

PJLI Micro-Loans Management System (E-Pahiram)



Personal **BACKGROUND**

(Name, Past Experience, Qualification, Career Summary)

Name : Johnjason M. Coligado

Qualification:

Tech Stack

- Programming Languages & Database: C#, C++, Python, Java, and MsSQL.
- Frameworks: Asp.net, Asp.net Core
- Deployment Tools: Docker & Kubernetes
- Game Development: Unity 3D

Career Summary :

Graduated with a BS Computer Engineering degree, has the title for the best capstone project (A.Y 2021 - 2022) entitled Arduino Based Kine Bike Simulation, and is also one of the capstone studies published and patented by the Laguna State Polytechnic University San Pablo City Campus. Former Vice President External of the Association of Students in Computer Engineering (ASCpE), one of the Trainee students of Continental Temic Philippines absorbed as Jr. IT Engineer.

Personal **BACKGROUND**

(Name, Past Experience, Qualification, Career Summary)

Name : Jhansept Kylo Pandanan

Qualification :

Tech Stack

- Programming Languages & Database: C#, C++, Python, Java, and MsSQL.
- Frameworks: Asp.net, Asp.net Core
- Deployment Tools: Docker & Kubernetes

Career Summary :

Jhansept Kylo Pandanan, a graduate of Computer engineering. The former Vice-President Internal of the Association of Students in Computer Engineering of their University. Had his Internship at Automated Technologies Inc. from May 2022 to July 2022 - working along with the Network engineers to provide support and assistance in building and configuring physical servers.

Key Takeaways/Learnings from the Program (HTD)



Database Management:

- Data normalization
- Stored procedure

Asp.NET Framework

- Dependency
- Validations
- MVC
- Roles/Authorizations

Web API (Rest API)

- Swagger
- Postman
- End points

Docker & Kubernetes

- Deployment
- Containerization

Problem Statement of the Capstone Project

The proposed solution is to create a loan management system that will **streamline the gadget loan process, provide unique perks and facts about the offered loan, and enable customers to track the progress of their purchase.** The **loan calculator** will also be incorporated, which will enable customers to **estimate the total cost of the loan.** This system will ensure transparency, provide a seamless experience for customers, and increase customer satisfaction.

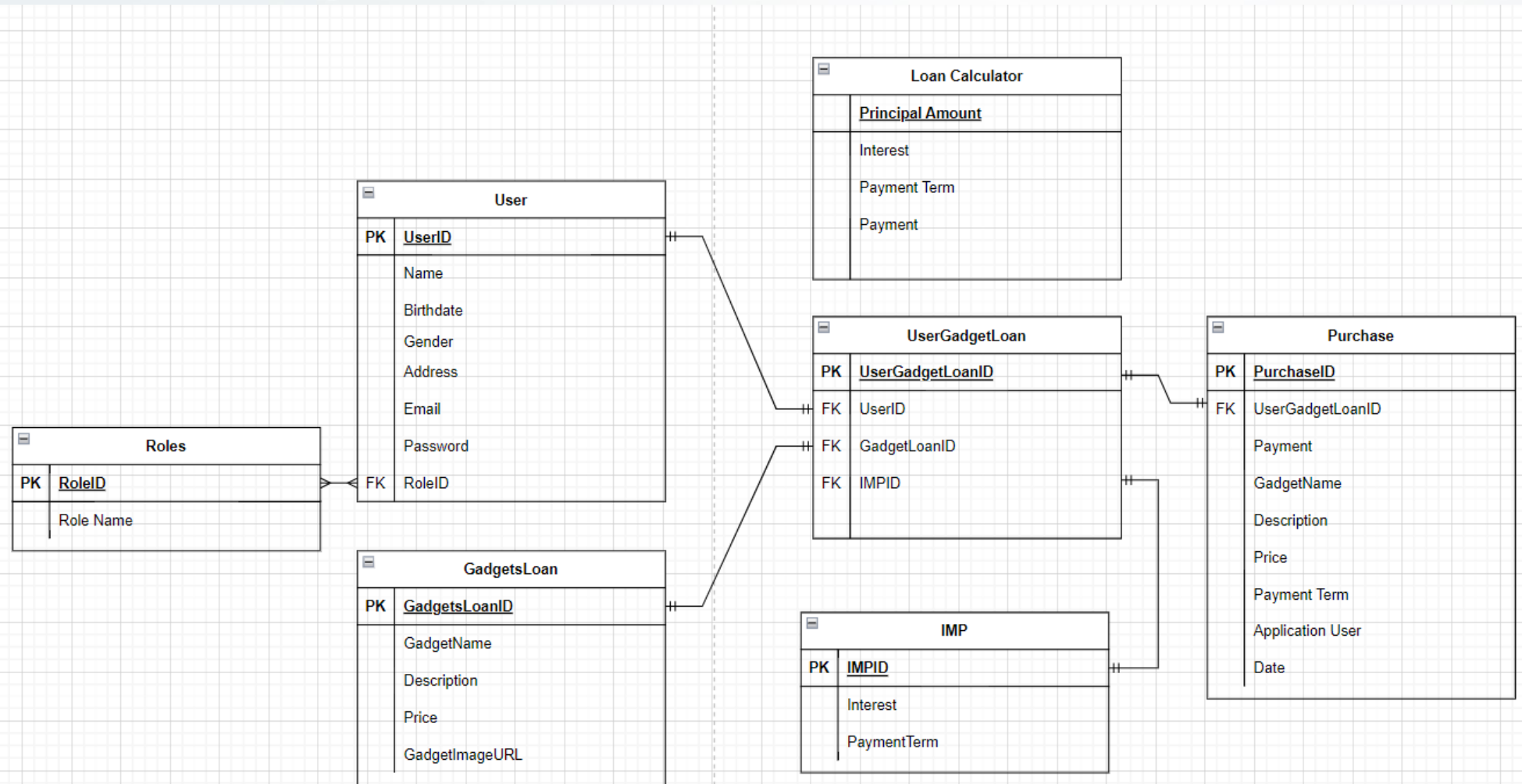
Approach Note

This study refers to the current PJLI micro-loans website. The loan management system was **built using Asp.Net MVC and dedicated frameworks, all data was handled with MsSQL and Entity Relationships**, it was **designed with bootstrap and css components**, and it will be **deployed with docker and kubernetes**.

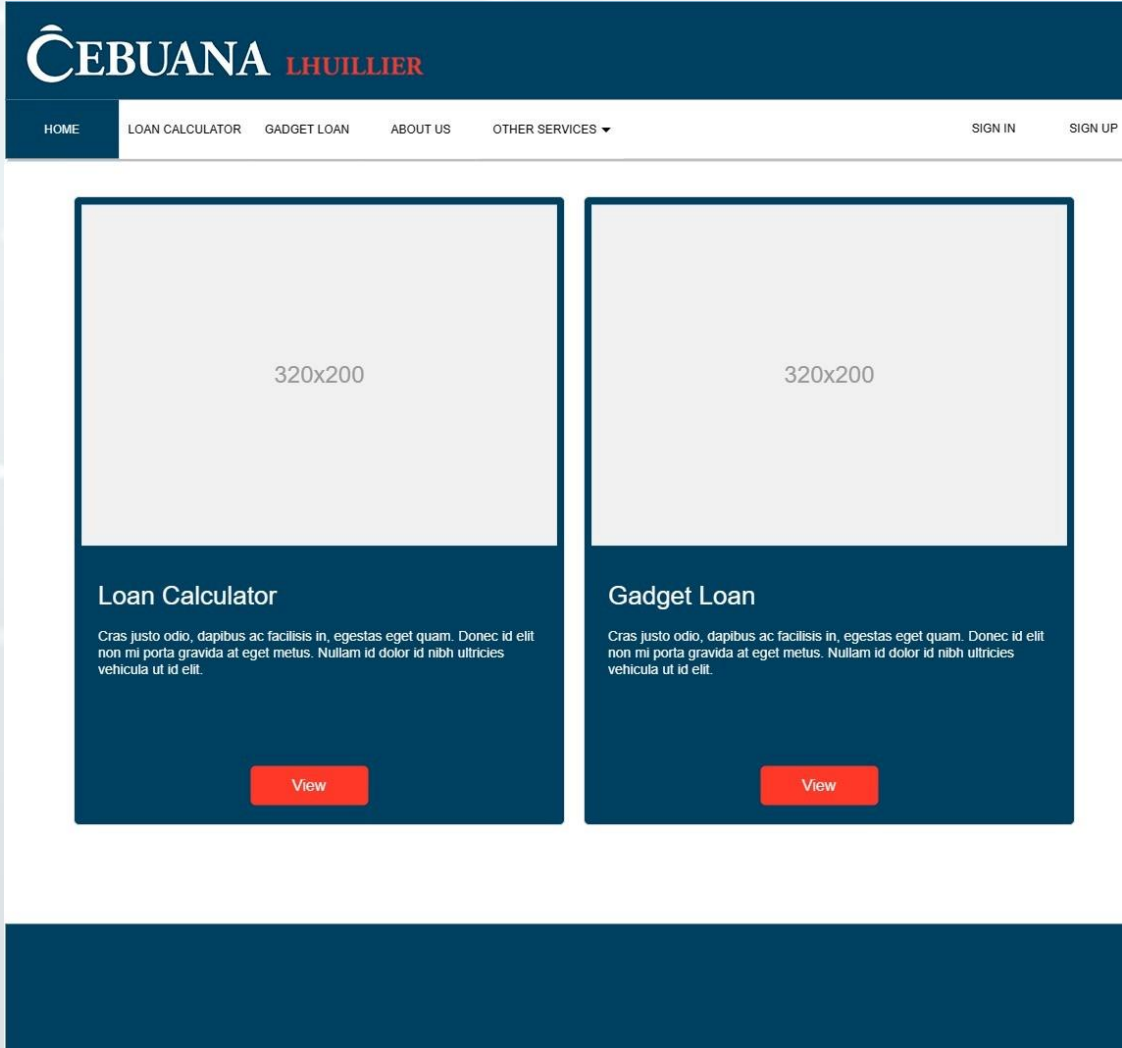
Approach:

- Planning Phase
- ER Diagram and Wireframe creation
- Implementation
- Deployment

ER Diagram



Wireframe/Architecture



CEBUANA

LHUIILLIER

HOME

LOAN CALCULATOR

GADGET LOAN

ABOUT US

OTHER SERVICES

SIGN IN

SIGN UP

Sign Up

First Name

First Name

Last Name

Last Name

Gender

Birthdate

mm/dd/yyyy

<

November 2015

>

SUN

MON

TUE

WED

THU

FRI

SAT

31

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

1

2

3

4

5

6

7

8

9

10

11

Email


abc@cde.com

Password

Confirm Password

abcdef

Submit



CEBUANA

LUHILLIER

HOME

LOAN CALCULATOR

GADGET LOAN

ABOUT US

OTHER SERVICES

PROFILE

LOG OUT

Gadget Loan

320x200

Gadget Name
(Price)

Cras justo odio, dapibus ac facilisis in, egestas eget quam. Donec id elit non mi porta gravida at eget metus. Nullam id dolor id nibh ultricies vehicula ut id elit.

View

320x200

Gadget Name
(Price)

Cras justo odio, dapibus ac facilisis in, egestas eget quam. Donec id elit non mi porta gravida at eget metus. Nullam id dolor id nibh ultricies vehicula ut id elit.

View

320x200

Gadget Name
(Price)

Cras justo odio, dapibus ac facilisis in, egestas eget quam. Donec id elit non mi porta gravida at eget metus. Nullam id dolor id nibh ultricies vehicula ut id elit.

View

320x200

Gadget Name
(Price)

Cras justo odio, dapibus ac facilisis in, egestas eget quam. Donec id elit non mi porta gravida at eget metus. Nullam id dolor id nibh ultricies vehicula ut id elit.

View

320x200

Gadget Name
(Price)

Cras justo odio, dapibus ac facilisis in, egestas eget quam. Donec id elit non mi porta gravida at eget metus. Nullam id dolor id nibh ultricies vehicula ut id elit.

View

320x200

Gadget Name
(Price)

Cras justo odio, dapibus ac facilisis in, egestas eget quam. Donec id elit non mi porta gravida at eget metus. Nullam id dolor id nibh ultricies vehicula ut id elit.

View

320x200

Gadget Name
(Price)

Cras justo odio, dapibus ac facilisis in, egestas eget quam. Donec id elit non mi porta gravida at eget metus. Nullam id dolor id nibh ultricies vehicula ut id elit.

View

320x200

Gadget Name
(Price)

Cras justo odio, dapibus ac facilisis in, egestas eget quam. Donec id elit non mi porta gravida at eget metus. Nullam id dolor id nibh ultricies vehicula ut id elit.

View

Wireframe

CEBUANA LHUILLIER

HOMELOAN CALCULATORGADGET LOANABOUT USOTHER SERVICES ▼PROFILELOG OUT

Gadget Loan

320x200

Gadget

Gadget Name

Price PHP

Description

Cras justo odio, dapibus ac facilisis in, egestas eget quam. Donec id elit non mi porta gravida at eget metus. Nullam id dolor id nibh ultricies vehicula ut id elit. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Nulla aliquet porttitor lacus luctus accumsan. Suspendisse ultrices gravida dictum fusce ut placerat orci. Morbi non

Interest Rate

3 Months	6 Months	12 Months	24 Months
%	%	%	%

Back To ListApply

CEBUANA LHUILLIER

HOMELOAN CALCULATORGADGET LOANABOUT USOTHER SERVICES ▼PROFILELOG OUT

Gadget Loan

320x200

Gadget

Gadget Name

Price PHP

Description

Cras justo odio, dapibus ac facilisis in, egestas eget quam. Donec id elit non mi porta gravida at eget metus. Nullam id dolor id nibh ultricies vehicula ut id elit. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Nulla aliquet porttitor lacus luctus accumsan. Suspendisse ultrices gravida dictum fusce ut placerat orci. Morbi non

Interest Rate

3 Months	6 Months	12 Months	24 Months
%	%	%	%

Payment Term ▼

3 Months6 Months12 Months24 Months

Back To ListConfirm

Wireframe

CEBUANA LHUILLIER

HOMELOAN CALCULATORGADGET LOANABOUT USOTHER SERVICES ▼PROFILELOG OUT

Gadget Loan

320x200

Gadget Name

PHP

Description

Cras justo odio, dapibus ac facilisis in, egestas eget quam. Donec i d elit non mi porta gravida at eget metus. Nullam id dolor id nibh ultricies vehicula ut id elit. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Nulla aliquet porttitor lacus luctus accumsan. Suspendisse ultrices gravida dictum fusce ut placerat orci. Morbi non

Interest Rate			
3 Months	6 Months	12 Months	24 Months
%	%	%	%

Payment Term: N Months

Monthly Payment: Php 0.00

Back

Purchase Gadget

CEBUANA LHUILLIER

HOMELOAN CALCULATORGADGET LOANABOUT USOTHER SERVICES ▼PROFILELOG OUT

Gadget Loan

320x200

Gadget Name

PHP

Description

Cras justo odio, dapibus ac facilisis in, egestas eget quam. Donec i d elit non mi porta gravida at eget metus. Nullam id dolor id nibh ultricies vehicula ut id elit. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Nulla aliquet porttitor lacus luctus accumsan. Suspendisse ultrices gravida dictum fusce ut placerat orci. Morbi non

Interest Rate			
3 Months	6 Months	12 Months	24 Months
%	%	%	%

Application Submitted

Please wait a call if your application is approved. Thank you!

View Application

Wireframe

CEBUANA

LHUIILLIER

HOME

LOAN CALCULATOR

GADGET LOAN

ABOUT US

OTHER SERVICES ▾

PROFILE

LOG OUT

Loan Calculator

Principal Amount (Loan Amount)

(Fixed) Annual Interest Rate

Loan Term

Monthly Payment: Php 0.00

Calculate

CEBUANA

LHUIILLIER

HOME

LOAN CALCULATOR

GADGET LOAN

ABOUT US

OTHER SERVICES ▾

APPLICATIONS

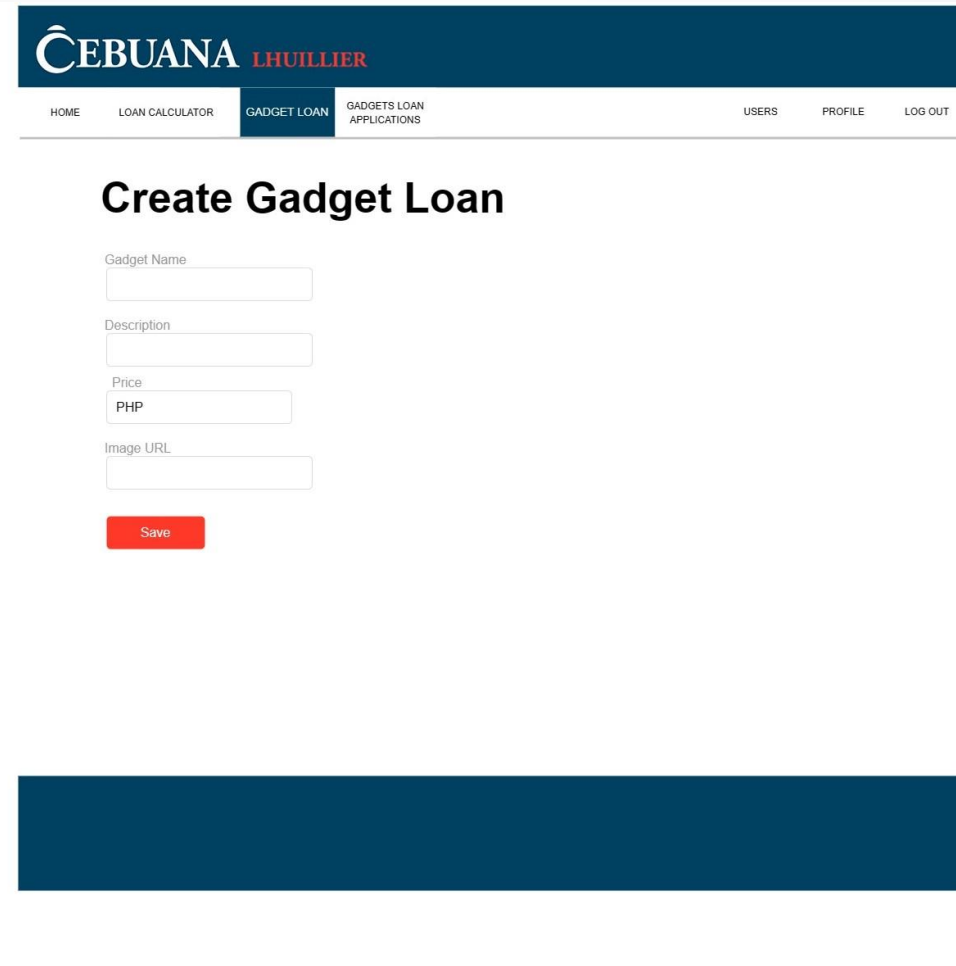
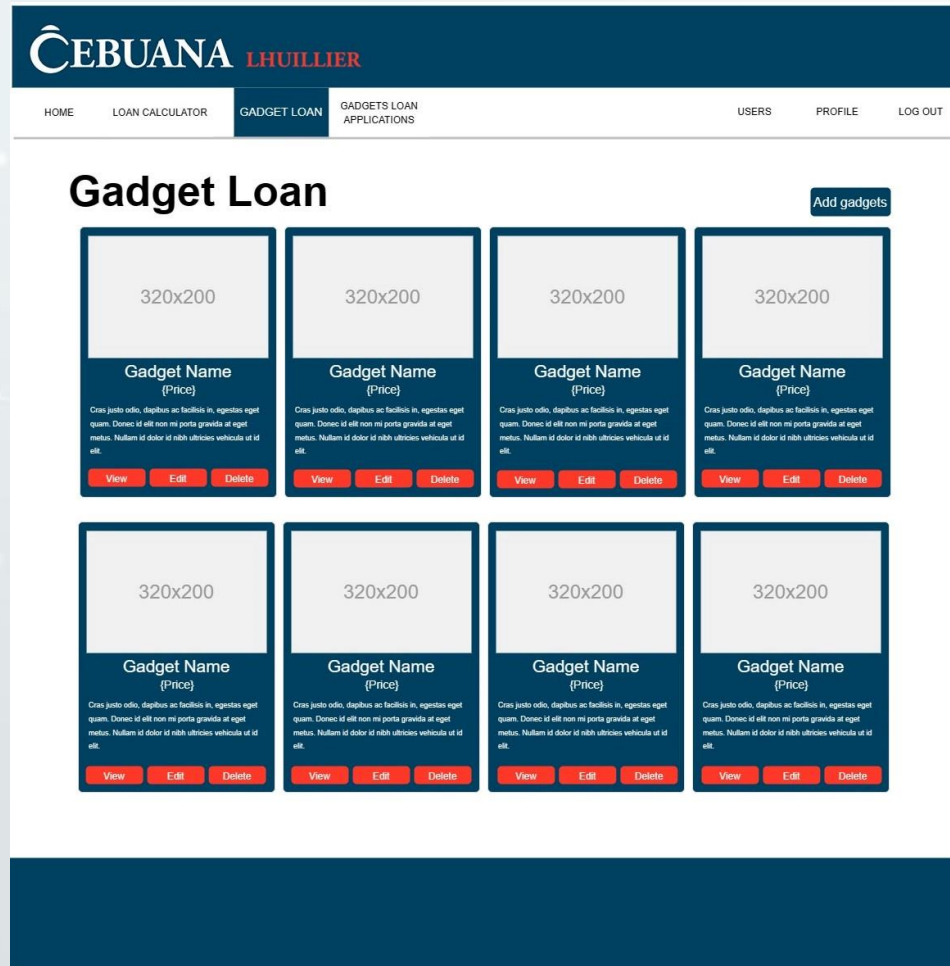
PROFILE

LOG OUT

Application

Gadget Loan	Gadget Name	Interest	Payment Terms	Status
ID	{InterestRate}%	{LoanAmount}	{PaymentTerms}	<div>For Verification</div> <div>Declined</div> <div>Approved</div> <div>Delete</div>

Wireframe



Wireframe

CEBUANA LHUILLIER

HOMELOAN CALCULATORGADGET LOANGADGET LOAN APPLICATIONSUSERSPROFILELOG OUT

Gadget Loan Applications

Gadget name	Full Name	Price	Tenure	Interest	Status
{Gadget Name}	{First Name}	{Price}	{Tenure}	{Interest}	<div>For Verification</div> <div>Declined</div> <div>Approved</div> <div>View</div> <div>Delete</div>
{Gadget Name}	{First Name}	{Pricce}	{Tenure}	{Interest}	<div>For Verification</div> <div>Declined</div> <div>Approved</div> <div>View</div> <div>Delete</div>

CEBUANA LHUILLIER

HOMELOAN CALCULATORGADGET LOANGADGET LOAN APPLICATIONSUSERSPROFILELOG OUT

Gadget Loan Application

Full Name

Full Name

Email

Email

Birthdate

Birthdate

Gender

Gender

Loan Amount

Loan Amount

Tenure

Tenure

Status

Approve

Decline

Save

Wireframe

CEBUANA LHUILLIER

HOMELOAN CALCULATORGADGET LOANGADGET LOAN APPLICATIONSUSERSPROFILELOG OUT

Gadget Loan Applications

Gadget name	Full Name	Price	Tenure	Interest	Status
{Gadget Name}	{First Name}	{Price}	{Tenure}	{Interest}	<div>For Verification</div> <div>Declined</div> <div>Approved</div> <div>View</div> <div>Delete</div>
{Gadget Name}	{First Name}	{Price}	{Tenure}	{Interest}	<div>For Verification</div> <div>Declined</div> <div>Approved</div> <div>View</div> <div>Delete</div>

CEBUANA LHUILLIER

HOMELOAN CALCULATORGADGET LOANGADGET LOAN APPLICATIONSUSERSPROFILELOG OUT

Gadget Loan Application

Full Name

Full Name

Email

Email

Birthdate

Birthdate

Gender

Gender

Loan Amount

Loan Amount

Tenure

Tenure

Status

Approve

Decline

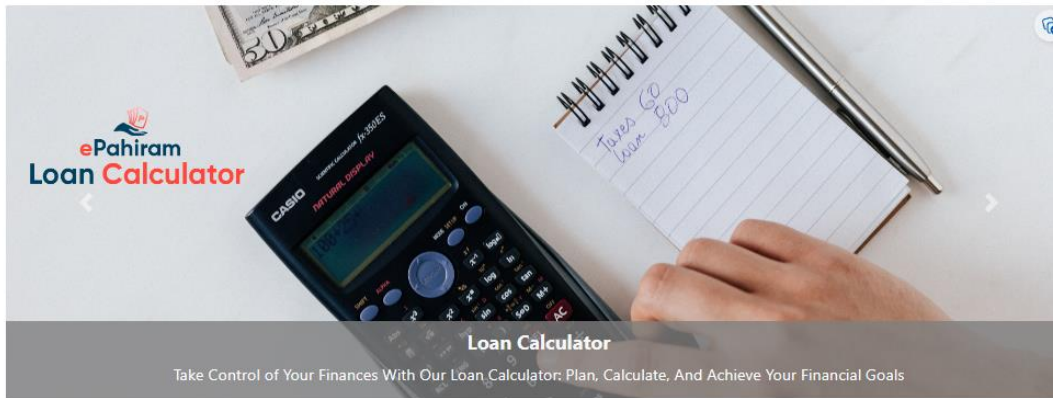
Save

Important Features



Home Loan Calculator Gadget Loan

Login Register



ePahiram
Loan Calculator

Loan Calculator

Loan calculators can help you figure out your monthly payments on different types of loans

[View](#)


ePahiram
Gadget Loan


Gadget Loan

A gadget loan is a financial product that allows you to borrow money for a specific type of gadget.

[View](#)

Important Features


[Home](#)
[Loan Calculator](#)
[Gadget Loan](#)
[Login](#)
[Register](#)



We create value to customers through a simple application process, easy terms, and less requirements, cutting long lines and long waiting time. Our network of more than 2,200 branches nationwide and online presence give customers unlimited access and utter convenience in applying for a loan. Our five-point application to disbursement process ensures services are delivered on time.

Welcome to ePahiram

Login Your Account

Email address


name@example.com

Password

Password

☐ Remember me

Sign in



© 2023

Services

[Loan Calculator](#)

[Gadget Loan](#)

Social Media

[Facebook](#)

[Twitter](#)

[Youtube](#)

[Instagram](#)

Important Features

[Home](#) [Loan Calculator](#) [Gadget Loan](#)[Login](#) [Register](#)

We create value to customers through a simple application process, easy terms, and less requirements, cutting long lines and long waiting time. Our network of more than 2,200 branches nationwide and online presence give customers unlimited access and utter convenience in applying for a loan. Our five-point application to disbursement process ensures services are delivered on time.

Welcome to ePahiram

Register an Account

FullName

Email address

Date of Birth



Gender

Phone Number

Address

Password

Confirm Password

Important Features

LoanCalculator

Principal Amount (Loan Amount):

(Fixed) Annual Interest Rate:

Loan Term (Refer To The Table Below):

Calculate


Loan Description

Loan Terms (months)	(Fixed) Interest Rate (annual)	Loan Amount
12	12%(12.00)	Php 50,000 - Php 500,000
24	12%(12.00)	Php 50,000 - Php 500,000
36	12%(12.00)	Php 50,000 - Php 500,000

Eligibility Criteria


Criteria	Requirement
Minimum Loan Amount	Php 50,000
Maximum Loan Amount	Php 500,000
Minimum Loan Term	12 months
Maximum Loan Term	36 months
Minimum Annual Income	Php 25,000

Important Features

 [Home](#) [Loan Calculator](#) [Gadget Loan](#) [Login](#) [Register](#)


GadgetLoan

Search



iPhone 14 ProMax
PHP 79999
The iPhone 14 Pro Max display has rounded corners that follow a beautiful curved design, and these corners are within a standard rectangle. When measured as

[View](#)





iPhone 14 Pro
PHP 75999
The iPhone 14 Pro display has rounded corners that follow a beautiful curved design, and these corners are within a standard rectangle. When measured as


[View](#)

iPhone 13 ProMax
PHP 65999
The iPhone 13 display has rounded corners that follow a beautiful curved design, and these corners are within a standard rectangle. When measured as

[View](#)







Important Features

GadgetLoan



iPhone 14 ProMax

PHP 79999

The iPhone 14 Pro Max display has rounded corners that follow a beautiful curved design, and these corners are within a standard rectangle. When measured as a standard rectangular shape, the screen is 6.69 inches diagonally (actual viewable area is less).

Payment Term

Select Payment Term

[Back to list](#)

[Confirm](#)

Important Features

Confirm Purchase



iPhone 14 ProMax

PHP ₱79,999.00

The iPhone 14 Pro Max display has rounded corners that follow a beautiful curved design, and these corners are within a standard rectangle. When measured as a standard rectangular shape, the screen is 6.69 inches diagonally (actual viewable area is less).

Interest: 0.5%

Payment Term: 3 Months

Monthly Payment: ₱27,066.33

[Back](#)

[Confirm Purchase](#)

Important Features

MyPurchase

Gadget Name	Interest	Payment Term	Monthly Payment	Date Applied	Status	Actions
Iphone 14 ProMax	1.5%	24 months	4533.28	18/04/2023	Pending	View Withdraw Purchase

[View Archived Purchases](#)

Important Features

PurchaseDetails

[Back](#)

Gadget Name	Iphone 14 ProMax
Price	PHP ₱79,999.00
Description	The iPhone 14 Pro Max display has rounded corners that follow a beautiful curved design, and these corners are within a standard rectangle. When measured as a standard rectangular shape, the screen is 6.69 inches diagonally (actual viewable area is less).
Interest	1.5%
Payment Term	24 Months
Monthly Payment	₱4,533.28
Date Applied	18/04/2023 2:49:55 am

Important Features

ProfileDetails

[Update Password](#)

Name	Registered
Email	registered@gmail.com
Phone Number	1234567890
Gender	Male
Birthdate	18/04/2023
Address	Somewhere

Important Features

ManageUsers

FullName	Email	Phone Number	Actions
Registered	registered@gmail.com	1234567890	View Delete

UserDetails

[Back to List](#)

Id	cba87ff8-bb15-442f-8a47-0e65a93cab8c
Name	Registered
Email	registered@gmail.com
Phone Number	1234567890
Gender	Male
Birthdate	18/04/2023
Address	Somewhere

Important Features

ViewPurchases

SearchView Archived Purchases

Name	Phone Number	Gadget Name	Interest	Payment Term	Date Applied	Status	Actions		
Registered	1234567890	Iphone 14 ProMax	1.5%	24 months	18/04/2023 2:49:55 am	Pending	<button>View</button>	<button>Approve</button>	<button>Decline</button>

Archived Purchases

Get More Gadgets

Gadget Name	Interest	Payment Term	Monthly Payment	Date Purchased	Status	Actions	
Iphone 14 ProMax	0.7%	6 months	13893.16	18/04/2023	Declined	<button>View</button>	<button>Delete Purchase</button>

Important Features

PurchaseDetails

[Back](#)

Gadget Name	Iphone 14 ProMax
Price	PHP ₱79,999.00
Description	The iPhone 14 Pro Max display has rounded corners that follow a beautiful curved design, and these corners are within a standard rectangle. When measured as a standard rectangular shape, the screen is 6.69 inches diagonally (actual viewable area is less).
Interest	0.7%
Payment Term	6 Months
Monthly Payment	₱13,893.16
Date Applied	18/04/2023 2:46:19 am

UserDetails

Name	Registered
Email	registered@gmail.com
Phone Number	1234567890
Gender	M
Birthdate	18/04/2023 2:45:20 am
Address	Somewhere

Modules Done

John Jason M. Coligado:

- Entity relationship in MVC
- loan Calculator (formula and implementation)
- EMI Formula for Gadget and Loan Calculator (Implementation)
- Purchase Controllers

Jhansept Kylo Pandanan:

- ER Diagram
- Wireframes
- Gadget Loan Implementation (CRUD)
- UI

Implementation

• **Future Enhancement:** Payment Options such as (Online Banking, Over the counter payment, and Cash payment thru PJLI).

Conclusion

This capstone project adds new features to the existing web application for micro-loans, which can **compute the initial loan payment for the customer, provide a list of available loan gadgets**, and the admin can change details and add new gadgets as needed, and finally, the user has **a dashboard to view the purchase and existing payment terms**. this web application should meet business standards.

The background is a dark blue gradient. It features a faint, stylized image of two hands shaking in a firm grip, positioned centrally. Below the handshake, a cityscape with numerous skyscrapers is visible. Overlaid on the entire scene are thin, light blue lines that resemble a circuit board or a network diagram, with some lines ending in small circles.

Thank You