

AMK COS-209 Project Documentation

by Aung Min Khant

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Higher Diploma in Information Technology

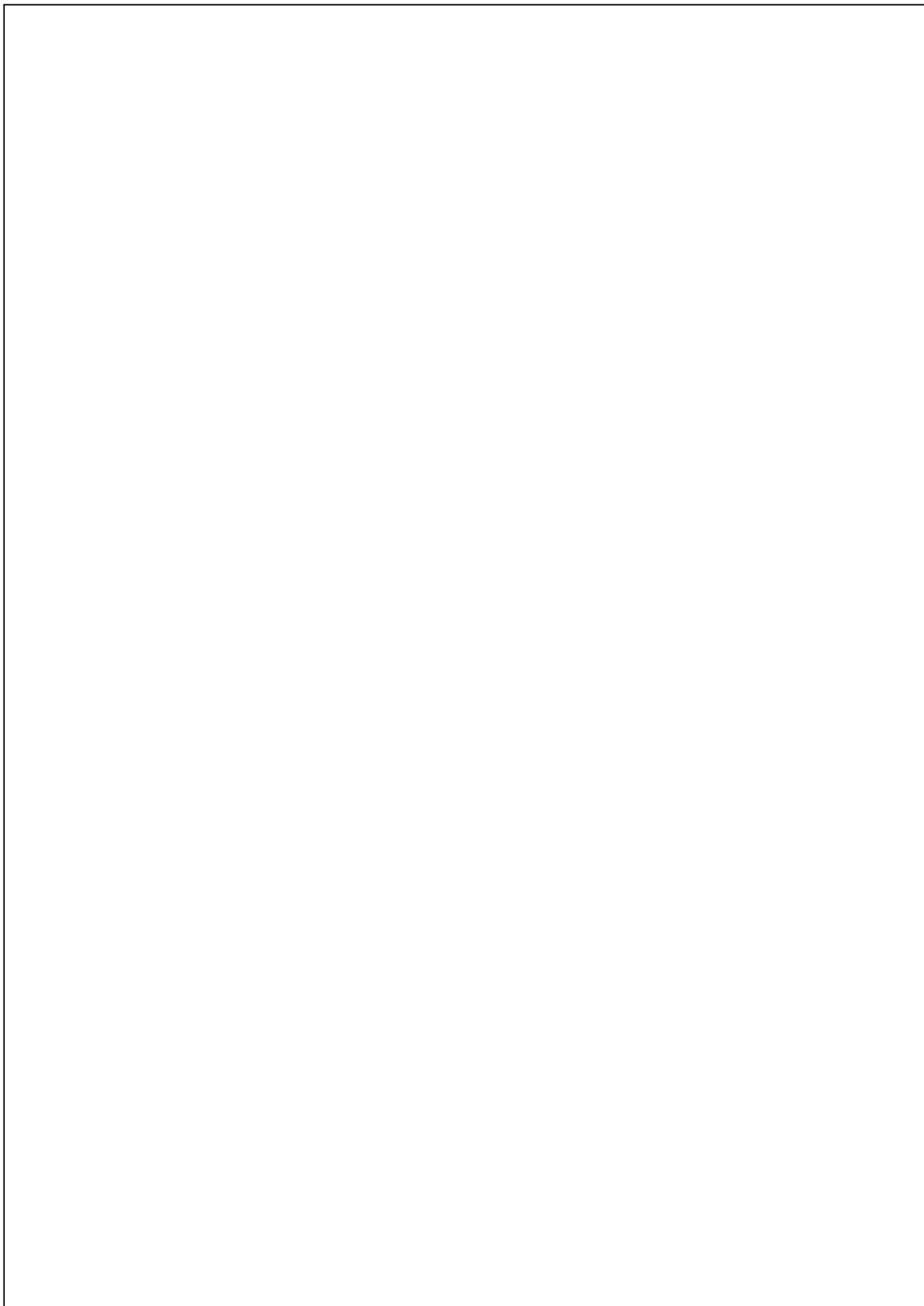
(HDIT)



Student ID : 00732

Name : Aung Min Khant

Submission Date : 15.5.2023



Section A

1) Project Overview

We'd like to introduce our web application to begin this document named "Prizemania", where you can participate in the monthly lucky draw program to get valuable prizes with the biggest prize, "iPhone 14 Pro Max", followed by "iPhone 14 Pro", "PlayStation 5", and the finally, "AirPod Pro 2". The user can buy many tickets to get the higher chance of getting the prizes with a price of 20,000 kyats each. The user must have a bank account to buy tickets. The winner will be chosen by the admin. Then, the user will be phoned when he or she is chosen as a winner. He or She will be also announced in the home page as a winner for the month.

1.1) Purpose

Our main purpose is to create a web application for people who are finding to participate an online lucky draw program to get high value demanding electronic devices with an affordable ticket price. The user can easily access to our page with easy registration but he or she will need a bank account to buy tickets.

1.2) Scope

We would like to talk about the services we will use in our program as well as the goals of our project.

Project objectives:

- i) Login and Signup features: If a user doesn't already have an account, they can log in and create one.
- ii) Purchase features: Users can buy their tickets to participate in the lucky draw program.
- iii) Generate winner features: The admin will generate winner tickets and will contact to the winners via phone number.

These are the functionalities and offerings that our web application will have in order to satisfy the needs of the customers.

Additionally, we'll employ the program that's ideal for our project. Estimated project completion time is one month.

1.3) Project Constraints and Risks

There will be limitations when we create our program, such as time, money, and resource limitations, as well as technical challenges. Sometimes, we have to maintain the website if the program has met the unexpected error or the users are having difficulties to use the software. Whatever problems we are encountering with, I think we can quickly identify the most effective options.

1.4) Budget and Schedule Summary

The project is anticipated to be finished in about a month. I have included a timetable table with anticipated dates in my project offer paper. Firstly, planning of the project would take about 2 days to finish. Requirement analysis will take another 2 to 3 days. The timeline for design implementation and prototyping will take about another 5 days. After design implementation, we can start the deployment of the website which would take about 2 weeks. Then, we will take another 5 days for the testing of the website. Software implementation, and operations and management will take around 1 week to accomplish.

I'll dive into more detail regarding the budget later. In conclusion, we predict that the total cost of project management would range from \$6000 to \$10000.

We have completed our project overview. Additionally, we will discuss our project with charts, diagrams, and various issues.

2) Requirements Definition

To fully develop the project, there are a lot of requirements that we need to research and compile. I'll include the detailed lists of needs for the project in this document.

2.1) Software Requirement

To create the program, we need the right programs and software. We will use the "Visual Studio Code" program to create this project because it is the best for creating web apps using HTML, CSS, JavaScript, PHP, and finally we use "Bootstrap: the front-end framework" for styling the website. We also use MySQL database for storing data and managing data.

2.2) Hardware Requirement

Basic gear needed for the program, such as a computer or a laptop that could run the OS.

2.3) Project Members

Roles	Responsibilities	Members Total Needed
Client	Client can visit the website and buy tickets to participate in the lucky draw program.	-
Stakeholder	Approve the project deliverables. Identify and address any risks or issues connected to the project or program.	More than one stakeholder
Project Manager	Verify that each process is functioning properly. Organize the project team as a whole. Additionally ensure the booked time will be done in time.	At least one PM
Analyst	Investigate the project's prerequisites.	Need two or more analysts
Developer	Create the features and software. Check to see that the quality of the service	Need at least 3 or 4 developers

	meets the needs of the customers.	
Tester	Testing the product regardless of whether it is prepared to send off.	At least 2 testers

2.4) Functional Requirement

An explanation of the service which the program must provide is a functional requirement. The functional requirement of the program is that user have to register to log into the lucky draw program. For another, users have to buy tickets to participate in the program. The random generate system is added for choosing the winners.

2.5) Non-Functional Requirements

Non-functional requirements relate to qualities like as dependability, efficiency, usability, maintenance, and portability rather than functionality. For the non-functionality of the program is that user can do login and registration in just about 2 or 3 minutes. Users can also buy tickets in less than a minute. Those make the users save a lot of time. The program is also made for the users to be user friendly so that the users can use the website easily.

3) Work Breakdown Structure

Prepared By: Aung Min Khant

Date:15.5.2023

Project Name: "PrizeMania"

1 1.0. Project Initiation

- 1.1. Assign Project Manager
- 1.2. Hold a meeting
 - 1.2.1. Assign Project Management Team
- 1.3. Develop and understand business case

2.0. Project Planning

- 2.1. Purpose of the Project
- 2.2. Scope Statement
- 2.3. Project Members
- 2.4. Project Timeline
- 2.5. Schedule and Budget Statement

3.0. Project Developing

- 3.1. Requirement Analysis
- 3.2. Design Implementation
- 3.3. Software Development
- 3.4. Software Testing
- 3.5. Operations and Management
 - 3.5.1. Staff Training
 - 3.5.2. Project Launch

4.0. Closeout

4) Gantt-Chart



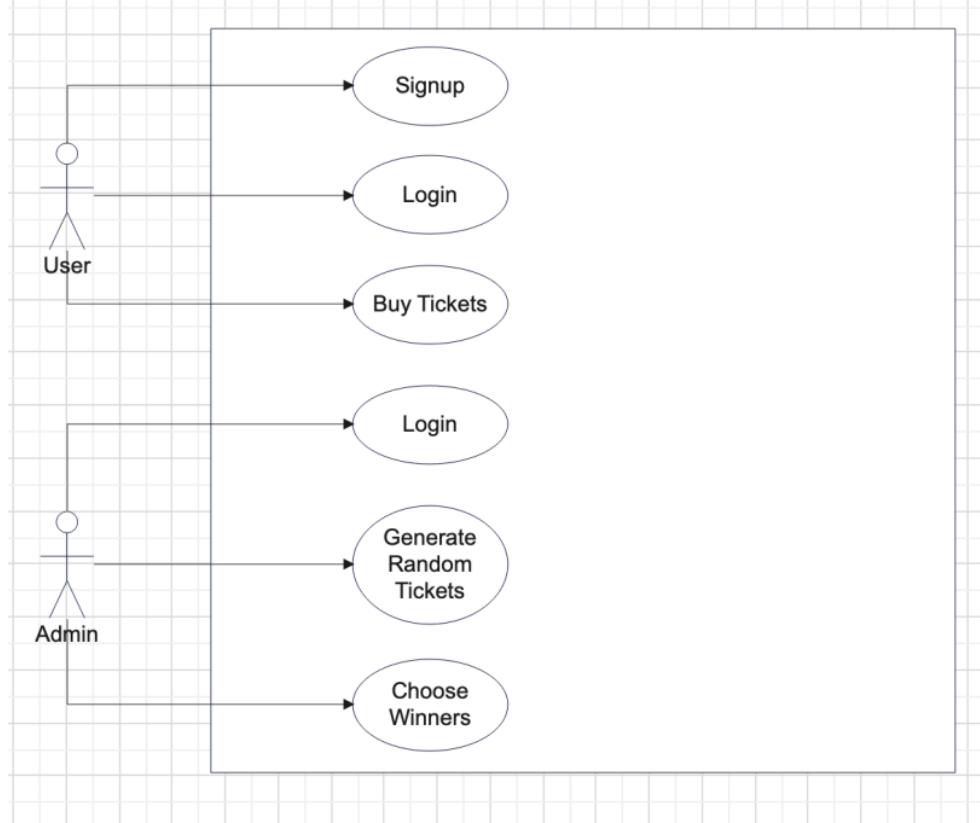
5) Budgeting

Name	Approximate Price
Software License	\$300
Server License	Between \$1000 and \$3000
Database License	About \$2000
Development Consultant	About \$3000
Project Management	Between \$6000 and \$10000

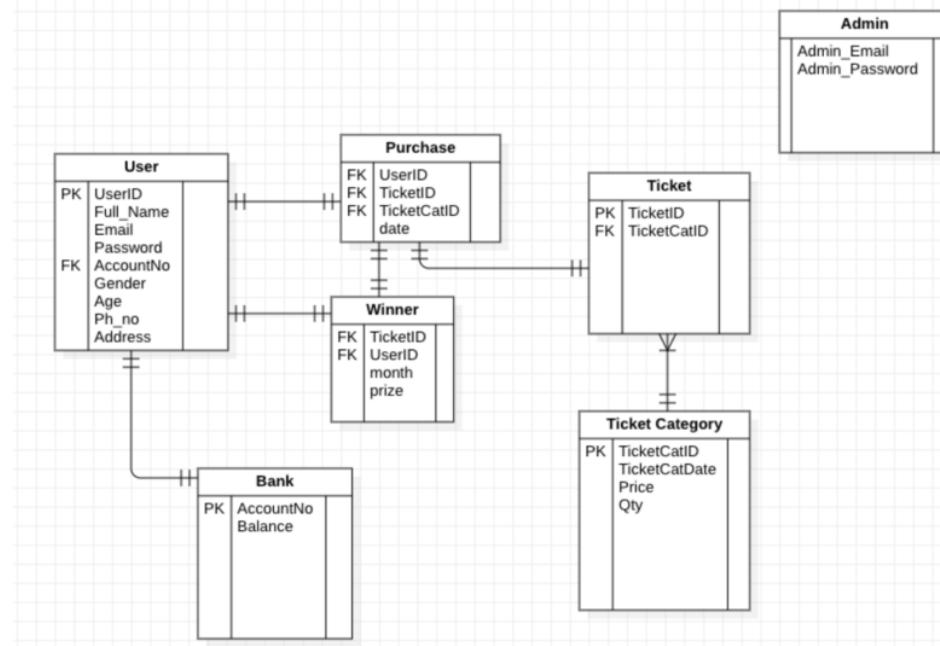
Section B

1) UML Diagrams

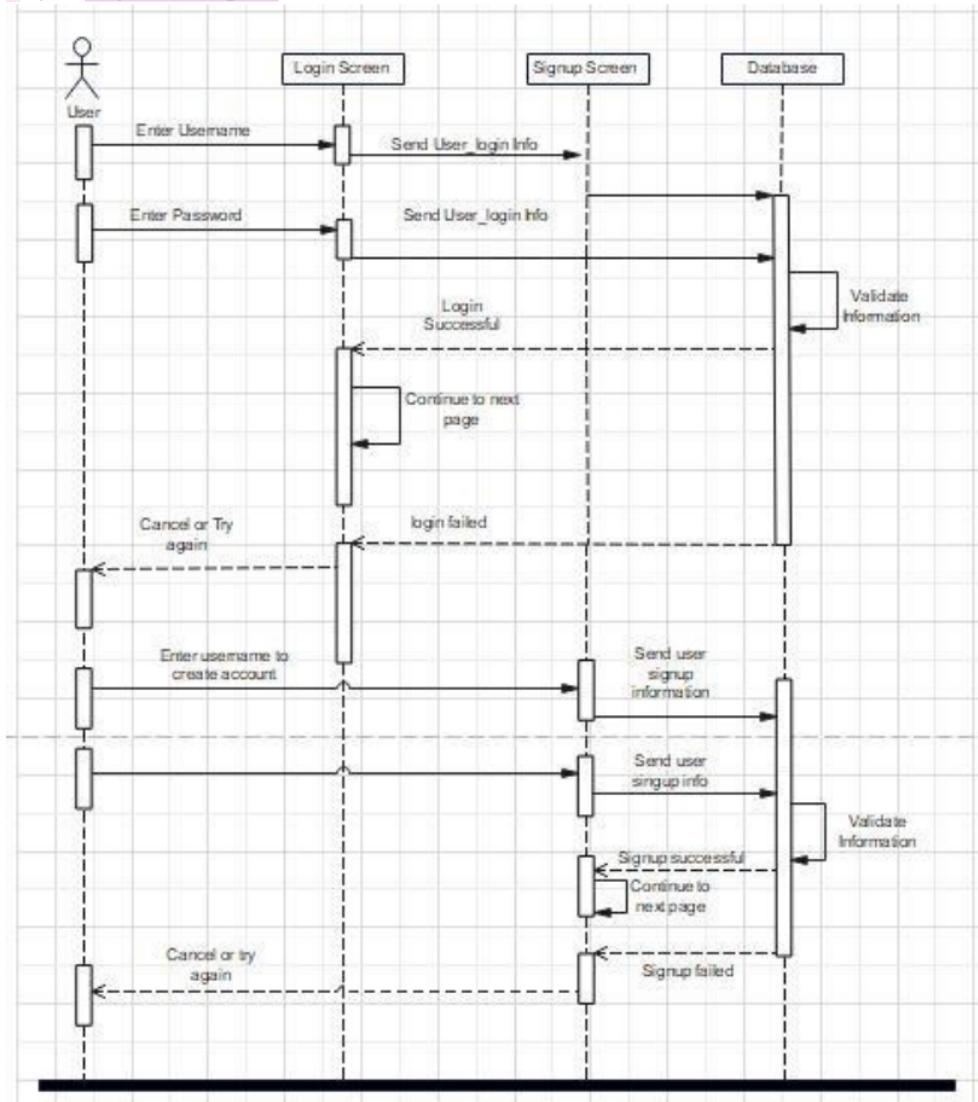
1.1) Use Case Diagram



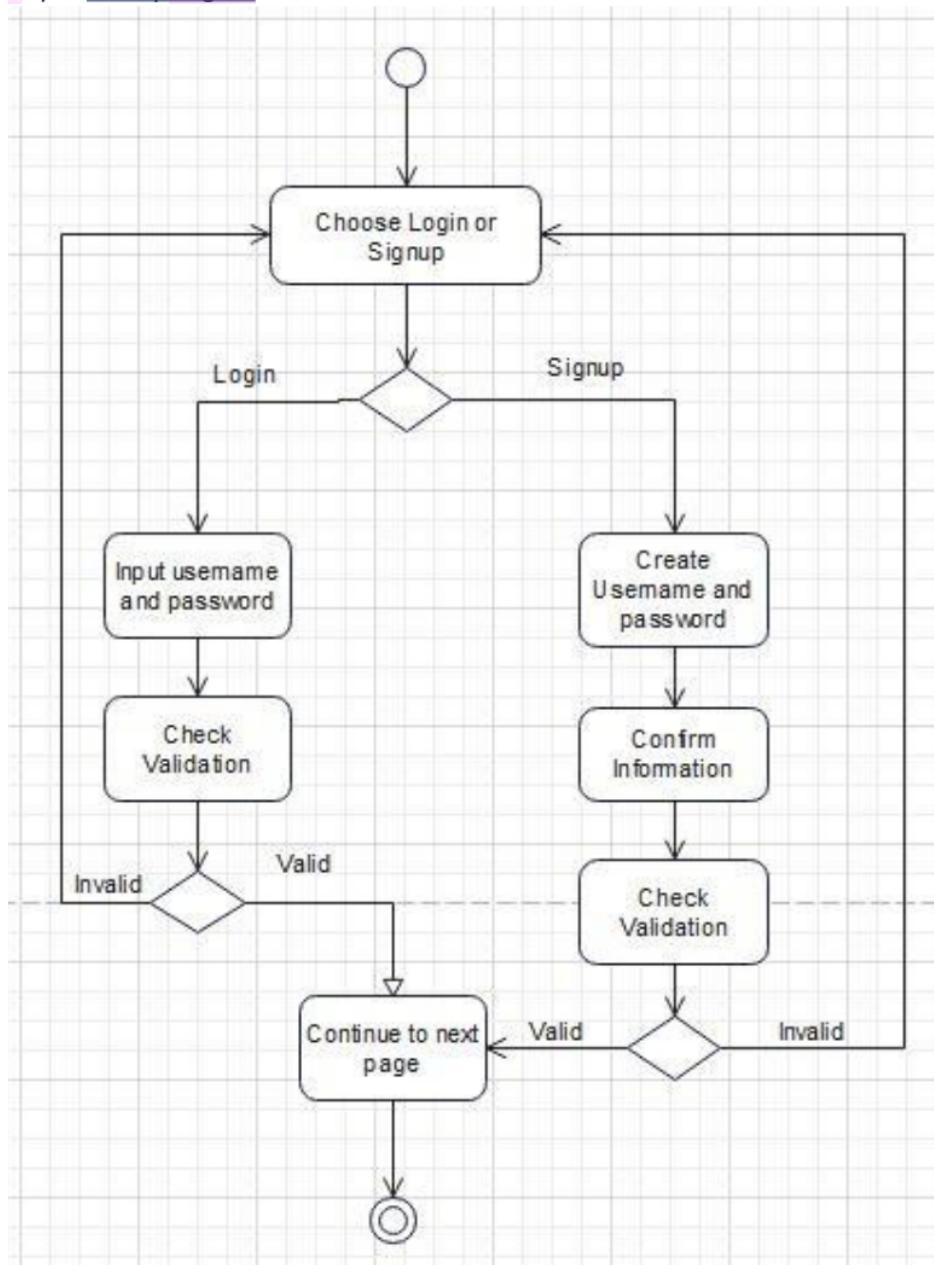
2.1) ER Diagram



2.2) Sequence Diagram



2.3) Activity Diagram



2) ¹ Process Descriptions

In this topic, I will describe the processes in Work breakdown Structure in detail.

1

Process Name	Description
1.0. Project Initiation	- At this stage of the project, every team member has a specific assignment.

1.1. Assign Project Manager	- choosing the project manager, who will be in charge of managing the crew and ensuring the project is completed flawlessly.
1.2. Hold a Meeting	- The entire project team, including the project supervisor, would come together and talk about the project during this phase. The title of the project and development path will be decided by the members.
1.2.1. Assign Project Management Team	- The project manager will divide the team into separate groups during the meeting and assign duties to each group. For instance, service, or maintenance, and development teams might exist.
1.3. Developing Business Case	- During the meeting, the project manager is going to split the team into distinct groups and assign each group a unique set of tasks to do. The software engineering team, the maintenance squad, the service team, etc. are some examples.
2.0. Project Planning	- The project manager and a select group of the team will establish the crucial project planning phases during this process.
2.1. Project Planning Steps	<p>- Steps in project planning include:</p> <ul style="list-style-type: none"> (i) Describe the project's objectives and motivations in order to clarify its meaning. (ii) In the scope statement, specify the project's outputs and its intended use. (iii) Schedule and participants in the project: List the profiles of the team players and a schedule synopsis. (iv) The project's timing and financial details are summarized in the cost and schedule section.
3.0. Project Developing	Once this project has been properly planned, the team responsible for its development will start working on it.
3.1. Requirement Analysis	The analysts will do requirements study prior to beginning the project or program design.
3.2. Design Implementations	The architecture of the web page and the database will be created by developers.
3.3. Software Developments	The appropriate coding and procedures will be used to construct the app.
3.4. Software Testing	Process that is necessary to utilize and must be employed. Regardless of whether the program is ready for launch or not, they will check it and run it.
3.5. Operation and Management	Following adequate software training for the staff, the product will eventually be made accessible to the public as a whole.

Section C

Database Design

"LuckyDrawDB" database

Table	Action	Rows	Type	Collation	Size	Overhead
Admin	Browse Structure Search Insert Empty Drop	1	InnoDB	utf8mb4_general_ci	16.0 Kib	-
Bank	Browse Structure Search Insert Empty Drop	3	InnoDB	utf8mb4_general_ci	16.0 Kib	-
purchase	Browse Structure Search Insert Empty Drop	9	InnoDB	utf8mb4_general_ci	64.0 Kib	-
ticket	Browse Structure Search Insert Empty Drop	422	InnoDB	utf8mb4_general_ci	32.0 Kib	-
ticket_category	Browse Structure Search Insert Empty Drop	2	InnoDB	utf8mb4_general_ci	16.0 Kib	-
user	Browse Structure Search Insert Empty Drop	2	InnoDB	utf8mb4_general_ci	32.0 Kib	-
winner	Browse Structure Search Insert Empty Drop	4	InnoDB	utf8mb4_general_ci	48.0 Kib	-

Admin table

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	admin_email	varchar(30)	utf8mb4_general_ci		No	None		Change Drop	
2	admin_pwd	varchar(30)	utf8mb4_general_ci		No	None		Change Drop	

admin_email admin_pwd

aung@gmail.com A123

Bank table

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	acc_no	varchar(20)	utf8mb4_general_ci		No	None		Change Drop	
2	balance	int(15)			No	None		Change Drop	
		acc_no		balance					
<input type="checkbox"/>	Edit Copy Delete	1111 2222 3333 4444	960000						
<input type="checkbox"/>	Edit Copy Delete	2222 3333 4444 5555	2780000						
<input type="checkbox"/>	Edit Copy Delete	3333 4444 5555 6666	40000						

User table

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action	
1	userid	int(10)			No	None	AUTO_INCREMENT	Change Drop		
2	name	varchar(30)	utf8mb4_general_ci		No	None		Change Drop		
3	email	varchar(30)	utf8mb4_general_ci		No	None		Change Drop		
4	pwd	varchar(30)	utf8mb4_general_ci		No	None		Change Drop		
5	acc_no	varchar(20)	utf8mb4_general_ci		No	None		Change Drop		
6	gender	varchar(10)	utf8mb4_general_ci		No	None		Change Drop		
7	age	int(3)			No	None		Change Drop		
8	ph_no	int(11)			No	None		Change Drop		
9	address	varchar(100)	utf8mb4_general_ci		No	None		Change Drop		
		userid	name	email	pwd	acc_no	gender	age	ph_no	address
<input type="checkbox"/>	Edit Copy Delete	10001	Tyler	tyler@gmail.com	T123	1111 2222 3333 4444	Male	23	987654321	YGN
<input type="checkbox"/>	Edit Copy Delete	10002	Taylor	taylor@gmail.com	T123	2222 3333 4444 5555	Female	20	123456789	YGN

Ticket Category table

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	t_cat_id	int(5)			No	None		AUTO_INCREMENT	Change Drop More
2	t_cat_date	date			No	None			Change Drop More
3	price	int(6)			No	None			Change Drop More
4	qty	int(4)			No	None			Change Drop More

			t_cat_id	t_cat_date	price	qty
				1001	2023-04-01	20000 600
				1002	2023-05-01	20000 600

Ticket table

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	t_id	int(5)			No	None		AUTO_INCREMENT	Change Drop More
2	t_cat_id	int(11)			No	None			Change Drop More

			t_id	t_cat_id
				1001 1001
				1002 1001
				1003 1001
				1004 1001
				1005 1001
				1006 1001
				1007 1001
				1008 1001
				1009 1001
				1010 1001
				2001 1002
				2002 1002
				2003 1002
				2004 1002
				2005 1002
				2006 1002
				2007 1002
				2008 1002
				2009 1002
				2010 1002
				2011 1002
				2012 1002
				2013 1002
				2014 1002
				2015 1002

Purchase table

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action	
<input type="checkbox"/>	1 userid	int(10)			No	None		 Change	 Drop	 More
<input type="checkbox"/>	2 t_id	int(5)			No	None		 Change	 Drop	 More
<input type="checkbox"/>	3 t_cat_id	int(5)			No	None		 Change	 Drop	 More
<input type="checkbox"/>	4 p_date	date			No	None		 Change	 Drop	 More

userid t_id t_cat_id p_date

10002	2002	1002	2023-05-11
10002	2003	1002	2023-05-11
10002	2004	1002	2023-05-11
10002	2005	1002	2023-05-11
10001	2006	1002	2023-05-12
10001	2007	1002	2023-05-12
10001	2008	1002	2023-05-12
10001	2009	1002	2023-05-12
10001	2010	1002	2023-05-12

Winner

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action	
<input type="checkbox"/>	1 userid	int(10)			No	None		 Change	 Drop	 More
<input type="checkbox"/>	2 t_id	int(5)			No	None		 Change	 Drop	 More
<input type="checkbox"/>	3 month	date			No	None		 Change	 Drop	 More
<input type="checkbox"/>	4 prize	varchar(30)	utf8mb4_general_ci		No	None		 Change	 Drop	 More

userid t_id month prize

10002	2002	2023-05-12	Airpod Pro 2
10002	2003	2023-05-12	PlayStation 5
10002	2004	2023-05-12	iPhone 14 Pro
10001	2006	2023-05-12	iPhone 14 Pro Max

User Interface

Home Page

Welcome to PrizeMania!!!

Today is your day for the chance to win the PRIZES with the biggest Prize of IPHONE 14 PRO MAX!!!

[All Users](#) [New User](#) [Login](#)

Here are the PRIZES!!!

iPhone 14 Pro Max



iPhone 14 Pro



AirPods Pro 2

Here are the monthly WINNERS!!!

Name	Month	Prize
Taylor	May, 2023	Airpod Pro 2
Taylor	May, 2023	PlayStation 5
Taylor	May, 2023	iPhone 14 Pro
Tyler	May, 2023	iPhone 14 Pro Max

About Page

About PrizeMania

We deployed our website last month and it's becoming popular among youths within a month.

Contact Page

Contact Us

0967834512

Signup Page

All Users

New User

Users

Sign Up

Full Name:

Email:

Password:

Confirm Password:

Account No:

Gender

 -- select --

Age:

Phone No:

Address:

[!\[\]\(861dd3e896b3ecaa9110c7518e911f7b_img.jpg\) Sign Up](#)

[Clear](#)

User Login

PrizeMania [Home](#) [About](#) [Contact Us](#)

[All Users](#) [New User](#) [Login](#) ▾

Log In

Email:

Password:

[Log In](#)

[Clear](#)

Amin Login

PrizeMania [Home](#) [About](#) [Contact Us](#)

[All Users](#) [New User](#) [Login](#) ▾

Admin Log In

Email:

Password:

[Log In](#)

[Clear](#)

Purchase Ticket Page

PrizeMania [Home](#) [About](#) [Contact Us](#)

All Users [New User](#) [Users](#)

Purchase Tickets

Ticket Quantity:

1

Price 20000

[Buy](#) [Log Out](#)

Admin Control Page

PrizeMania [Home](#) [About](#) [Contact Us](#)

All Users [New User](#) [Users](#)

Admin Control

Winner Ticket:

[Generate](#)

Ticket ID for AirPod Pro2 Winner:

Ticket ID for PlayStation 5 Winner:

Ticket ID for iPhone 14 Pro Winner:

Ticket ID for iPhone 14 Pro Max Winner:

[Go](#)

Security Features of the System

Currently, we did not do anything about security within the system, but we will implement soon for the better security.

Section D: System Testings & Implementations

Test Plan

- to verify whether the administrator's user-name and password are properly written.
- to verify that the user filled out all necessary fields

- to test bank account number correctly written or not
- to test purchasing ticket properly doing well
- to test choosing winner work well or not

Test Data & Result

Chris

Email:
chris@gmail.com

Password:

Confirm Password:

Account No: Fill out this field

Gender
Male

Age:
18

Phone No:

Address:

[Sign Up](#) [Clear](#)

If we do not fill the require field, the signup page does not work.

PrizeMania [Home](#) [About](#) [Contact Us](#)

[All Users](#) [New User](#) [Users](#)

Sign Up

Full Name:
Chris

Email:
chris@gmail.com

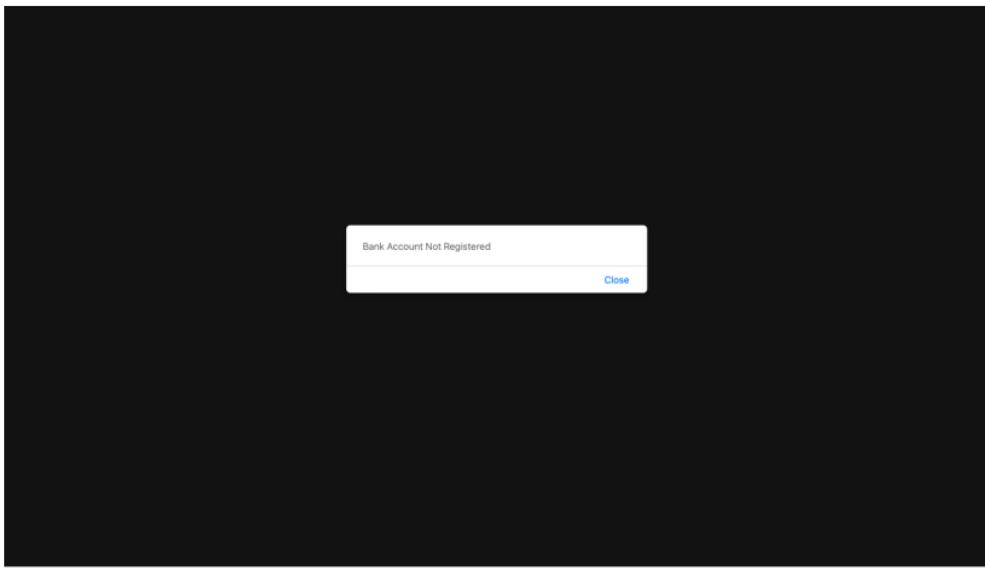
Password:

Confirm Password:

Account No:
3333 4444 5555 6667

Gender
Male

Age:
18



If we write the not existing bank account in the input field, it will show “Bank Account Not Registered”.

PrizeMania [Home](#) [About](#) [Contact Us](#)

[All Users](#) [New User](#) [Users](#)

Sign Up

Full Name:

Email:

Password:

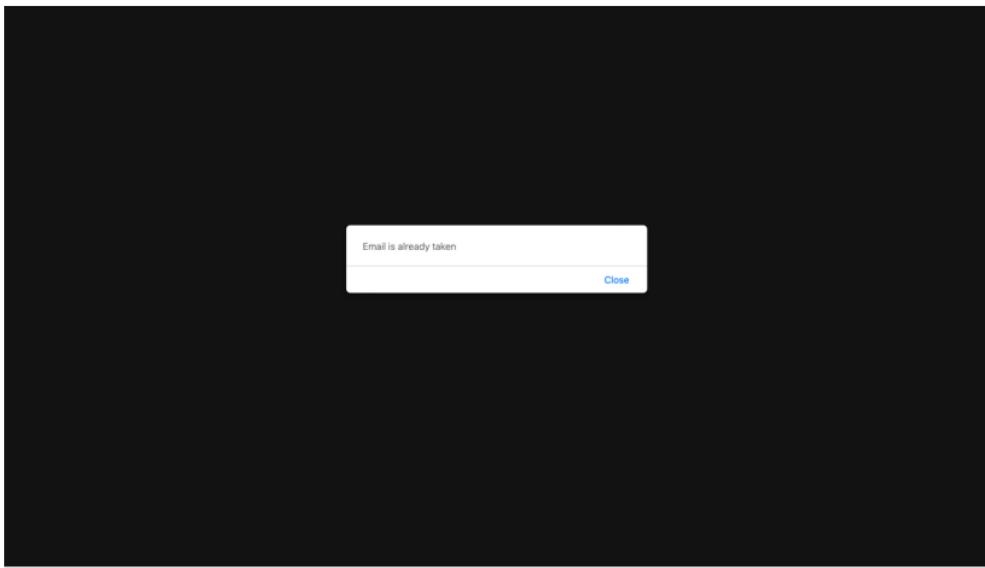
Confirm Password:

Account No:

Gender

Male

Age:



If we write the already taken email address in the input field, it will show “Email is already taken”.

PrizeMania [Home](#) [About](#) [Contact Us](#)

[All Users](#) [New User](#) [Users](#)

Sign Up

Full Name: Chris

Email: chris@gmail.com

Password: ****

Confirm Password: ****

Account No: 9999 4444 5555 6666

Gender: Male

Age: 18

The screenshot shows the phpMyAdmin interface for the 'LuckyDrawDB' database. The left sidebar lists databases like 'information_schema', 'LuckyDrawDB', 'mysql', 'performance_schema', and 'test'. The 'user' table under 'LuckyDrawDB' is selected. The main area displays the table structure with columns: userid, name, email, pwd, acc_no, gender, age, ph_no, and address. Three rows of data are shown:

	userid	name	email	pwd	acc_no	gender	age	ph_no	address
1	10001	Tyler	tyler@gmail.com	T123	1111 2222 3333 4444	Male	23	987654321	YGN
2	10002	Taylor	taylor@gmail.com	T123	2222 3333 4444 5555	Female	20	123456789	YGN
3	10003	Chris	chris@gmail.com	C123	3333 4444 5555 6666	Male	18	3456787	YGN

Below the table, there are buttons for 'Edit', 'Copy', 'Delete', and 'Export'. A 'Query results operations' section includes 'Print', 'Copy to clipboard', 'Export', 'Display chart', and 'Create view' options. A 'Bookmark this SQL query' section allows labeling the query and choosing access rights.

The data added has been recorded in the user table.

The screenshot shows the 'Log In' page of the PrizeMania website. The top navigation bar includes links for Home, About, Contact Us, All Users, New User, and Login. The main form has fields for 'Email' (taylor@gmail.com) and 'Password'. The 'Password' field is highlighted in red with a tooltip 'Fill out this field'. Below the password input are links for 'Passwords...' and 'Suggest New Password'.

If we do not fill all the require fields, it will show like this again.

PrizeMania [Home](#) [About](#) [Contact Us](#)

[All Users](#) [New User](#) [Login](#)

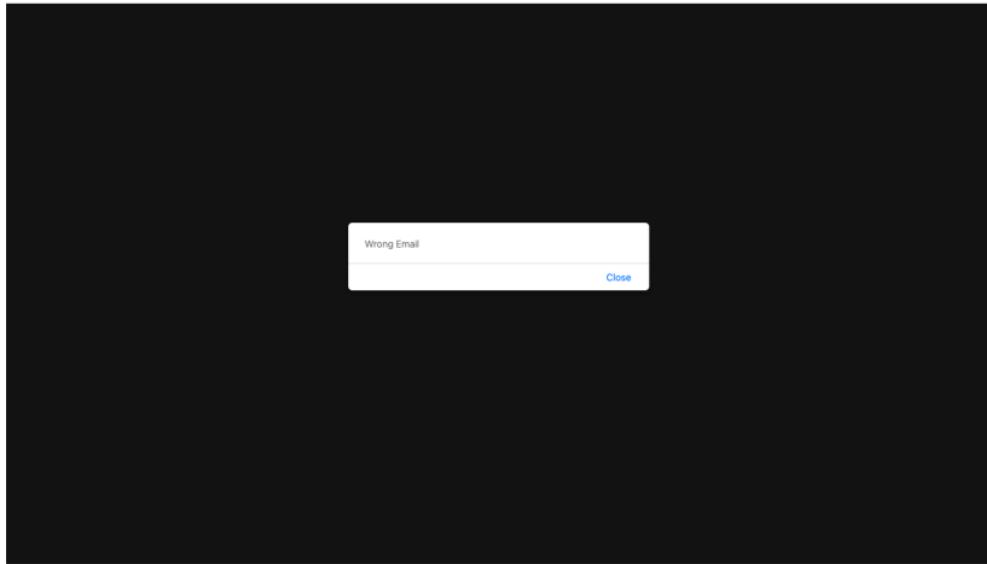
Log In

Email:

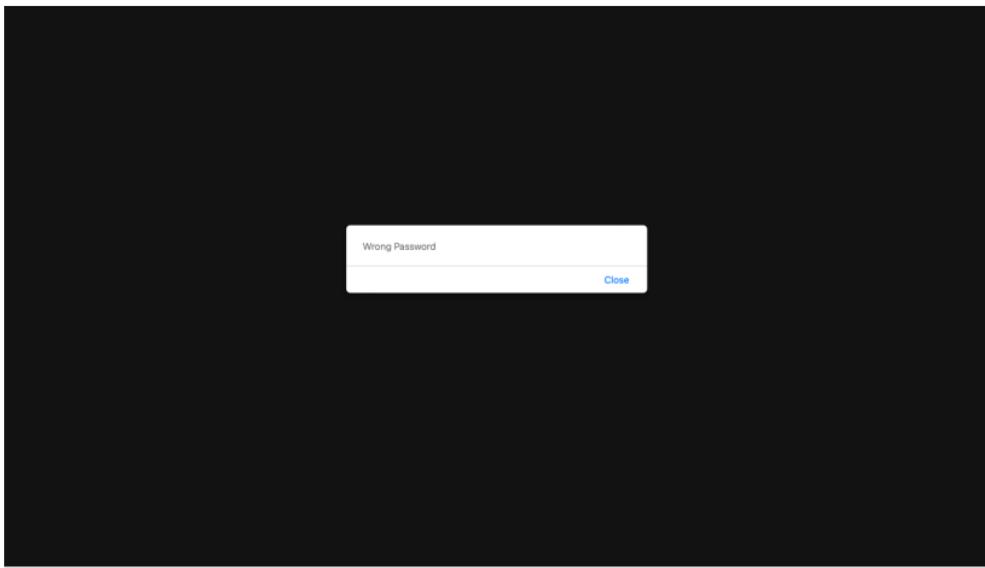
Password:

 [Forgot Password?](#)

[Log In](#) [Clear](#)



If we write wrong email address, it will show “Wrong Email” in both user login and admin login.
When we write the correct email and password, it will lead to the purchase page to buy tickets.



If we write correct email address but wrong password, it will show “Wrong Password” in both user login and admin login.

Purchase Tickets

Ticket Quantity:

1

5

Price

20000

[Buy](#) [Log Out](#)

userid	t_id	t_cat_id	p_date
10002	2002	1002	2023-05-11
10002	2003	1002	2023-05-11
10002	2004	1002	2023-05-11
10002	2005	1002	2023-05-11
10001	2006	1002	2023-05-12
10001	2007	1002	2023-05-12
10001	2008	1002	2023-05-12
10001	2009	1002	2023-05-12
10001	2010	1002	2023-05-12

Your purchase is successful

Close

phpMyAdmin

Recent - Favorites

LuckyDrawDB

New

information_schema

New

LuckyDrawDB

New

Admin

Bank

purchase

ticket

ticket_category

user

winner

mysql

performance_schema

phpmyadmin

store

StudentDB

TennisDB

test

Server: localhost - Database: LuckyDrawDB - Table: purchase

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Showing rows 0 - 9 (10 total, Query took 0.00005 seconds.)

SELECT * FROM `purchase`

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all Number of rows: 25 Filter rows: Search this table Sort by key: None

+ Options

userid	t_id	t_cat_id	p_date
10002	2002	1002	2023-05-11
10002	2003	1002	2023-05-11
10002	2004	1002	2023-05-11
10002	2005	1002	2023-05-11
10001	2006	1002	2023-05-12
10001	2007	1002	2023-05-12
10001	2008	1002	2023-05-12
10001	2009	1002	2023-05-12
10001	2010	1002	2023-05-12
10003	2011	1002	2023-05-15

Show all Number of rows: 25 Filter rows: Search this table Sort by key: None

Query results operations

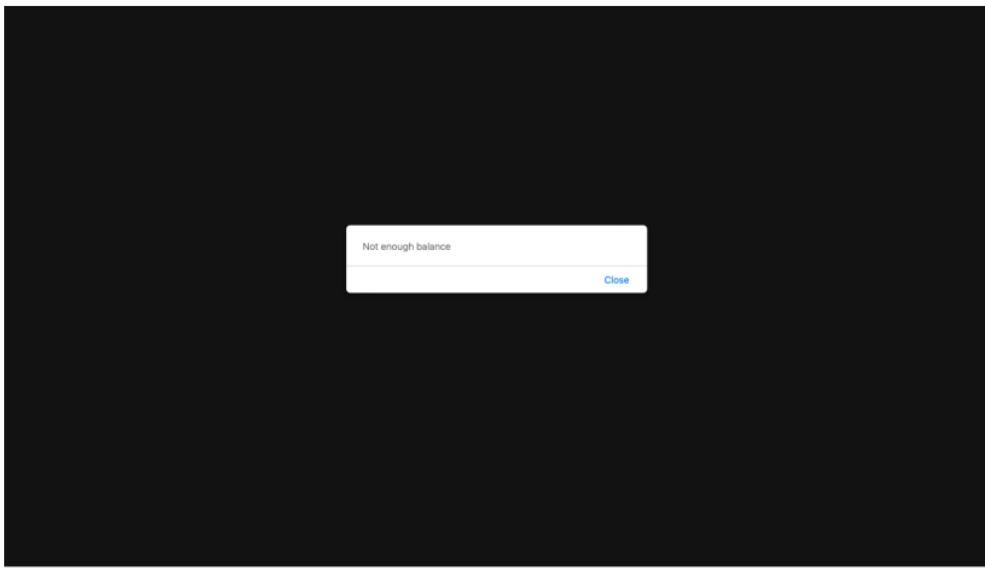
Print Copy to clipboard Export Display chart Create view

Bookmark this SQL query

Label: Let every user access this bookmark

Console this SQL query

You will see one data is added to the purchase database.



If we buy tickets but not enough money in the bank account, it will show “Not Enough Balance”.

In admin control page, clicking generate button will randomly show ticket IDs for the winners.

1

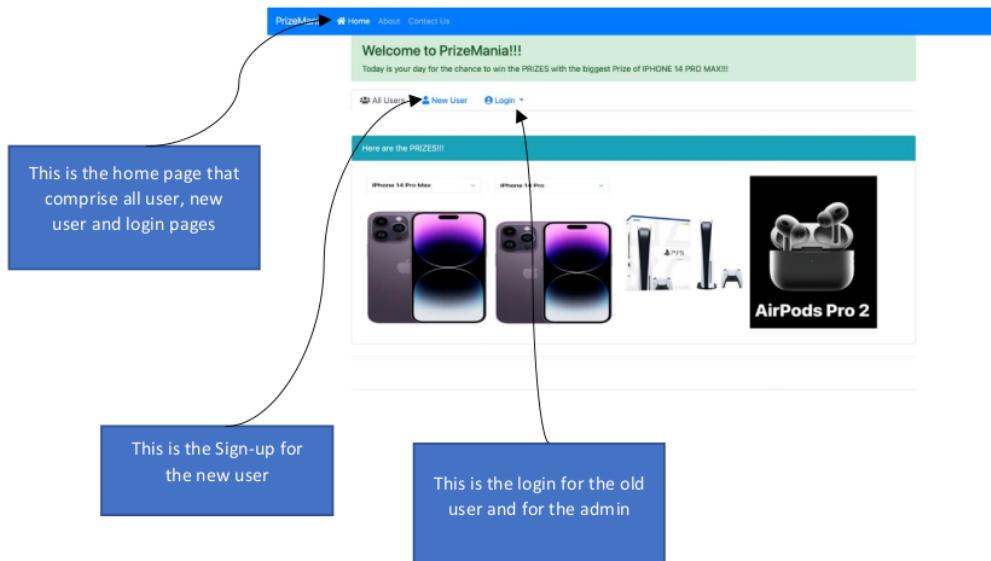
Changeover Procedure (System Implementation Plan)

How we developed the software

- (1) Requirement Analysis - Each software and hardware need that is going to be used in the process of developing software should be defined and analyzed.
- (2) Design Implementation - The process of determining how an information system ought to be developed (physical system design), confirming whether the information system is functional and being utilized, and making sure the information system complies with quality standards is known as systems implementation, also known as quality assurance.
- (3) Software Development - The software engineers start coding and building the system using all the reliable source code and the right technique.
- (4) System Testing - Following system development, the program is evaluated to verify if it is prepared for public release.

User Manuals

Home Page



About Page



Contact Page



PrizeMania [Home](#) [About](#) [Contact Us](#)

Contact Us
0967834512

Signup Page

PrizeMania [Home](#) [About](#) [Contact Us](#)

All Users [New User](#) [Users](#)

Sign Up

Full Name:

Email:

Password:

Confirm Password:

Account No:

Gender

 -- select --

Age:

Phone No:

Address:

 [Sign Up](#) [Clear](#)





If the user is fully filled the text field and click on sign up button the data will upload in the database

This is to clear all the text field.

User Login



Log In

Email:

Password:

If the email and password are correct the user are allowed to get into the system

This is to clear all the text field.

Amin Login



Admin Log In

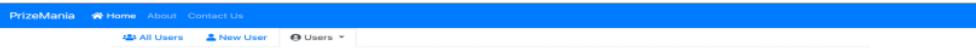
Email:

Password:

This is to clear all the text field.

If the email and password are correct the Admins are allowed to get into the system

Purchase Ticket Page



Purchase Tickets

Ticket Quantity:

1

Price

20000

This is the log out button to logout from the system.

If users choose the quantity and click on the buy button the purchase data will upload in the database

Admin Control Page

The screenshot shows a web application interface titled "Admin Control". At the top, there is a navigation bar with links for Home, About, Contact Us, All Users, New User, and Users. Below the navigation, there is a form section labeled "Winner Ticket:" containing four input fields. The first field is labeled "Ticket ID for AirPod Pro2 Winner:" and has a "Generate" button next to it. The other three fields are labeled "Ticket ID for PlayStation 5 Winner:", "Ticket ID for iPhone 14 Pro Winner:", and "Ticket ID for iPhone 14 Pro Max Winner:". Below these fields is a "Go" button. A callout box with a blue border and white text is positioned to the right of the "Generate" button, stating: "If admin click on generate button the data will appear in the Ticket id field."

Section E: Critical Appraisal

System Limitations

Users cannot view the tickets that they already bought.

Recommended Changes

In this system, users can view the ticket. So, I just want to change the system that a user can't view the ticket that they already bought.

Critical Reflection of the project experience

A lucky draw system's design and development are not always simple. It requires a significant amount of risk and difficulty for me. I had to do extensive study on MySQL XAMPP, and Visual Studio code. The plan, the scope, the budget, and the drawings, among other documents, must all be put together. I encountered several challenges while working on this project. For example, I didn't have enough time to integrate the features I intended to, so I had to start again and rebuild all the code and designs. One of the benefits was that I gained a ton of amazing skills and knowledge about management practices. I believe that because this project required me to work alone and rely only on myself, it considerably boosted my strength and self-confidence. I will surely take new challenges for new initiatives, even if they are difficult, and work to hone my management and development abilities.

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