is a process of developing the conceptual model of data. It minimizes the artificially embedded in using separate files. It is a definition of the entire information content of the organization and it species a relationship between the data. The primary objective are fast response time to inquiries, more information cost, control of redundancy, clarity and ease of use ,at low program independence, accuracy and integrity of the system, fast recovery and privacy and security of information and availability of powerful end user languages.

Primary key

The key which is to identify records. Also uniquely notify the not null constraints.

Foreign key

The key which references the primary key, is the data inserted in the primary key column of the table.

Normalization

After the conceptual level, the next level of process of database design to organize to base structure into a good shape called normalization. The normalization simplifies the entries,

removing redundancies from the system data and finally builds a data structure, which is both flexible and adaptable to the system.

In the database design, we create a database with different tables that is used to store data. We normalize the data in the table. Database normalization is the process of organizing data. We use fields and tables in a relational database to minimize redundancy and dependency. Normalization usually involves dividing large tables into smaller tables and defining relationships between them. The objective is to isolate data so that additions, deletions and modifications of a field can be made in just one table and then propagated through the rest of the database via the defined relationships. In the project we have made use of the 3rd normal form (3NF) is a property of database tables. A relation is in 3rd normal form if it in second normal form and there are no functional dependencies between two (or more) non-primary key attributes.

Database is an integrated collection of data. This is the difference between logical and physical data in our project we have made use of tables which are stored in the database named database. Values that are generated by the application.

The tables are used to store the Id and the key constraints of all the tables are shown below in detail:

4.3 TABLES

The tables used in this project are mentioned below.

1. Table name : admin_login

Description: used to store the login details

FIELD NAME	DATA TYPE	CONSTRAINTS	SIZE	DESCRIPTION
Admin_Id	Int	Primary key	10	Specifies admin id
Admin_Name	Varchar	Not Null	25	Specifies admin name
Admin_Password	Varchar	Not Null	15	Specifies admin password

2. Table name : user

Description : used to store the login details of the users.

FIELD NAME	DATA TYPE	CONSTRAINTS	SIZE	DESCRIPTION
id_client	Int	Primary key	10	Specified user id
name	Varchar	Not Null	100	Specifies user name
email	Varchar	Not Null	100	Specifies user email address
pass	Varchar	Not Null	25	Specifies the password

3. Table name : products

Description : used to store the details of the products.

FIELD NAME	DATA TYPE	CONSTRAINTS	SIZE	DESCRIPTION
id_product	Int	Primary key	10	Defined the product id
pname	Varchar	Not Null	100	Specifies the product name
price	Int	Not Null	10	Specifies the price
photo	Varchar	Not Null	25	Image of the product
genre	Varchar	Not Null	25	Specifies the product genre
console	Varchar	Not Null	25	Specifies the supported console for the product
descp	Varchar	Not Null	1000	A small description about the product

4. Table name : sales

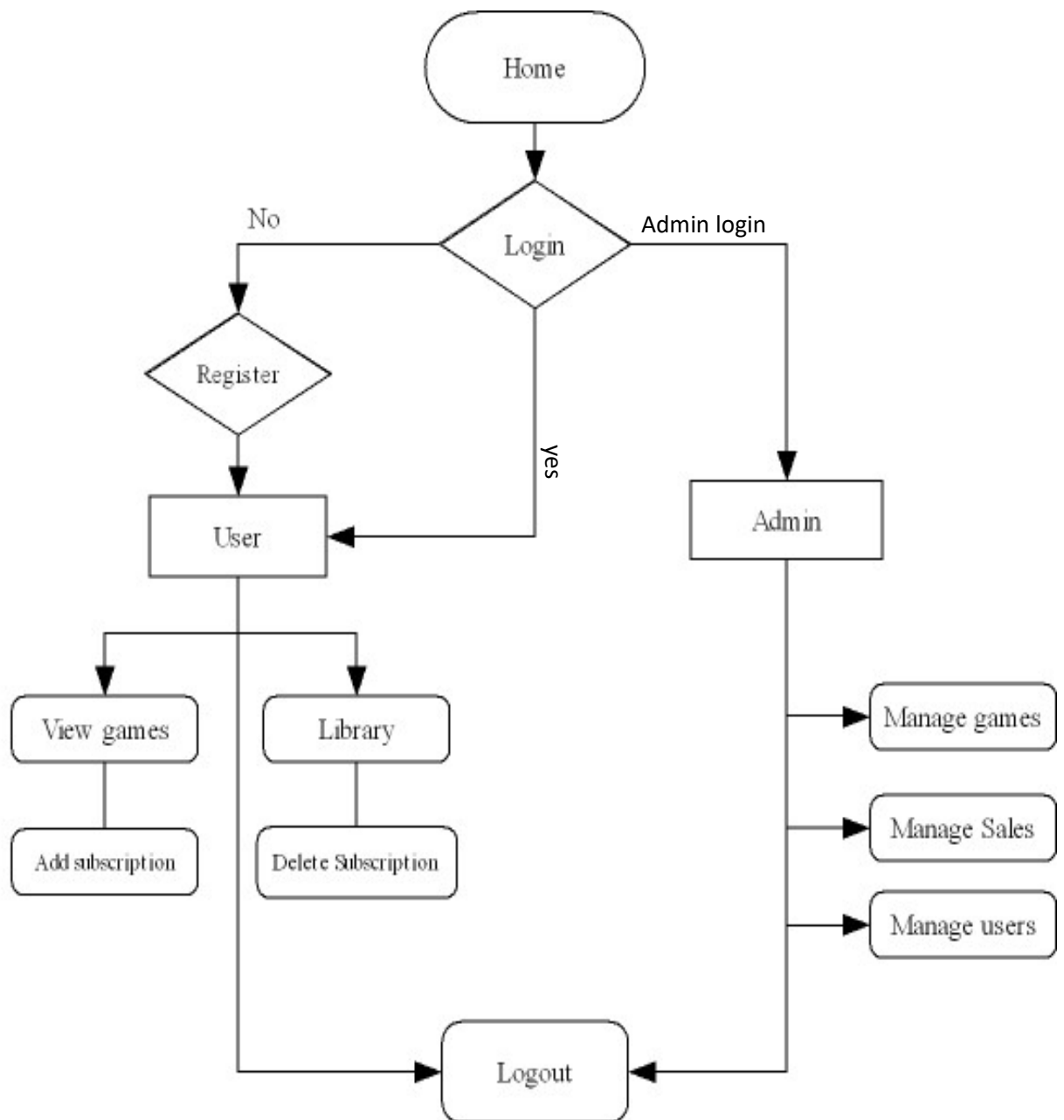
Description : Used to store the uploaded items

FIELD NAME	DATA TYPE	CONSTRAINTS	SIZE	DESCRIPTION
Id_sale	Int	Primary Key	10	Specifies sale id
datesale	Date	Not Null	6	Specifies date of the sale
price	Double	Not Null	16,4	Specifies the price of the product
idclient	Int	Foreign Key	10	Specifies the id of the customer
idproduct	Int	Foreign Key	10	Specifies id of the product

4.4 SYSTEM FLOWCHART

The flowchart is a graphic technique specifically developed for using dataflow. The flowchart is a pictorial representation that uses predefined symbols to describe dataflow of a system about its logic. Flowcharts were first used in the early 20th century to describe engineering and manufacturing systems. With the rise of computer programming, the system flowchart has become a valuable tool for depicting the flow of control through a computer system and where decisions are made that affect the flow.

Computer programming requires careful planning and logical thinking. Programmers need to thoroughly understand a task before beginning to code. System flowcharts were heavily used in the early days of programming to help system designers visualize all the decisions that needed to be addressed. Other tools have since been introduced that may be more appropriate for describing complex systems. One of these tools is pseudocode, which uses a combination of programming language syntax and English-like natural language to describe how a task will be completed. Many system designers find pseudocode easier to produce and modify than a complicated flowchart. However, flowcharts are still used for many business applications.



System flowchart : Online Game store Management System

4.5 DATA FLOW DIAGRAM

The data flow diagram (DFD) is one of the most important tools used by system analysis. A DFD is also known as "Bubble Chart" has the purpose of clarifying system requirements and identifying major transformations that will become programs in system design phase. So it is the starting point of the design phase that functionally decomposes the requirement specifications down to the lowest level of detail. Data flow diagrams are made up of several symbols, which represent system components. Most data flow modeling methods use four kinds of symbols. These symbols used to represent four kinds of the system components. Processes, data stores, data flows and external entities. Circles in DFD represent processes. Data flow is represented by a thin line in the DFD and each data store has a unique name and square or rectangle represents external entities.

Constructing a DFD

Several rules of thumb are used in drawing a DFD. Process should be named and numbered for easy reference. Each name should be representative of the process.

The direction of flow is from top to bottom and left to right. When a process is exploded into lower-level details, they are numbered. The names of data stores, sources and destinations are written Process and data flow in capital letters. Names have the first letter of each word capitalized.

To construct a DFD we use,

- Arrow
- Circles
- Pen Ended Box
- Squares

An arrow identifies the data flow in motion. It is pipeline through which information is flown like the rectangle in the flow chart. A circle stands for process that converts data into information. An open-ended box represents a data store, data at rest or a temporary repository of data. A square defines a source or destination of system data.

Five rules for constructing a DFD

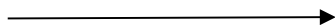
- ❖ Arrows should not cross each other
- ❖ Squares, circles and files must be names
- ❖ Decomposed data flow squares and circles can have same names.
- ❖ Choose meaningful names for data flow
- ❖ Draw all data flows around the outside of the diagram.

Symbols used in a DFD

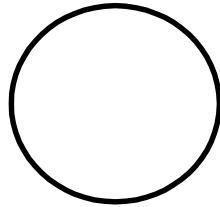
1. A Square defines source or destination of data.



2. An Arrow shows dataflow.



3.A Circle represents a process that transforms incoming data into outgoing data flows



4.An Open rectangle shows a datastore

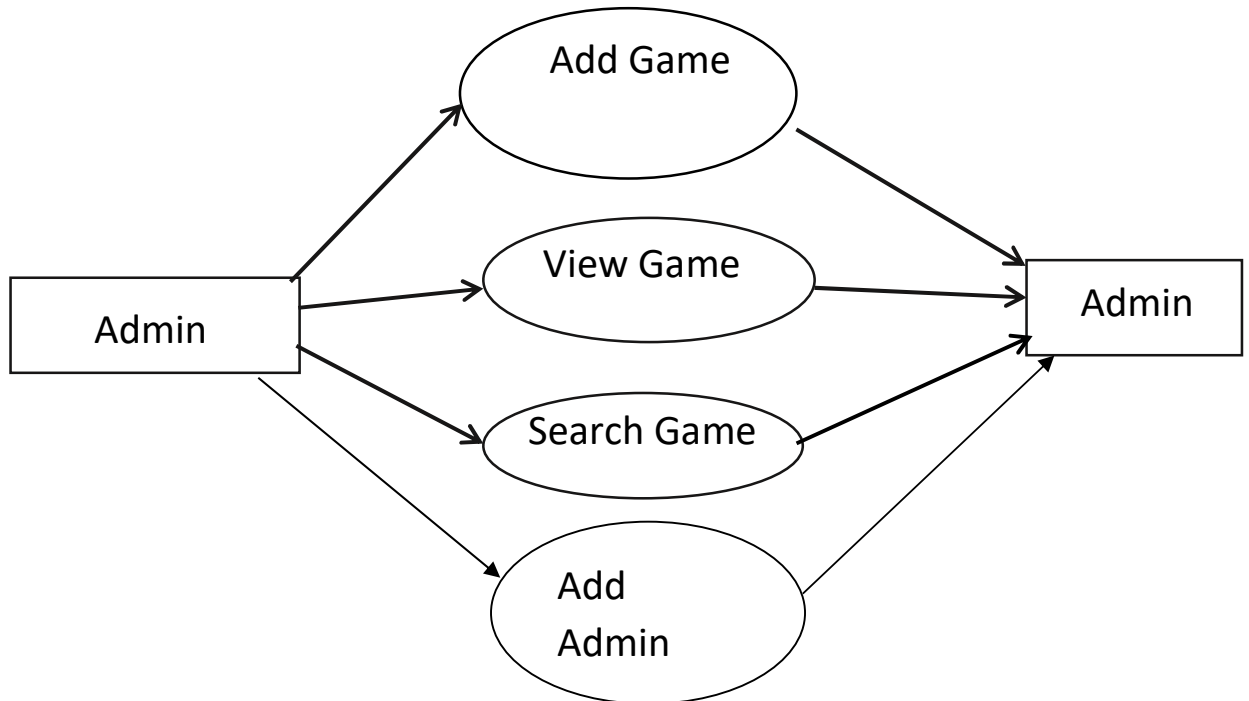


DFD OF THE PROJECT

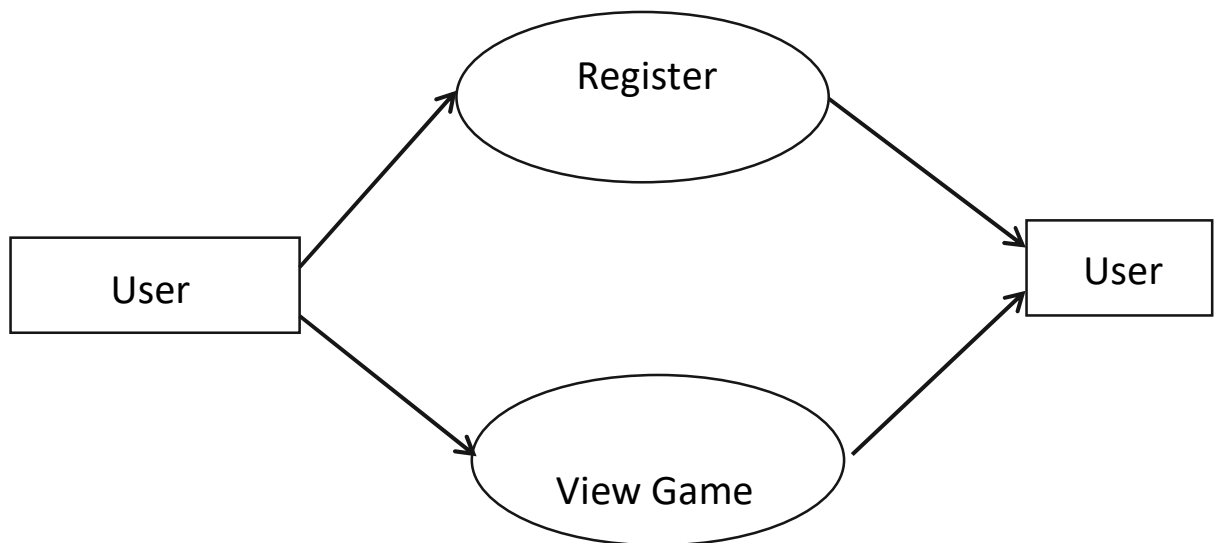
CONTEXT DIAGRAM



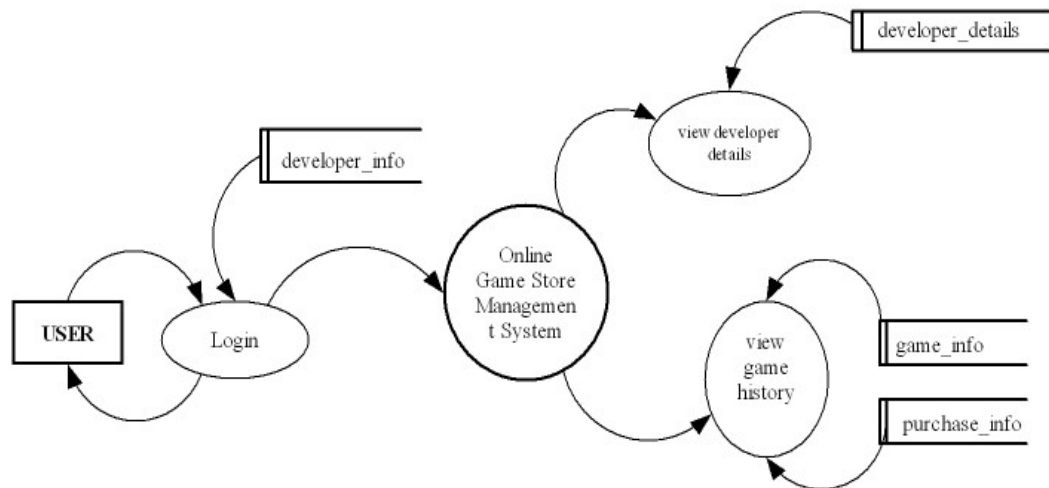
LEVEL 1 DFD FOR ADMIN



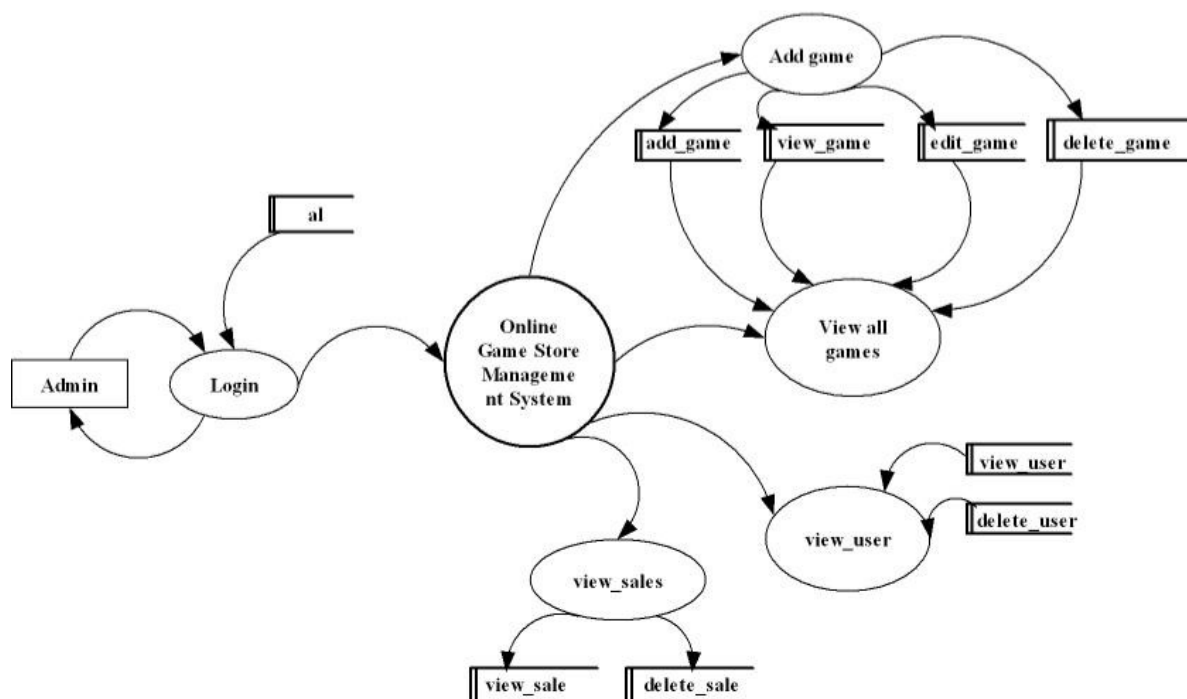
LEVEL 1 DFD FOR USER



LEVEL 2 DFD FOR USER



LEVEL 2 DFD FOR ADMIN



4.6 INPUT DESIGN

Input design is one of the most expensive phases of the operation of computerized system and often the major problem of a usually. A larger number of problems with a system can be traced back to fault input design and methods. Therefore, that output data is the block of a system and has to be analysed and designed consideration.

It is the process of converting the user-oriented description of into a computer-based business information system inputs of input design is to create to a programmer oriented specification. An input layout that is easy to follow and prevent operator. It covers all phases of input from creation of initial data into actual entry of the data to the system for processing. The input design is the link that ties the system into world of its users. The user interface design is very important for any application. The interface design defines how the software communication within itself, to system that interpreted with it and with human who use it. The goal of designing input data is to make the automation as easy and free from errors as possible. For providing a good input design for the application easy data input and selection features are adopted.

The input design requirements such as user friendliness, also considered for the development of the project. At right time are Requirements of Form Design:

- Identification and wording.
- Maximum readability and use
- Physical factors
- Order of data items.
- Easy of data entry

- Size and arrangement.
- Use of instructions.

ENDGAME
GAMING THEME

Home Games addgames Sales view users admin Logout

Add Game

Home / Add Game

GAME NAME

GENRE

CONSOLE

DESCRIPTION

LOGIN/REGISTRATION

Let's PLAY

Login

AdminLogin

Register Here

Username

Email

Password

Confirm Password

Register

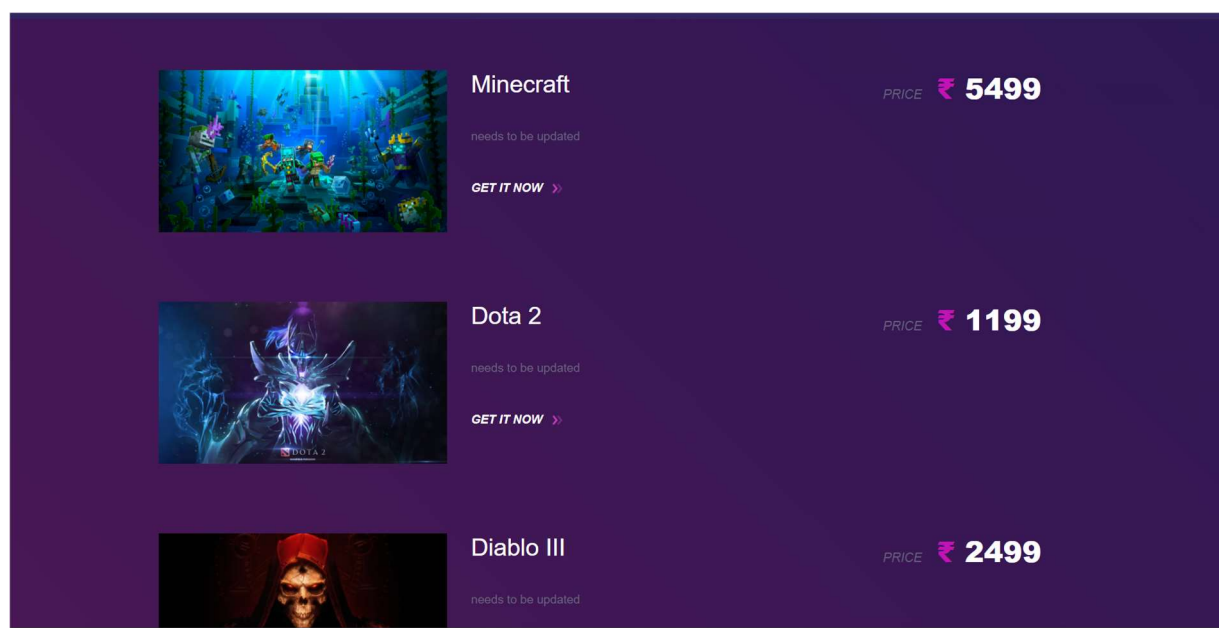
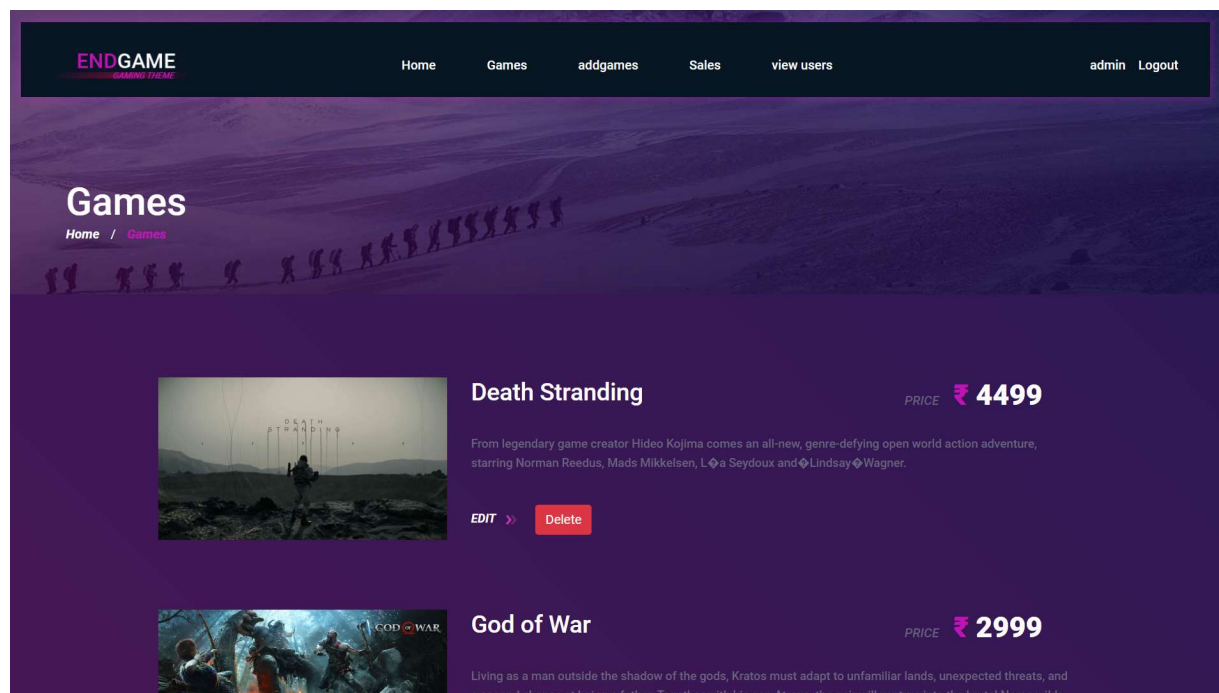
4.7 OUTPUT DESIGN

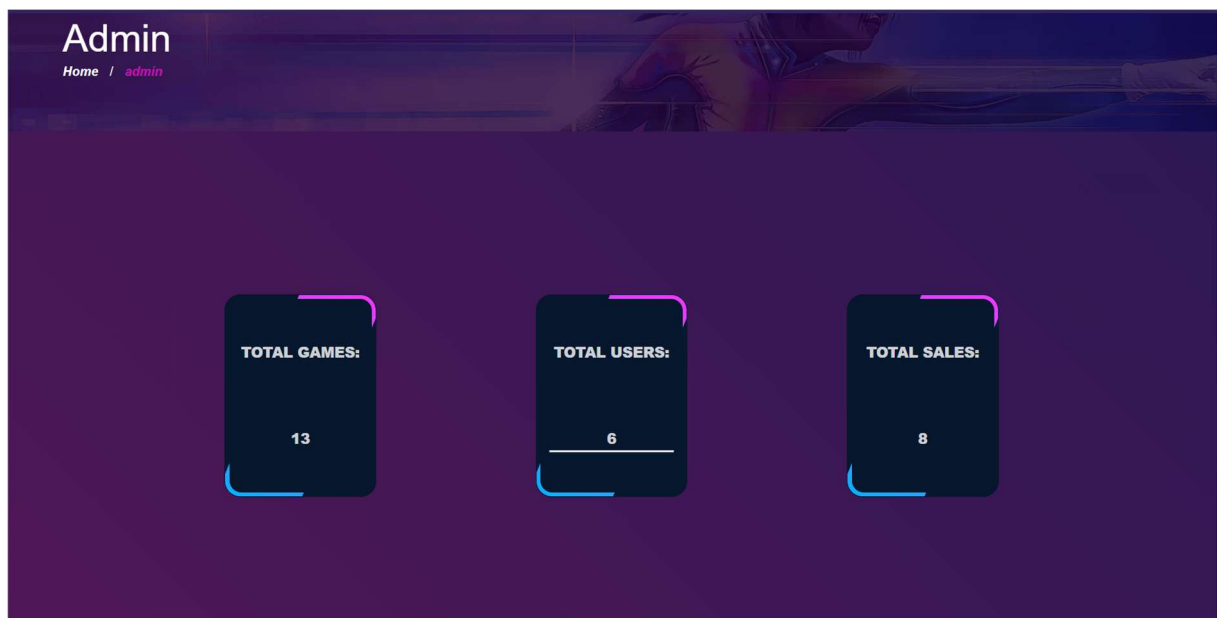
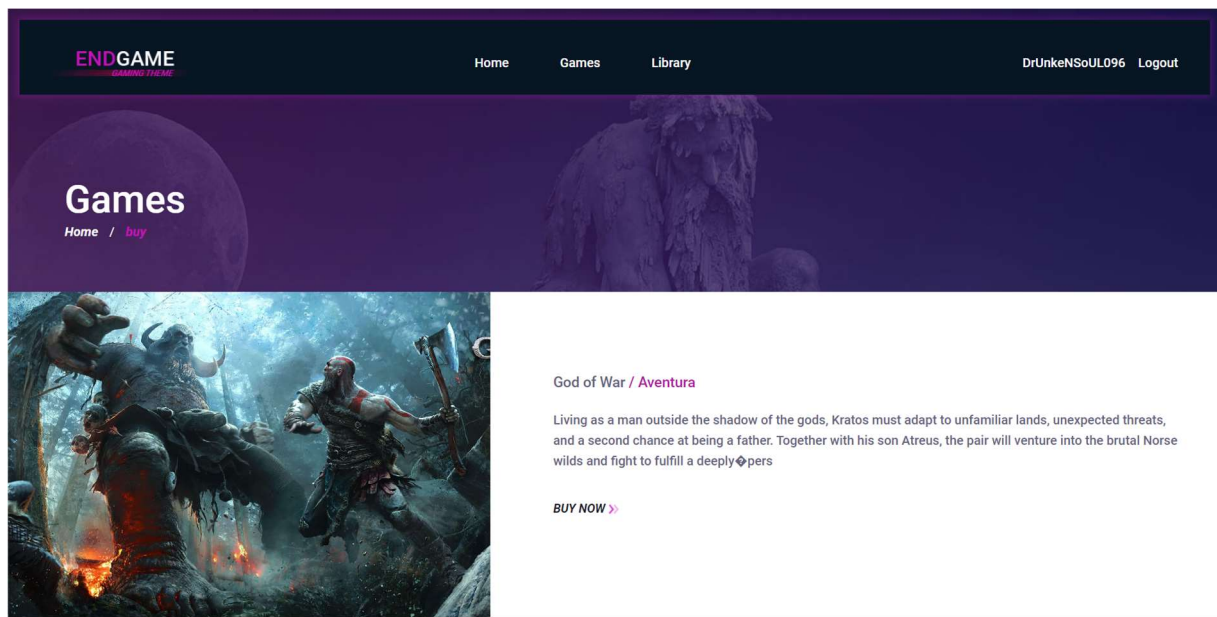
A quality output is one, which meets the requirements of the end user and presents the information clearly. In any system results of processing are communicated to the user and to the other systems through outputs. In the output design it is determined how the information is to be displayed for immediate need and also the hard copy output. It is the most important and direct source information to the user. Thus, output design generally refers to the result and information that are generated by the system.

For many ends users' output is the main reason for developing the system and the basis on which they are evaluate the usefulness of application. The objective of a system finds its shape in terms of the output. The analysis of the objective of the system leads to determination of outputs. Outputs of a system can take various forms. The most common are reports, Screens, Printed form, Animations etc. The outputs also vary in terms of their contents, frequency, timing, and format. The users of the output, its purpose and sequence of details to be all considered. The output forms a system in the justification for its existence. If the outputs are inadequate in anyway, the system itself is inadequate.

The basic requirements of output are that it should be accurate, timely and appropriate, in terms of content, medium and layout for its intended purpose. Hence it is necessary to design output so that the objectives of the system are met in the best possible manner. The outputs are in the form of reports When designing output, the system analyst must accomplish things like, to determine what information to be present, to decide whether to display or print the information and select the output medium to distribute the output to intended recipients.

The output is the most important and direct source of information to the user. So, it should be provided in a most efficient formatted way. An efficient and intelligent output of the system improves the relationship between the user and the system and help in decision making.





SYSTEM DEVELOPMENT

5.1 INTRODUCTION

An online game store management system is a platform that allows businesses to sell and distribute video games through the internet. This system streamlines the process of managing the store, including product catalogue management, order processing, inventory management, customer relationship management, and financial reporting.

A well-designed online game store management system can significantly improve the efficiency and profitability of a business. It can reduce the amount of manual work involved in managing the store and allow the store owner to focus on other aspects of the business.

5.2 MENU LEVEL DESCRIPTION

The project development to assist the users in minimizing the time and manpower required to manage the data in an organization, this project is a modular template system with the unique distinction of having a simple, user-friendly environment. This means users do not need any programming knowledge. A set of templates will be defined in the software to create an initial view, she/he can then use the simple management interface to control the software and perform their own activities.

5.3 PROCESS SPECIFICATION

The development process for an online game store management system should be iterative and flexible, allowing for changes and improvements to be made as needed. The goal of the process is to create a system that is user-friendly, efficient, and reliable, and that meets the needs of the business and its customers.

SYSTEM TESTING

Final testing performed is the system testing. After all modules are integrated to our system, system is checked for completeness. Here system will be free of syntactic errors, we mainly focused to find out the uncover requirements.

6.1 TESTING METHODS

In a software development project, errors can be injected at any stage during the development. Testing performs a very critical role for quality and for ensuring the reliability of software. During testing, the program to be tested is executed with set of test cases, and the output of the program for the test cases is evaluated to determine if the program is performing as it is expected to. Testing is vital to the success of the system. System testing makes logical assumption that if all the parts of the system are correct, we have achieved the mission successfully. System testing is the stage of implementing that is aimed at assuring that the system works accurately and efficiently before the live operation commences.

The main objective of testing is to uncover errors from the system. For the uncovering process we have to give proper input data to the system. So, we should have more conscious to give input data. It is important to give correct inputs to efficient testing. The Game Management System Software was tested and found to be working as expected. There was no abnormal behaviour reported during the testing of the program.

6.2 TEST PLAN ACTIVITIES

UNIT TESTING

The Game store management System Software was divided into several units and tested individually. Each unit was found to be working satisfactorily. This testing is carried out during the programming stage itself. In this testing step each module is found to be working satisfactorily as regards to the expected output from the module. Using a method called white box testing in which the software tester has knowledge of the inner workings structure and language of the software, or at least its purpose of each module or component of the software is tested individually. In the unit test case, we will be testing the separate modules of the software. We will test the components by passing data through it and we will monitor data to find the errors. We will be looking for entry and exit editions of data. We will make sure that all the components work without any troubles.

INTEGRATION TESTING

The major concerns of integration testing are developing and incremental strategy. That will limit the complexity of the entire actions among components as they are added to the system. Developing a component as they are added to the system, developing and implementation and integration schedules that will make the modules available when needed, and designing test case that will demonstrate the viability of the evolving system.

Though each program works individually, they should also work after linking them together. This is also referred to as interfacing. Data may be lost across interface and one module can have adverse effect on another. Subroutines are to linking may not do the desired function expected by the main routine. Integration testing is a symmetric technique for constructing program's

structure while at the same time conducting tests to uncover errors associated with the interface. In the testing the programs are constructed and tested in small segments.

VALIDATION TESTING

To uncover functional errors, that is, to check whether functional characteristic confirm to specification or not.

OUTPUT TESTING

The output generated or displayed by the system, under consideration is tested asking the users about the format required by them. Here, the output is considered into two ways one is on the screen and other is the format. The output format on the screen is found to be correct as the format design according to the user needs.

SECURITY TESTING

The security level of system is tested which prevents unauthorized access to the system and records the usernames that performed any change to the records. The security testing was tested and was found to be secure

USER ACCEPTANCE TESTING

User acceptance of a system is the factor for the success of any system, The system under consideration is tested for user acceptance by constantly keeping in touch with perspective system users at the time developing and making of testing automation tool.

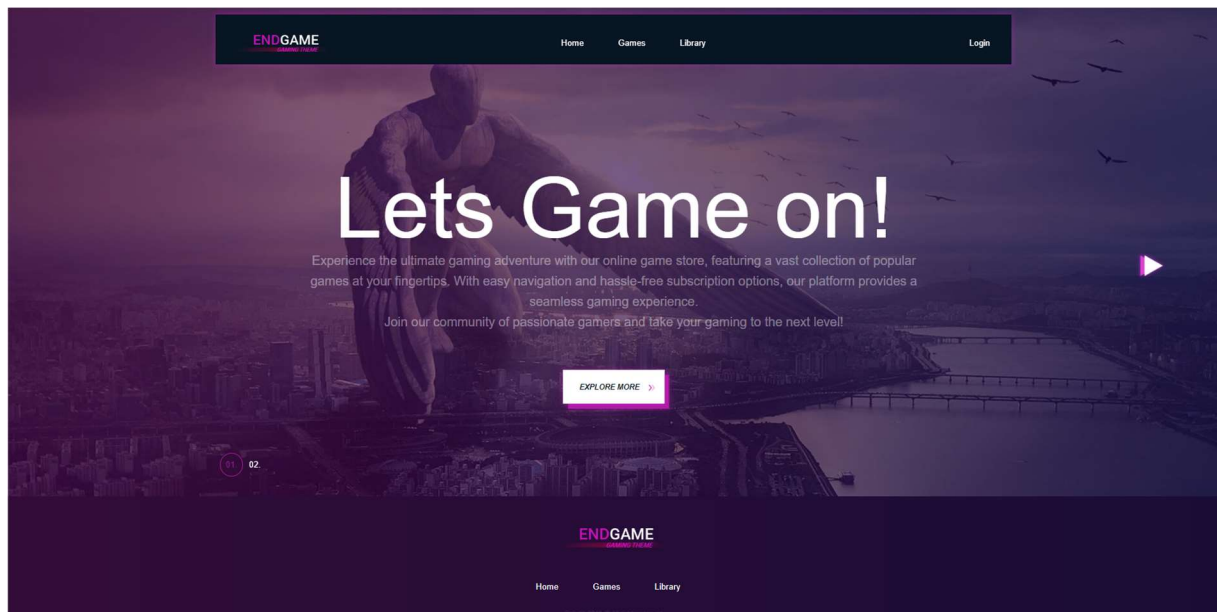
The testing of the software began along with coding. Since the design was fully object-oriented. First the interface was developed and tested. Then

unit testing was done for every module in the system for various inputs, such that each line of code is at least once executed.

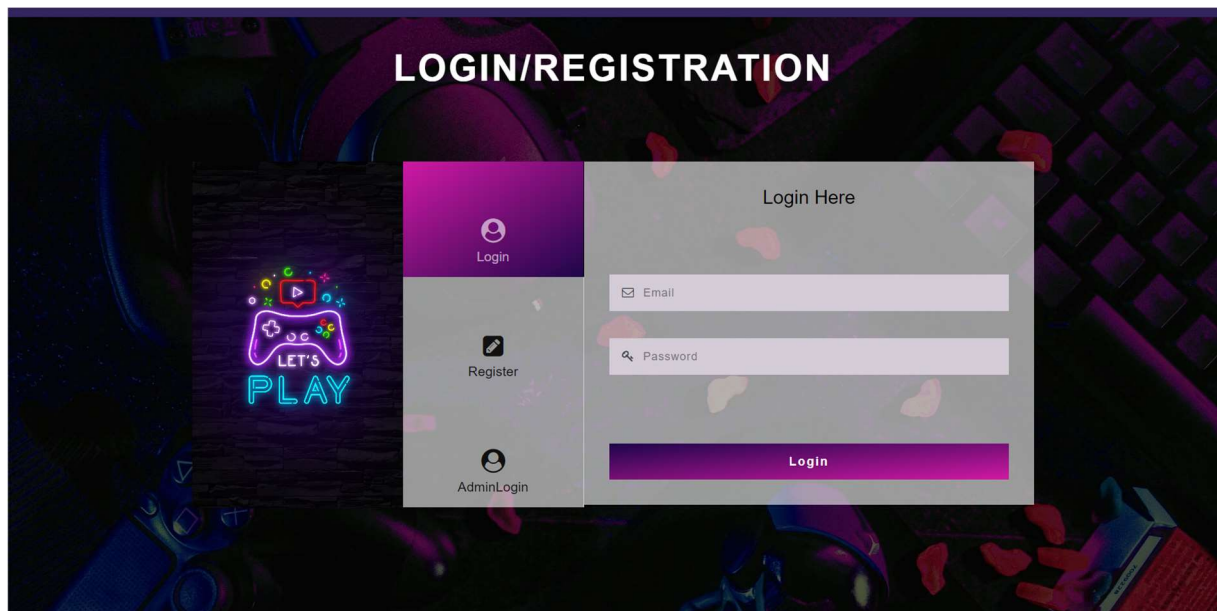
After all modules were coded, the integration test was carried out. Some minor and major errors were noted at the initial stage and each of them was re-coded until it was rectified. In the implementation of user interface part, no major errors were found. After the software was completely developed, the testing was done. The output of the system is correct and accurate during the time of demonstration. We proceed the testing process in this way.

SCREEN LAYOUTS

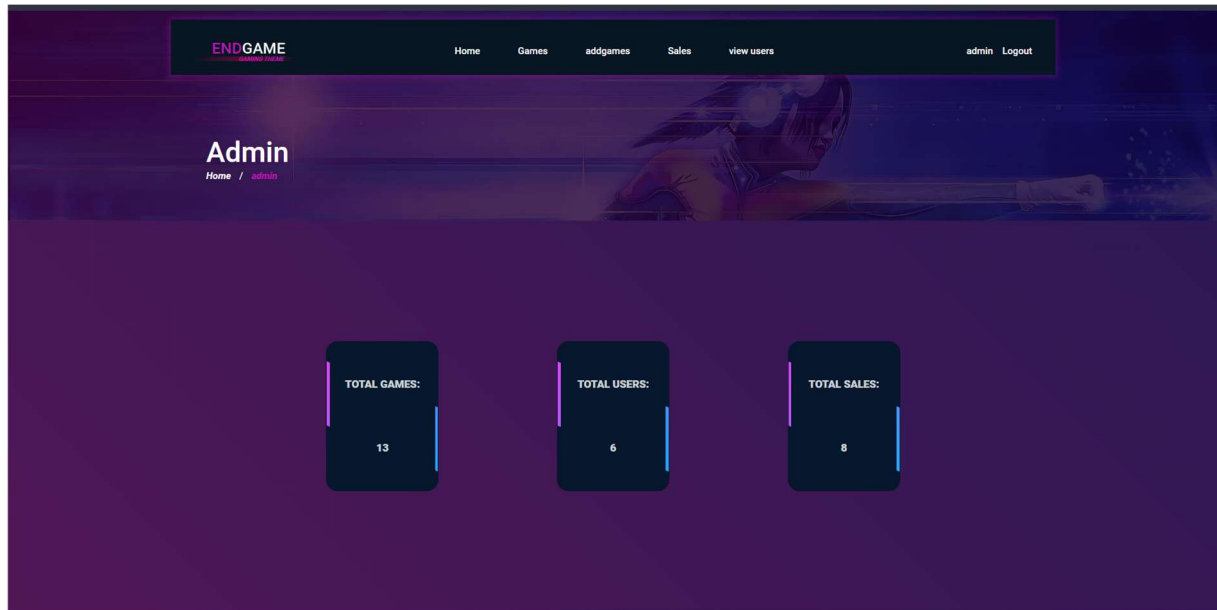
Home Page



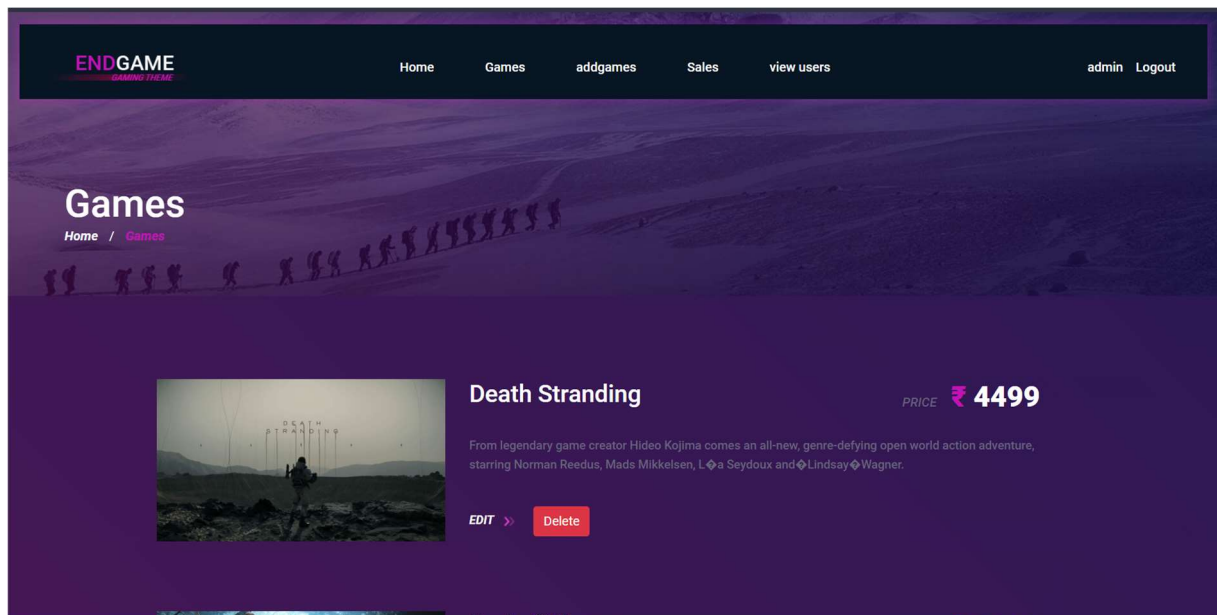
Login page



Admin Home Page



Admin Manage Games



Manage Sales

SALES LIST

SI	SALES ID	USER ID	USERNAME	PRODUCT ID	PRODUCT NAME	ACTION
1	1	2	Beatriz Viti	2	Death Stranding	
2	18	11	DrUnkeNSoUL096	2	Death Stranding	
3	20	11	DrUnkeNSoUL096	5	Fortnite	

Mange Users

USERS LIST

SI	USER ID	USERNAME	EMAIL	PASSWORD	ACTION
1	5	Milton Souza	tioname2@yahoo.com	12345678	
2	11	DrUnkeNSoUL096	mathewsshajibca@mac.edu.in	1234567890	
3	2	Beatriz Viti	beatrizvika@gmail.com	12345678	

Buy a Game

The screenshot shows a web application for an online game store. At the top, a dark purple navigation bar contains the 'ENDGAME' logo on the left, and links for 'Home', 'Games', and 'Library' in the center. On the right side of the navigation bar, the user's name 'DrUnkeNSoUL096' and a 'Logout' link are displayed. Below the navigation bar, a large banner features a soccer player in a white Real Madrid jersey. To the right of the player, the text 'Games' is displayed, with 'Home / buy' as a breadcrumb. The main content area is split into two columns. The left column features a large image of the FIFA 19 game cover, which includes the EA Sports logo and the FIFA logo. The right column contains the text 'Fifa 19 / Esportes' followed by a paragraph describing the game: 'Experience the ultimate soccer showdown with FIFA 19, the must-have game for all soccer fans! With breathtaking graphics, realistic gameplay, and an extensive range of customization options, FIFA 19 lets you create your own dream team and take on the world's best players. Join the FIFA community and compete against friends and players from around the world for ultimate bragging rights. Don't wait - grab your copy of FIFA 19 today and take your soccer skills to the next level!'. Below this text is a 'BUY NOW >>' button. At the bottom of the page, a dark purple footer bar contains the 'ENDGAME' logo.

ENDGAME

Home Games Library

DrUnkeNSoUL096 Logout

Games

Home / buy

Fifa 19 / Esportes

Experience the ultimate soccer showdown with FIFA 19, the must-have game for all soccer fans! With breathtaking graphics, realistic gameplay, and an extensive range of customization options, FIFA 19 lets you create your own dream team and take on the world's best players. Join the FIFA community and compete against friends and players from around the world for ultimate bragging rights. Don't wait - grab your copy of FIFA 19 today and take your soccer skills to the next level!

BUY NOW >>

ENDGAME

SYSTEM IMPLEMENTATION

System implementation is the important stage of project when the theoretical design is turned into practical system. The main stages in the implementation are as follows: → Planning

→ Training

→ System testing and

→ Changeover Planning

Planning is the first task in the implementation. At the time of implementation of any system people from different departments and system analysis involve. They are concerned to practical problem of controlling various activities of people outside their own data processing departments. The line managers controlled through an implementation coordinating committee. The committee considers ideas, problems and complaints of user department, it must also consider:

- The implication of system environment.
- Self-selection and allocation for implementation tasks.
- Conclusion with unions and resources available.
- Standby facilities and channels of communication.

CONCLUSION
AND
SCOPE OF
FUTURE
ENHANCEMENT

8.1 CONCLUSION

To conclude, Project Data Grid works like a component which can access all the databases and picks up different functions. It overcomes the many limitations incorporated in the Shopping System.

- Easy Environment
- easily accessible and always available.

8.2 SCOPE OF FUTURE DEVELOPMENT

The scope of online game store management will continue to evolve and expand as technology and customer expectations change. In the future, the following areas are likely to become increasingly important:

- Artificial Intelligence and Machine Learning: The use of AI and ML will become increasingly common to automate tasks and provide a more personalized customer experience, such as personalized game recommendations and real-time customer support.
- Virtual and Augmented Reality: As VR and AR technology advances, online game stores will likely incorporate these technologies to offer customers a more immersive gaming experience and a better understanding of the games they are interested in.
- Mobile Optimization: The increasing importance of mobile devices means that online game stores will need to be optimized for mobile devices, making it easier for customers to purchase and play games on the go.
- Social Interaction and Collaboration: Online game stores will likely focus on enhancing the social aspect of the platform to allow customers to join

gaming communities, compete with other players, and share their gaming experiences.

- **Payment and Security:** As cyber threats continue to rise, online game stores will need to implement robust security measures to protect customer information and payment information.
- **Analytics and Data Management:** The use of data analytics will become even more important to gather and analyze customer data, providing valuable insights into customer behaviour and preferences and helping to make informed business decisions.
- **Inventory Management:** Online game stores will need to continue to streamline their inventory management systems to reduce waste and costs, improve the customer experience, and meet the increasing demand for instant gratification.
- **Integration with Streaming Services:** Online game stores will likely integrate with popular streaming services, such as Twitch, to allow customers to watch and participate in live gaming events and competitions.

These are just a few examples of how the scope of online game store management is likely to evolve in the future. To stay ahead in the rapidly changing gaming industry, online game stores will need to continuously evaluate and invest in new technologies and features that will enhance the customer experience and improve business operations.

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