



Agenda

- A smart a software project/System
- How to present your Project/System efficiently and effectively!!!

Knowledge sharing

ho=>Mg Kyaing

hen=>2023-09-10(Sunday)

A smart a software project/System

- 1) Must include Data Validation and showing meaningful message box when CRUD process a program.

The screenshot displays a web application interface for managing position information. A sidebar on the left contains navigation links for various modules: Category, Product, Table, Position, Employee, Order, Invoice, Reports, and a Logout button. The main content area is titled 'Position Information' and features a table with two entries. A red-bordered box highlights a teal-colored message at the top of the table: '1 record is created successfully'. The table has columns for '#', 'Code', 'Name', 'Basic Salary', and 'Actions'. The first entry is for a 'Waiter' with code 'pn-1' and a salary of 150000.00. The second entry is for a 'Cashier' with code 'pn-2' and a salary of 250000.00. Each entry has 'edit' and 'delete' buttons. Below the table, it indicates 'Showing 1 to 2 of 2 entries'. The footer shows the copyright notice 'Copyright © 2019-2023 AdminLTE.io. All rights reserved.' and the version 'Version 3.2.0'.

RMS

admin@gmail.com

Search

Position Information

1 record is created successfully

Show 10 entries

Search:

#	Code	Name	Basic Salary	Actions
1	pn-1	Waiter	150000.00	edit delete
2	pn-2	Cashier	250000.00	edit delete

Showing 1 to 2 of 2 entries

Previous 1 Next

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Version 3.2.0

A smart a software project/System

- 1) Must include Data Validation and showing meaningful message box when CRUD process a program.

The screenshot shows a web application interface for managing position information. A red box highlights a message box that says "Oh, Sorry pn-1 is already existed in system." This message appears after attempting to create a new position with the code "pn-1", which already exists in the system. The interface includes a sidebar with navigation links, a search bar, and a table of existing positions.

Browser: localhost:7096/Position/List

Navigation: Home

Position Information

Oh, Sorry pn-1 is already existed in system.

Show 10 entries

#	Code	Name	Basic Salary	Actions
1	pn-1	Waiter	150000.00	edit delete
2	pn-2	Cashier	250000.00	edit delete

Showing 1 to 2 of 2 entries

Previous 1 Next

A smart a software project/System

- 1) Must include Data Validation and showing meaningful message box when CRUD process a program.

The screenshot displays a web application interface for managing positions. A confirmation dialog box is overlaid on the page, asking for confirmation to delete a record. The dialog box has a title bar that says "localhost:7096 says" and a message "are you sure to delete this record?". It features two buttons: "OK" and "Cancel".

The background interface includes a sidebar with a search bar and a list of menu items: Category, Product, Table, Position, Employee, Order, Invoice, Reports, and Logout. The main content area shows a table of positions with columns for #, Code, Name, Basic Salary, and Actions. The table contains two entries: a Waiter with a basic salary of 150,000.00 and a Cashier with a basic salary of 250,000.00. The Actions column for each entry contains "edit" and "delete" buttons. The footer of the page includes a copyright notice for AdminLTE.io and the version number 3.2.0.

#	Code	Name	Basic Salary	Actions
1	pn-1	Waiter	150000.00	<button>edit</button> <button>delete</button>
2	pn-2	Cashier	250000.00	<button>edit</button> <button>delete</button>

A smart a software project/System

- 1) Must include Data Validation and showing meaningful message box when CRUD process a program

The screenshot displays a web application interface with a dark sidebar on the left and a main content area. The sidebar contains a user profile for 'admin@gmail.com' and a list of menu items: Category, Product, Table, Position, Employee, Order, Invoice, Reports, and a Logout button. The main content area is titled 'Position Information' and features a table with columns: #, Code, Name, Basic Salary, and Actions. A single entry is shown with ID 1, Code 'pn-2', Name 'Cashier', and Basic Salary '250000.00'. The Actions column for this entry contains 'edit' and 'delete' buttons. A red rectangular box highlights a teal-colored message above the table that reads 'delete process is completed successfully.'. Below the table, it says 'Showing 1 to 1 of 1 entries'. The footer of the page includes the copyright notice 'Copyright © 2019-2023 AdminLTE.io. All rights reserved.' and the version 'Version 3.2.0'.

#	Code	Name	Basic Salary	Actions
1	pn-2	Cashier	250000.00	edit delete

A smart a software project/System

- 1) Must include Data Validation and showing meaningful message box when CRUD process a program.

The screenshot displays the RMS AdminLTE.io web application. On the left is a dark sidebar with the 'RMS' logo, a user profile for 'admin@gmail.com', a search bar, and a menu with items: Category, Product, Table, Position, Employee, Order, Invoice, Reports, and a Logout button. The main content area is titled 'Employee Information' and features a red-bordered success message: '1 record is created successfully and you can login with this email :mr.kyaing7@gmail.com and default password :RMS@123welcome'. Below the message is a table with 1 entry. The table has columns: #, Code, Name, Email, Mobile Phone, Gender, Postion, and Actions. The single entry has ID 1, Code 'e1', Name 'Min Min', Email 'mr.kyaing7@gmail.com', Mobile Phone '+959256275319', Gender 'male', and Postion 'Cashier'. The Actions column contains 'edit' and 'delete' buttons. At the bottom of the table, it says 'Showing 1 to 1 of 1 entries' and includes 'Previous', '1', and 'Next' pagination links. The footer contains the copyright notice 'Copyright © 2019-2023 AdminLTE.io. All rights reserved.' and the version 'Version 3.2.0'.

RMS

admin@gmail.com

Search

Category

Product

Table

Position

Employee

Order

Invoice

Reports

Logout

Home

Employee Information

1 record is created successfully and you can login with this email :mr.kyaing7@gmail.com and default password :RMS@123welcome

Show 10 entries

#	Code	Name	Email	Mobile Phone	Gender	Postion	Actions
1	e1	Min Min	mr.kyaing7@gmail.com	+959256275319	male	Cashier	<button>edit</button> <button>delete</button>

Showing 1 to 1 of 1 entries

Previous 1 Next

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Version 3.2.0

A smart a software project/System

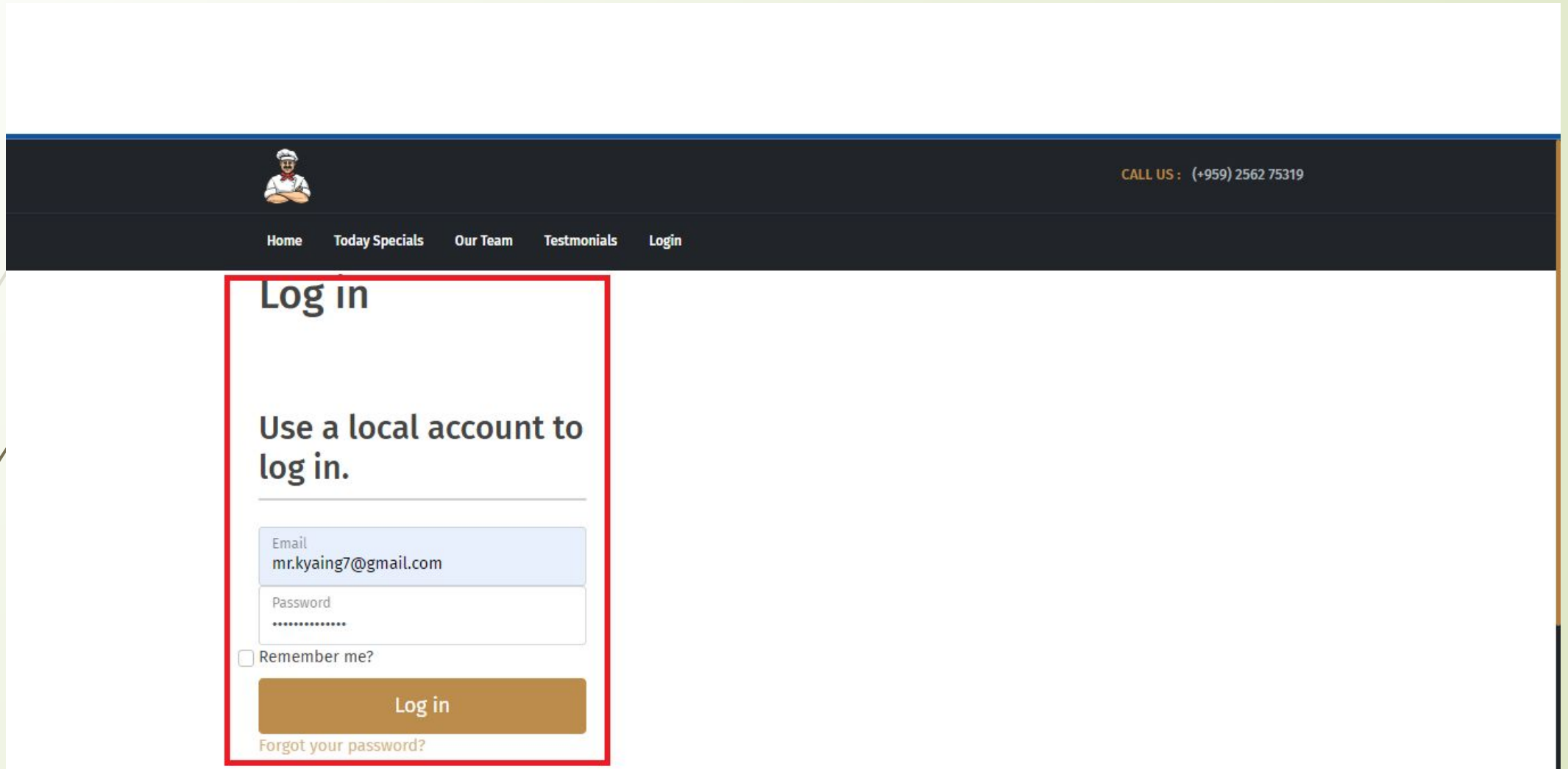
❑ 2) Must include User Management Functions:

Eg : Authentication and Authorization

- User Login
- Profile Management
- Change password
- User Logout

A smart a software project/System

❑ Must include user login / logout



The screenshot shows a web application interface. At the top, there is a dark blue header bar. On the left side of the header is a small icon of a chef. On the right side of the header is the text "CALL US : (+959) 2562 75319". Below the header is a dark blue navigation bar with the following links: "Home", "Today Specials", "Our Team", "Testimonials", and "Login". The main content area is white. In the center-left of the main content area, there is a red rectangular box highlighting a "Log in" form. The form contains the following elements: the text "Log in" in a large font, the text "Use a local account to log in." in a smaller font, an "Email" input field with the text "mr.kyaing7@gmail.com", a "Password" input field with masked characters "*****", a checkbox labeled "Remember me?", a "Log in" button, and a link "Forgot your password?" below the button.

Log in

Use a local account to log in.

Email
mr.kyaing7@gmail.com

Password

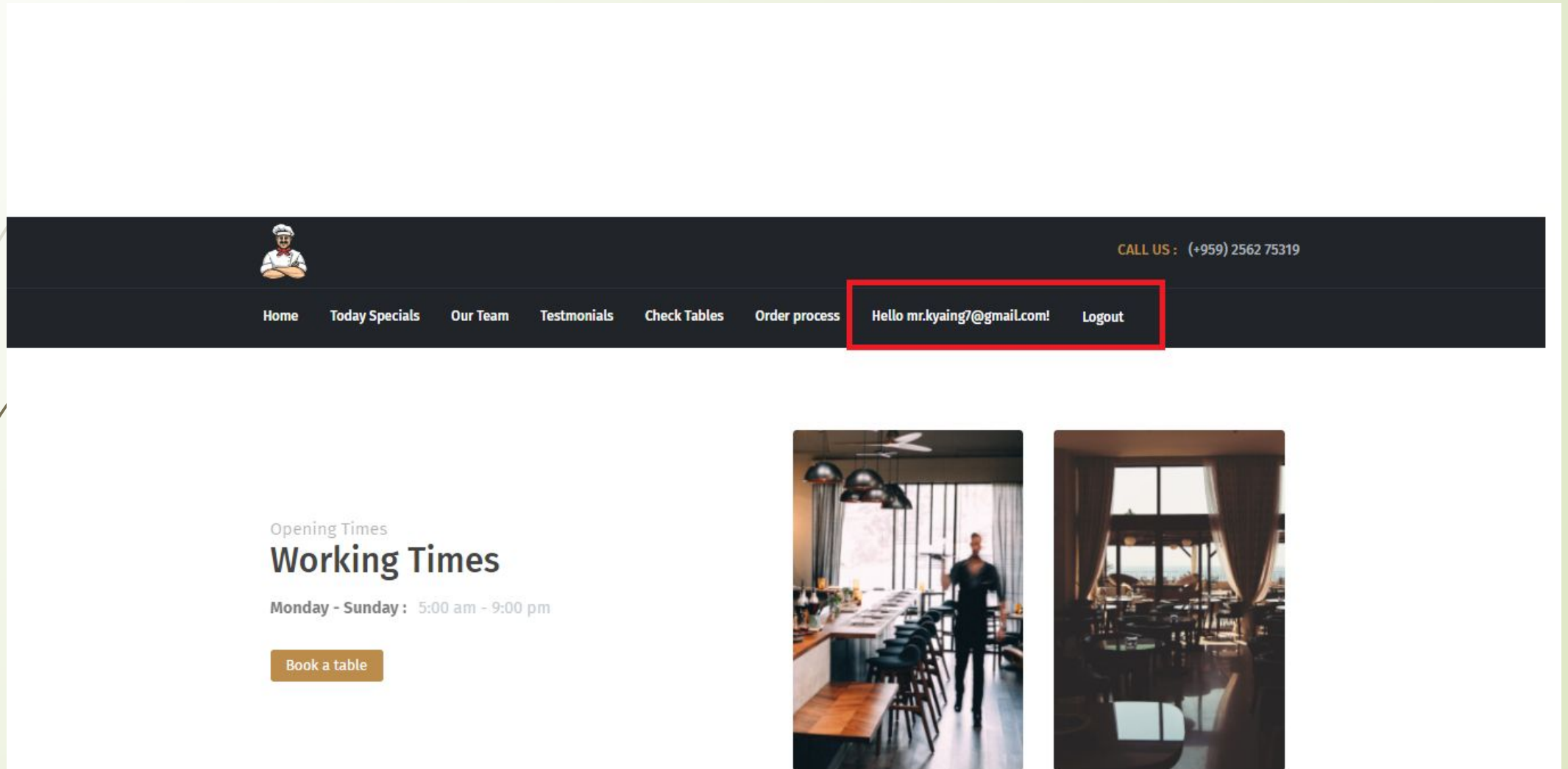
☐ Remember me?

Log in

[Forgot your password?](#)

A smart a software project/System

❑ Must include user login / logout



A smart a software project/System

❑ **Must include change password!!**

CALL US : (+959) 2562 75319

Home Today Specials Our Team Testimonials Check Tables Order process Hello mr.kyaing7@gmail.com! Logout

Manage your account

Change your account settings

Profile
Email
Password
Personal data

Change password

Current password

The Current password field is required.


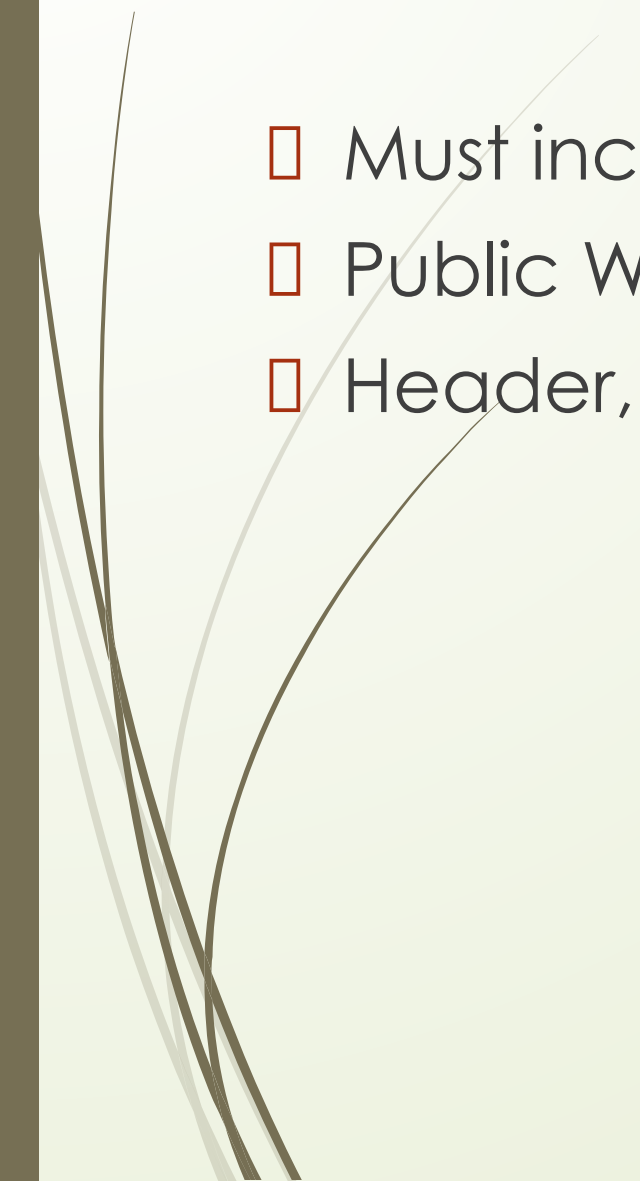
New password

The New password field is required.

Confirm new password

Update password

A smart a software project/System

- 
- 
- ❑ Must include Consistent UI Layout:
 - ❑ Public WebSite Layout and Admin Layout
 - ❑ Header,Navbar,Aside,Footer and Main Content

3) Must consistent UI Layout

Should include Navbar

Home Today Specials Our Team Testimonials Login



Number Of Seats

Description

Book A Table

We don't span customers. Check our [Privacy Policy](#)

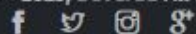
Should include footer



Our Company

Our Location

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3) Must consistent UI Layout

RMS

admin@gmail.com

Search

Category

Product

Table

Position

Employee

Order

Invoice

Reports

Logout

Home

Online Store Visitors

View Report

820

↑ 12.5%

Since last week

Visitors Over Time

Date	This Week	Last Week
18th	100	60
20th	120	80
22nd	170	70
24th	160	65
26th	180	80
28th	175	75
30th	160	100

Sales

View Report

\$18,230.00

↑ 33.1%

Since last month

Sales Over Time

Month	This year	Last year
JUN	\$1k	\$0.5k
JUL	\$2k	\$1.5k
AUG	\$3k	\$2.5k
SEP	\$2.5k	\$2k
OCT	\$2.5k	\$1.5k
NOV	\$2.5k	\$1k
DEC	\$3k	\$2k

Today Special Products

Name	Unit Price (MMK)	Category	More
မြေအိုးမြီးရှည်	3500.00	↑ မြေအိုးမြီးရှည်	
နန်းကြီးသုပ်	1300.00	↑ မြေအိုးမြီးရှည်	

Online Store Overview

↑ 12%

CONVERSION RATE

↑ 0.8%

SALES RATE

↓ 1%

REGISTRATION RATE

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Version 3.2.0



❑ 4) Must use and apply MVC Routing pattern

Template => Hosturl/controllername/actionName

Eg 1) Hosturl/account/logout

Eg 2) Hosturl/account/home

Eg 3) Hosturl/profile/edit?id=101

❑ 5)Build the project with excellent team work or collaboration

❑ **Discuss** Together!

❑ **Work** together!

❑ **Innovative** together!

❑ **Happy** together!

❑ **Achievement** together!

❑ **Pass Obstacles** together

❑ **And More**



❑ 6)JUST NOT DOING curd CODE/PROGRAM,beyond the crud CODE/PROGRAM!!

This is PROJECT OR SYSTEM OR SOFTWARE.

- think how the program are related each other**
- do the make sense concept in project .**
- think the end-users level when you use the project/software**





Any Questions in there !!

Let's move another topic



How to present your Project/System efficiently and effectively!!!

=====*****=====



Tips and Hints



Content



- ❑ What key contents should include in your project/system presentation?
- ❑ UML and Flowchart Notation & how to draw it?
- ❑ ERD Diagram Reverse Engineering(MySQL,MSSQL)
- ❑ Further Studies or To read next Level
- ❑ CASE Tools Reference and Links
- ❑ Any Comments and Open Discussion

What key contents should include in your project/system presentation?

- ❑ 0)Development Team Or Team members introduction(0.5 mins)
(မိမိကိုယ်ကို မိတ်ဆက်ခြင်းနဲ့ မိမိ team ကို မိတ်ဆက်ခြင်း။)
- ❑ 1)System's Objective Or Goal(2 mins)
(System ရဲ့ အဓိကရည်ရွယ်ချက်ကို ရှင်းပြခြင်း၊ သုံးတဲ့ Users တွေကို ဘယ်လို Solutions ပေးလဲ ရှင်းပြခြင်း။)
- ❑ 2)System's technical point of view(CASE and DevTools) (0.5 mins)
(System ကို ရေးသားသည့်နည်းပညာရှုထောင့်မှသုံးသပ်ခြင်းဘယ် tools တွေနဲ့ ရေးသားခဲ့ကြတယ်။)
- ❑ 3)System's functional Lists(Features Lists)(1 mins)
(System ရဲ့ Core features များကို ရှင်းပြခြင်း။)

What key contents should include in your project presentation?

- ❑ 4)System's Flowchart Or UML Diagrams(2 mins)
(System ရဲ့ အလုပ်လုပ်မှု ပုံစံကို ရှင်းပြခြင်း။)
- ❑ 5)System's ERD Or Database Design(Logical & Physical Design)(2 mins)
(System ရဲ့နောက်ကွယ်မှာdata သိမ်းဆည်းမှု ပုံစံများကိုရှင်းပြခြင်း[1NF,2NF,3NF,4NF etc])
- ❑ 6)System's Pros and Cons Or SWOT Analysis(2 mins)
(System ရဲ့ အားနည်းချက် အားသာချက်များကို ရှင်းပြချင်း။)
- ❑ 7)System's new feature list.(1 mins)
(System တွင်နောက်ထပ်ထည့်ချင်သော feature စာရင်းများကို ရှင်းပြခြင်း။)
- ❑ 8)Run/Show project/System(7 mins)
(မိမိတို့ရဲ့ project/system ကို run ပြခြင်း.မိမိရေးသားခဲ့သည့်အပိုင်းများကိုရှင်းပြခြင်း။)

0)Development Team Or Team Members Introduction (မိမိကိုယ်ကို မိတ်ဆက်ခြင်းနဲ့ မိမိ team ကို မိတ်ဆက်ခြင်း။)

- Team မိတ်ဆက်ချင်းဆိုတာကတော့ ရှင်းပါတယ်။
- မိမိကိုယ်ကို မိတ်ဆက်မယ် ။မိမိ team ကိုမိတ်ဆက်မယ်။
- ဘယ်သူတွေပါဝင်ရေးသားခဲ့တယ်ရယ်။
- ဘယ်သူတွေက ဘယ်အပိုင်းကို တာဝန်ရေးခဲ့တယ်ဆိုတာ စသည်ဖြင့်။
- ဥပမာ..Login and Logout ကို အောင်အောင်ရေးတယ်။Reports တွေကို မြဲမြဲရေးတယ်။
- ဘယ်အပိုင်းကတော့ ကျနော်/ကျမ ရေးတယ်.....စသည်၊

1)System's Objective Or Goal(2 mins)

(System ရဲ့ အဓိကရည်ရွယ်ချက်ကို ရှင်းပြခြင်း၊ သုံးတဲ့ Users တွေကို ဘယ်လို Solutions ပေးလဲစသည်။)

□ System's Objectives or Goal

□ How to fulfill users or stakeholders expectation by this system.

စနစ်က သုံးမဲ့ သူတွေကို ဘယ်လိုအကျိုးကျေးဇူးပေးမယ်ရယ်.ဘယ်လိုဖြည့်စီးပေးမလဲ။

□ Explain Over all functions of System

စနစ်ရဲ့ လုပ်ဆောင်မဲ့ အပိုင်းများကို အကြမ်းဖျင်းရှင်းပြခြင်း။

□ Write down your system's Objectives/Goal.

2)System's technical point of view(CASEs and DevTools) (0.5 mins)

(System ကို ရေးသားသည့်နည်းပညာရှုထောင့်မှသုံးသပ်ခြင်း ဘယ်tools တွေနဲ့ ရေးသားခဲ့ကြတယ်။)

□ Which technology are used to develop system?

- Programming Language & Framework>Java,C#,PHP,Spring, Spring Boot,struct2,mvc
- Database>>MySQL,MSSQL,PostgreSQL,SQLite
- Deployment Server>>IIS,Apache Server,xampp server,wamp server,
- Development Tools(IDE)>>eclipse Oxygen,visual studio 2015,vs code,sublime text,netbean,android studio 3.3 etc.
- Other Plugins & Templates & CSS Framework>>Bootstrap 3,4,Jquery,Ajax,Entity Framework 5,Hibernate ,Laravel 5.3

3) System's functional Lists (Features Lists) (2 mins)
(System ရဲ့ Main features များကို ရှင်းပြခြင်း။)

□ Main feature Lists

- Administration module (Login, Logout, User account mgt, user profile, role mgt)
- Transaction functions
- Reports functions

□ Write down your system's functional lists.

4)System's flowchart Or UML Diagrams(6 mins)

(System ရဲ့ အလုပ်လုပ်မဲ့ ပုံစံကို ရှင်းပြခြင်း။)

❑ UML And Flowchart ဆိုတာကို သိဖို့လိုလာပီ။

❑ **What is UML?**

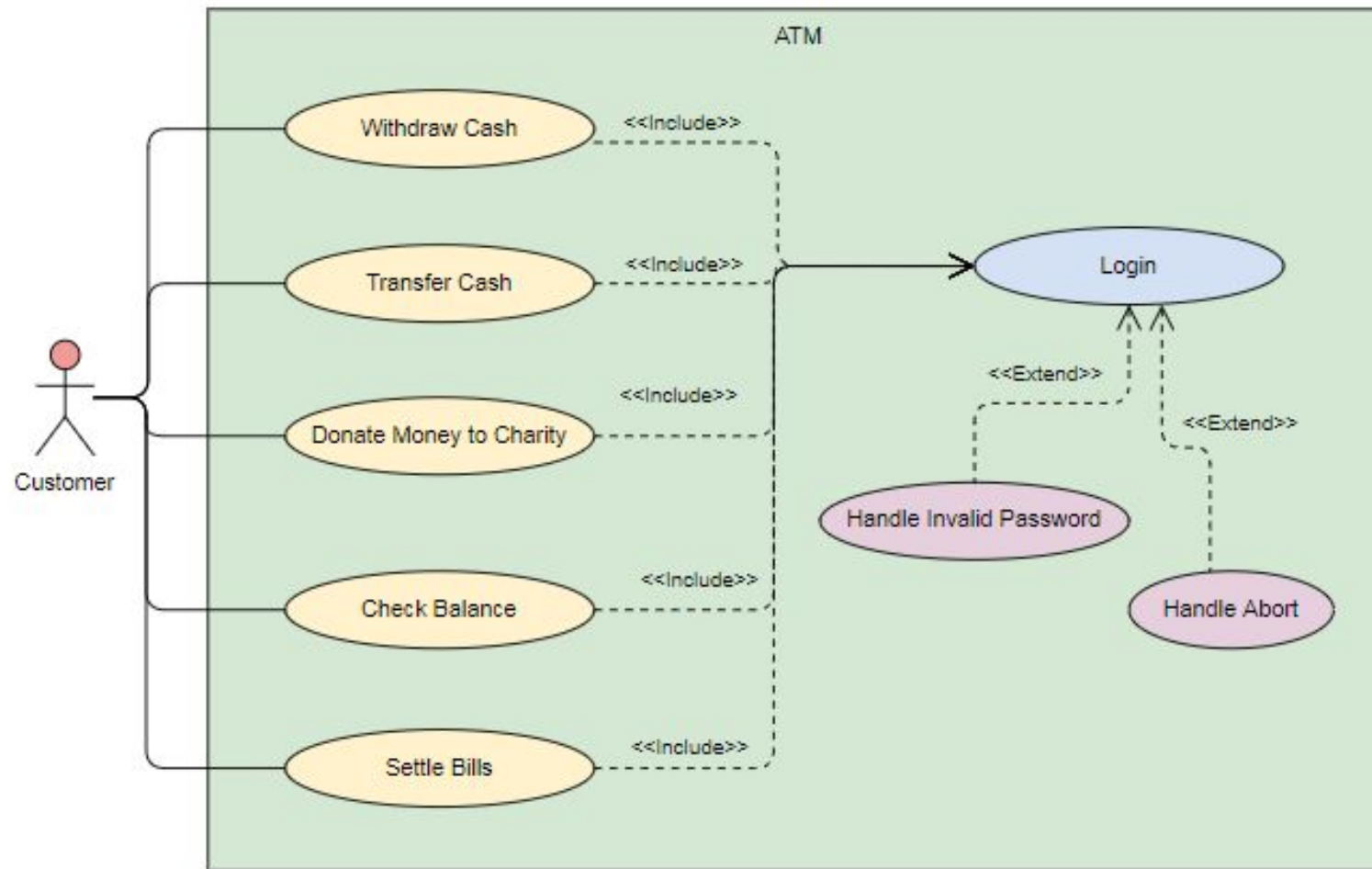
သုကအဓိကတော့ system ရဲ့ အလုပ်လုပ်မဲ့ ပုံစံ ကို users/stakeholders တွေကို သိသာမြင်သာအောင် Diagrams တွေနဲ့ ပုံလေးတွေနဲ့ ရှင်းပြတာပါ။

General/Big-Picture နားလည်သွားအောင်ရှင်းပြလိုက်တာပါ။

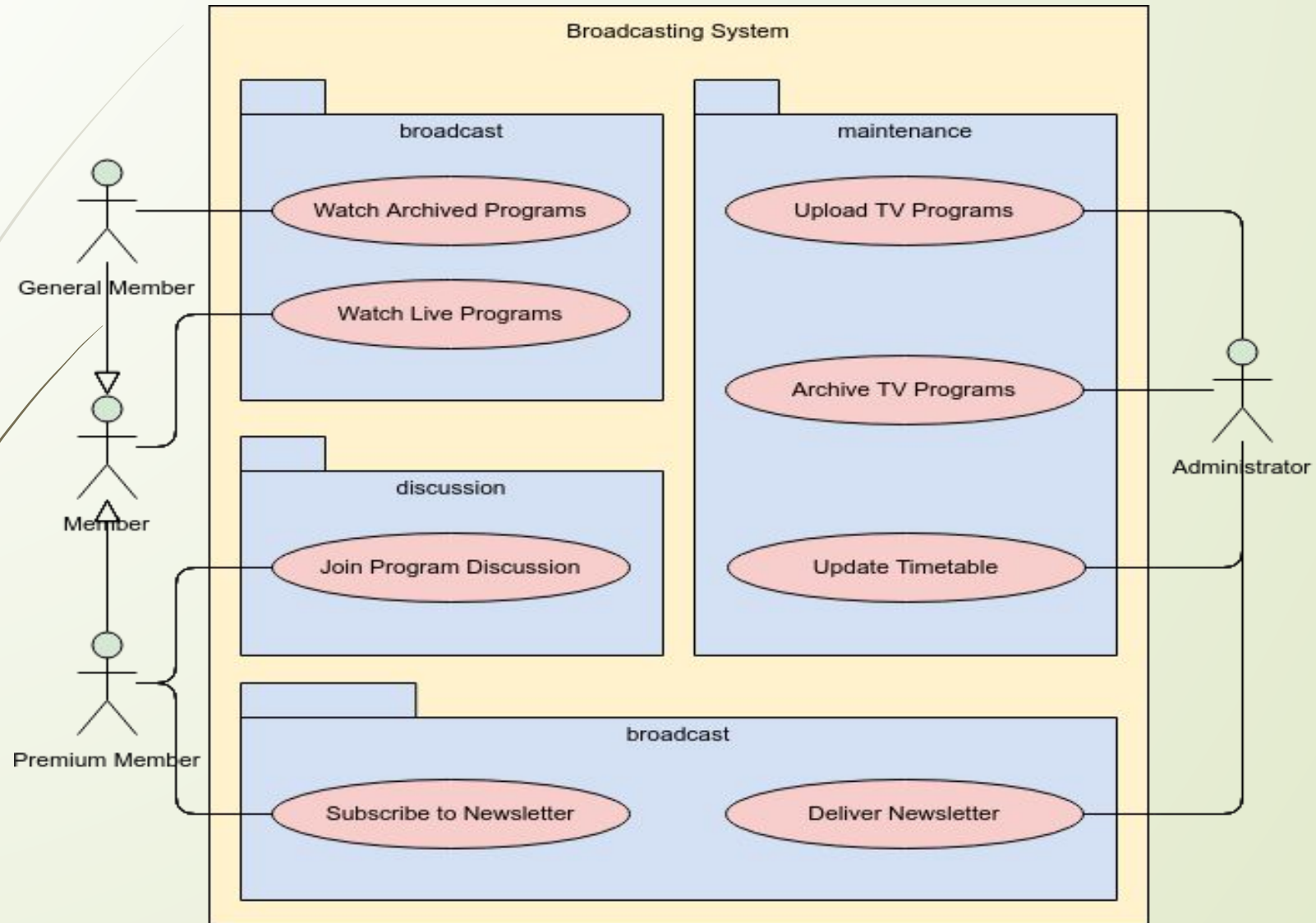
UML (Unified Modeling Language) is a standard language for specifying, visualizing, constructing, and documenting the artifacts of software systems. **UML** was created by the Object Management Group (OMG) and **UML** 1.0 specification draft was proposed to the OMG in January 1997.

- ❑ 1)Class diagram
- ❑ 2)Object diagram
- ❑ 3)Use case diagram
- ❑ 4)Sequence diagram
- ❑ 5)Collaboration diagram
- ❑ 6)Activity diagram
- ❑ 7)Statechart diagram
- ❑ 8)Deployment diagram
- ❑ 9)Component diagram

UML Use Case Diagram Example



UML Use Case Diagram Example



Notation of UML Use Case Diagram ? Let's See.

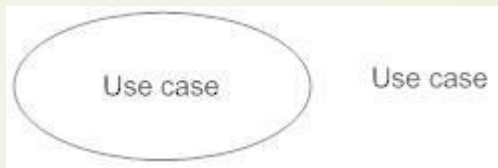
□ System

Draw your system's boundaries using a rectangle that contains use cases. Place actors outside the system's boundaries.



□ Use Case

Draw use cases using ovals. Label the ovals with verbs that represent the system's functions.



Notation of UML Use Case Diagram ? Let's See.

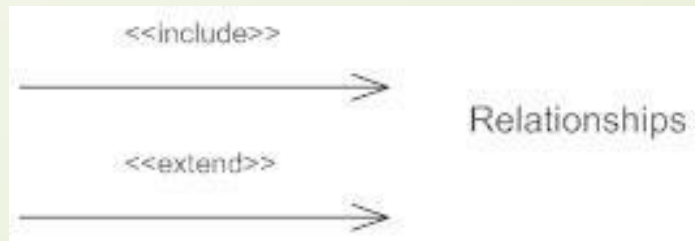
▣ Actors

Actors are the users of a system. When one system is the actor of another system, label the actor system with the actor stereotype.

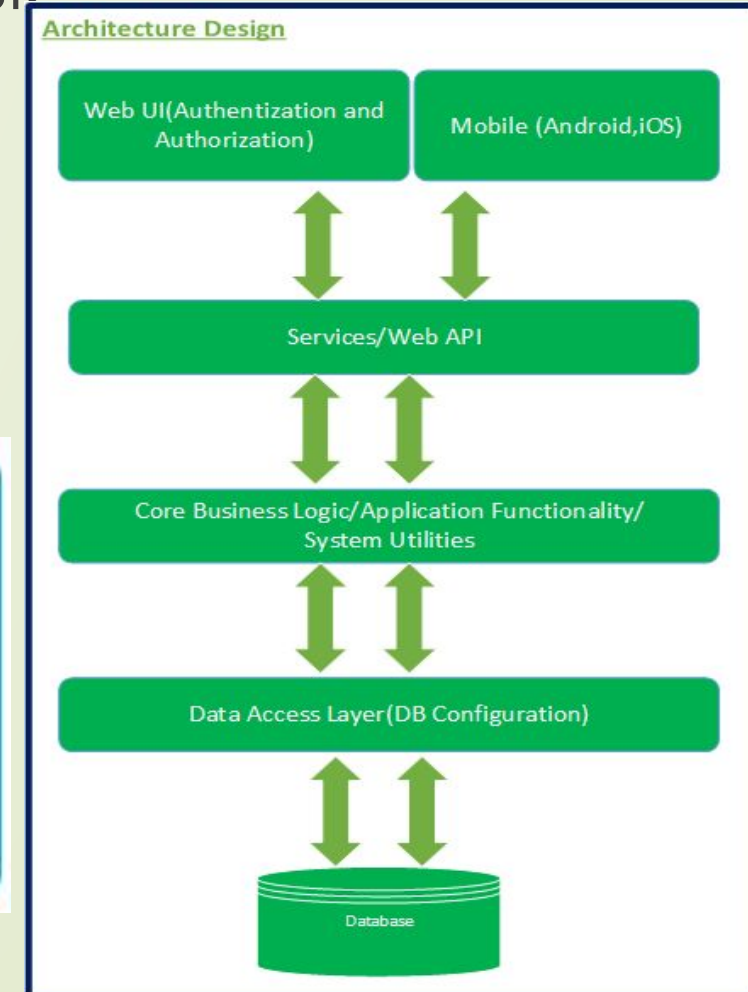
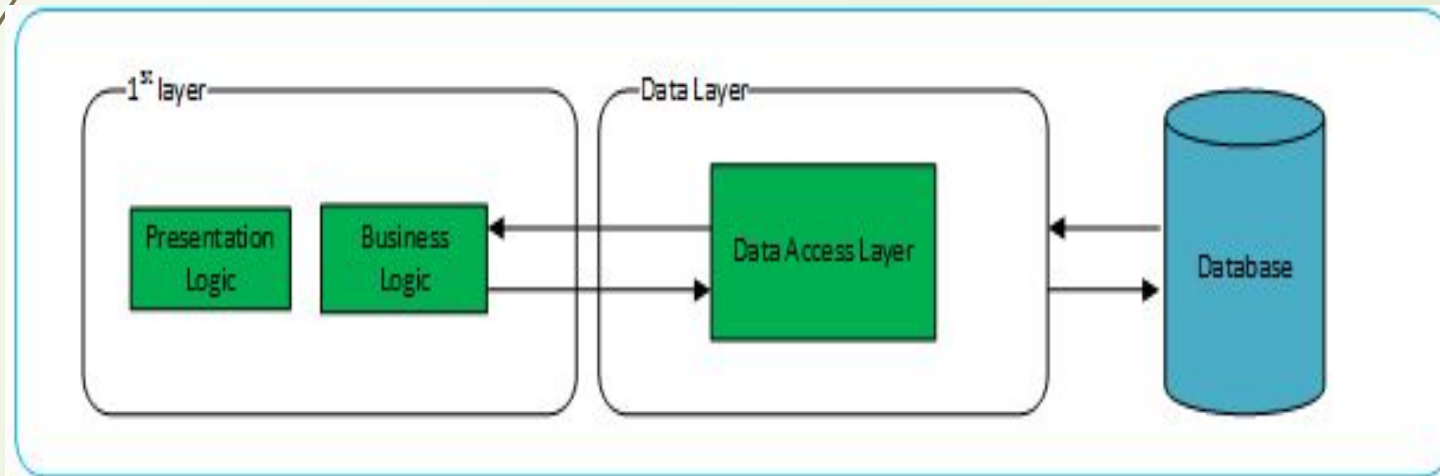


▣ Relationships

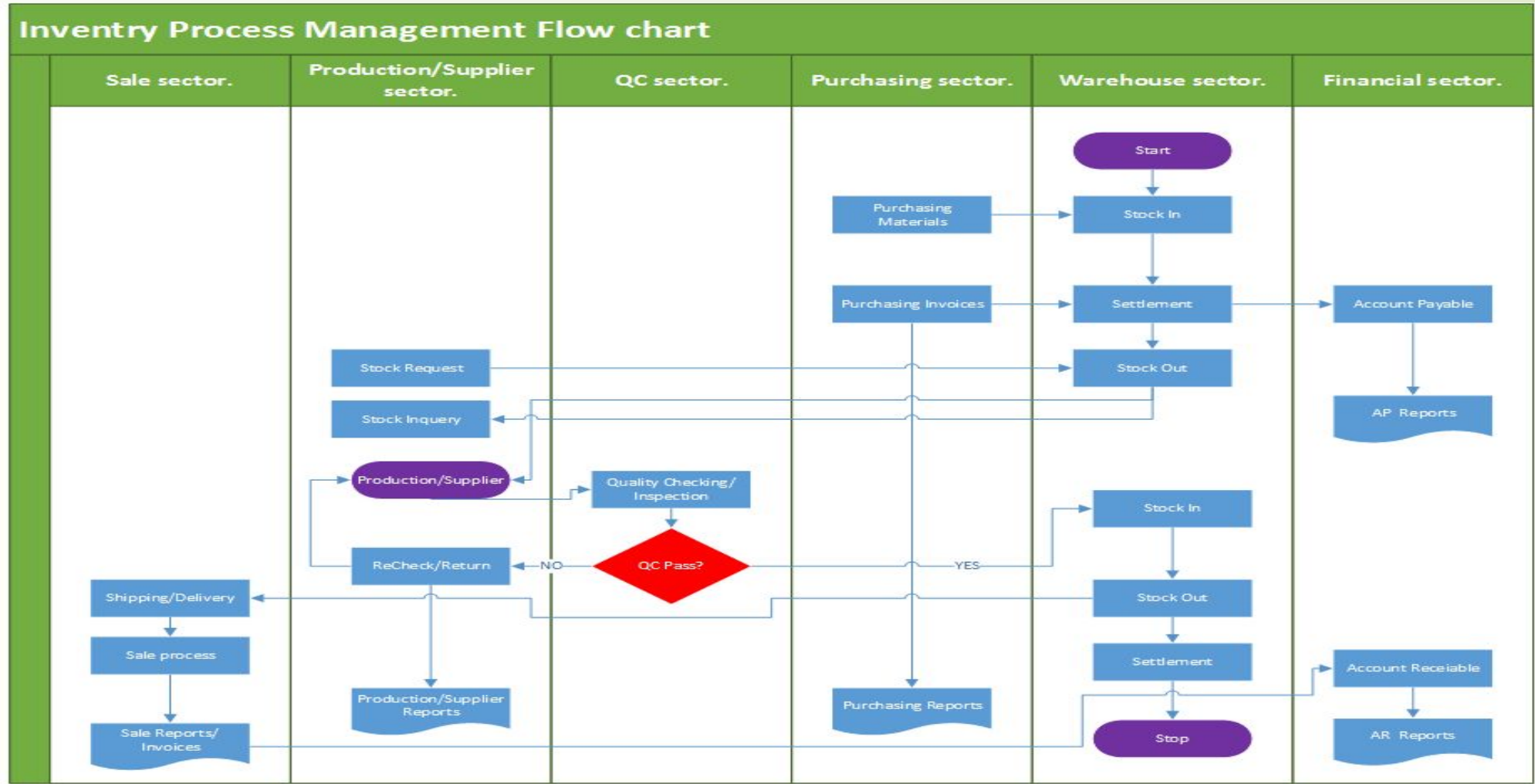
Illustrate relationships between an actor and a use case with a simple line. For relationships among use cases, use arrows labeled either "uses" or "extends." A "uses" relationship indicates that one use case is needed by another in order to perform a task. An "extends" relationship indicates alternative options under a certain use case.



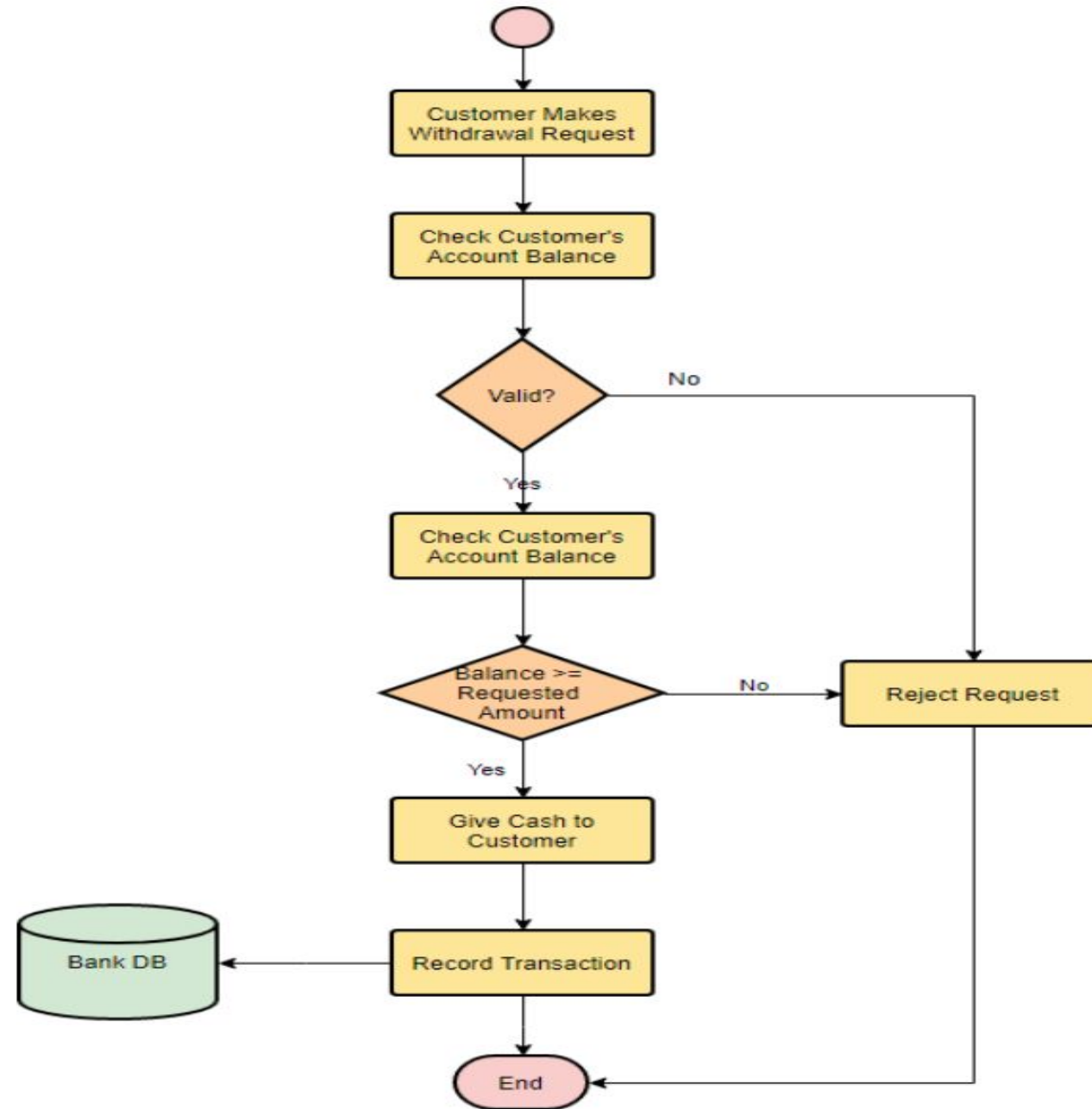
- A **flowchart** is a type of diagram that represents a workflow or process. A flowchart can also be defined as a diagrammatic representation of an algorithm, a step-by-step approach to solving a task












Flowchart Diagram Example



Flowchart Diagram Example



4) Notation of flowchart? Let's see!!!

ANSI/ISO Shape	Name	Description
	Flowline (Arrowhead) ^[15]	Shows the process's order of operation. A line coming from one symbol and pointing at another. ^[14] Arrowheads are added if the flow is not the standard top-to-bottom, left-to right. ^[15]
	Terminal ^[14]	Indicates the beginning and ending of a program or sub-process. Represented as a stadium, ^[14] oval or rounded (fillet) rectangle. They usually contain the word "Start" or "End", or another phrase signaling the start or end of a process, such as "submit inquiry" or "receive product".
	Process ^[15]	Represents a set of operations that changes value, form, or location of data. Represented as a rectangle. ^[15]
	Decision ^[15]	Shows a conditional operation that determines which one of the two paths the program will take. ^[14] The operation is commonly a yes/no question or true/false test. Represented as a diamond (rhombus). ^[15]
	Input/Output ^[15]	Indicates the process of inputting and outputting data, ^[15] as in entering data or displaying results. Represented as a parallelogram. ^[14]
	Annotation ^[14] (Comment) ^[15]	Indicating additional information about a step the program. Represented as an open rectangle with a dashed or solid line connecting it to the corresponding symbol in the flowchart. ^[15]
	Predefined Process ^[14]	Shows named process which is defined elsewhere. Represented as a rectangle with double-struck vertical edges. ^[14]
	On-page Connector ^[14]	Pairs of labeled connectors replace long or confusing lines on a flowchart page. Represented by a small circle with a letter inside. ^{[14][18]}
	Off-page Connector ^[14]	A labeled connector for use when the target is on another page. Represented as a home plate-shaped pentagon. ^{[14][18]}

4)Notation Of flowchart: Let's see!!!

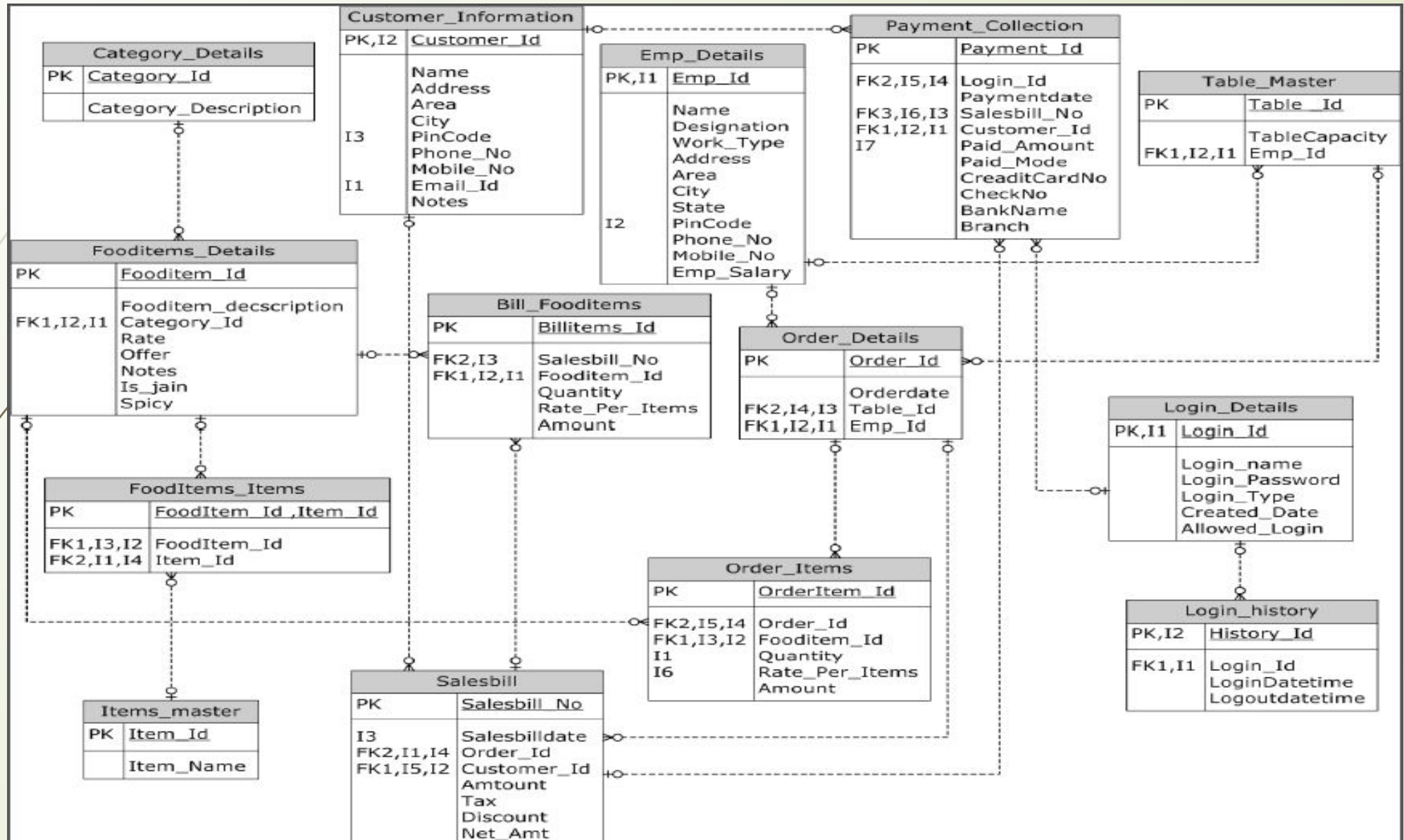
Shape	Name	Description
	Data File or Database	Data represented by a cylinder (disk drive).
	Document	Single documents represented a rectangle with a wavy base.
		Multiple documents represented stacked rectangle with a wavy base.
	Manual operation	represented by a trapezoid with the longest parallel side at the top, to represent an operation or adjustment to process that can only be made manually.
	Manual input	Represented by quadrilateral, with the top irregularly sloping up from left to right, like the side view of a keyboard.
	Preparation or Initialization	Represented by an elongated hexagon, originally used for steps like setting a switch or initializing a routine.

5) System's ERD Diagram or Database Design (Logical & Physical Design) (4 mins)

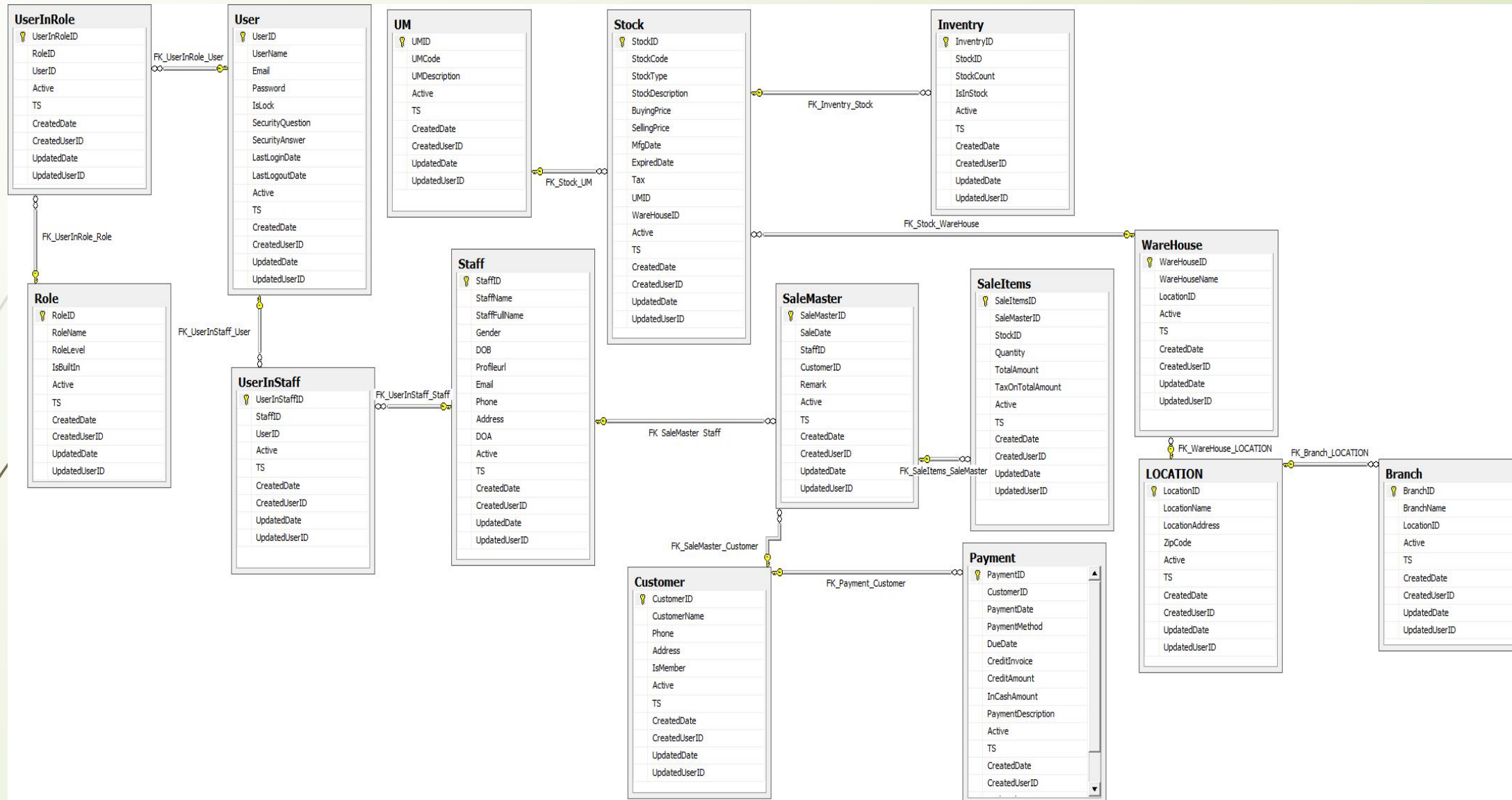
(System ရဲ့ နောက်ကွယ်မှာ data သိမ်းဆည်းမဲ့ ပုံစံများကို ရှင်းပြခြင်း
[1NF, 2NF, 3NF, 4NF etc])

- ❑ Function တစ်ခုချင်းစီရဲ့ ERD (Entity Relationship Diagram) design ကို ရှင်းလင်းခြင်း၊
- ❑ Overall function ကို ERD design (Logical or physical point of view) ရှင်းလင်းခြင်း။

5)ERD of Restaurant Management System(MySQL reverse engineering)



5)ERD of Retail Management System(MS SQL reverse engineering)



6) System's Pros and Cons Or SWOT Analysis(3 mins)

(System ရဲ့ အားနည်းချက် အားသာချက်များကို ရှင်းပြခြင်း။)

Do you know SWOT
?

Now know? But No
problem

SWOT means:

- ❑ S stand for Strengths, အားသာချက်များ
- ❑ W stand for Weakness, အားနည်းချက်များ
- ❑ O stand for Opportunities, အခွင့်အလမ်း
- ❑ T stand for Threatsအတားအဆီးများ စသည်

Strengths

list your:

- + advantages
- + unique and low-cost resources
- + factors mean that you "get the sale"

Weakness

list your:

- + disadvantages, limitations
- + what could you improve
- + factors lose you sales

SWOT

Opportunities

list your:

- + chances to improve performance
- + good opportunities can you spot

Threats

list your:

- + external trouble for the business
- + obstacles do you face
- + what your competitors are doing

6) System's Pros and Cons Or SWOT Analysis(3 mins) (System ရဲ့ အားနည်းချက် အားသာချက်များကို ရှင်းပြချင်း။)

Pros of System.

- ❑ Save time and energy
- ❑ Lack of data missing
- ❑ Reduce manual jobs and so on.

Cons of System

- ❑ Server costs and software costs
- ❑ Operations costs
- ❑ Training costs
- ❑ Users blame the system and so on.

❑ **Write down your system's Pros and Cons.**

7)System's new feature list and innovative idea.(1 min)
(System တွင်နောက်ထပ်ထည့်ချင်သော feature စာရင်းများကို ရှင်းပြခြင်း။)

New feature/Innovative idea list:

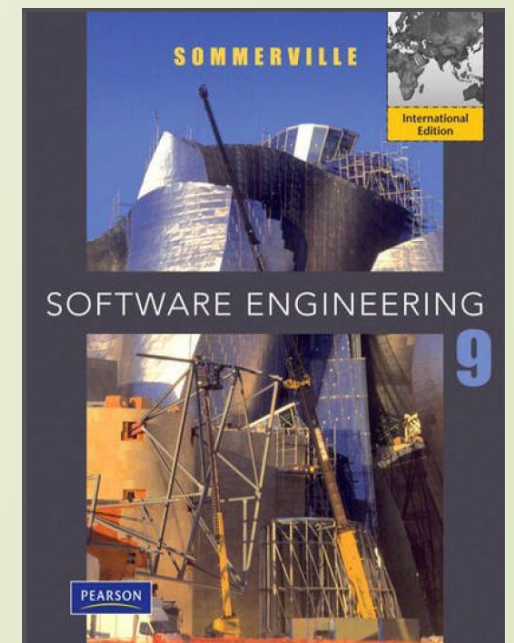
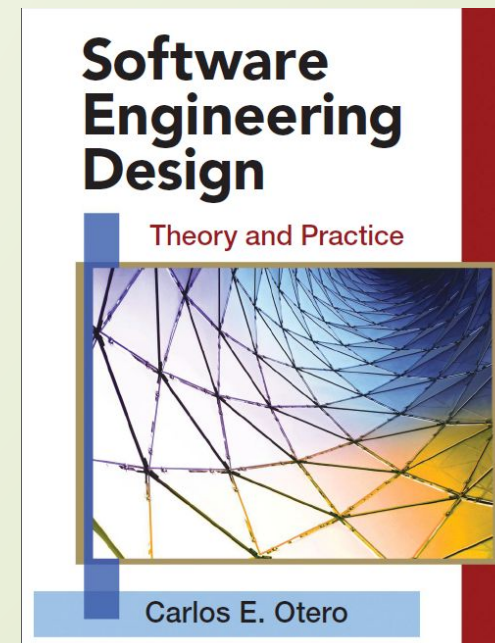
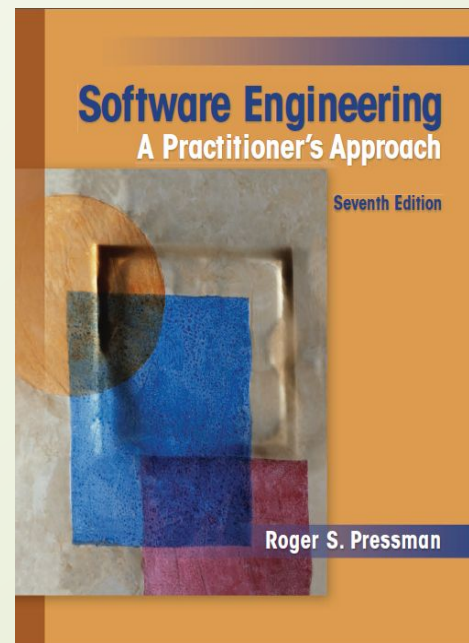
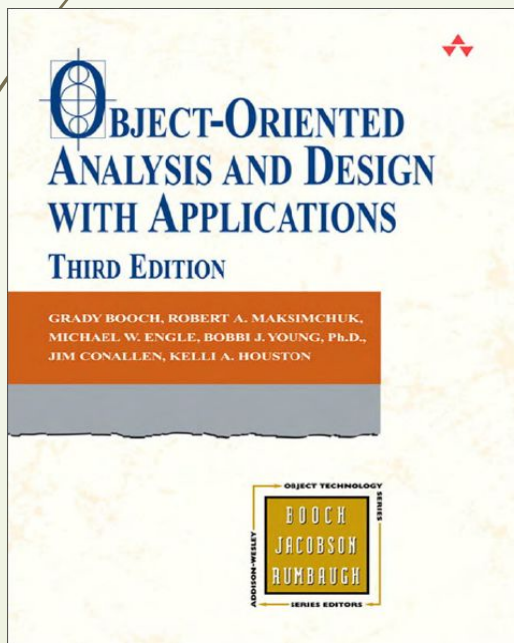
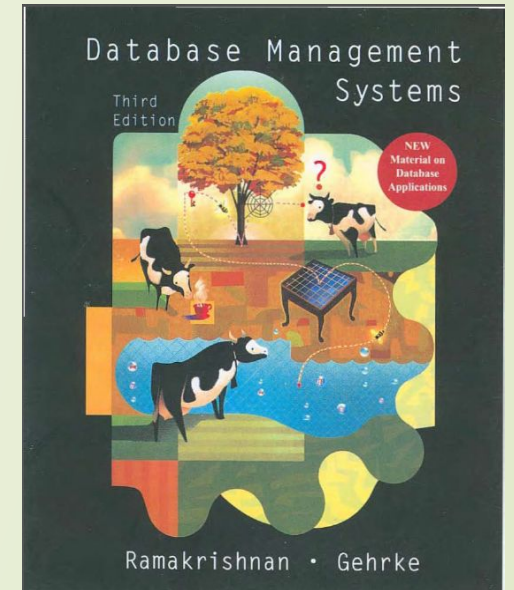
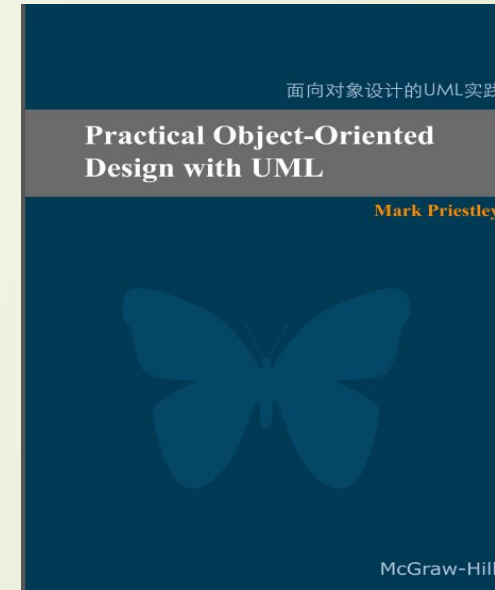
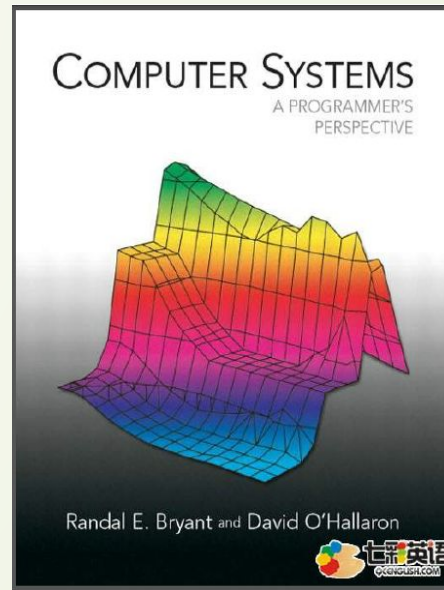
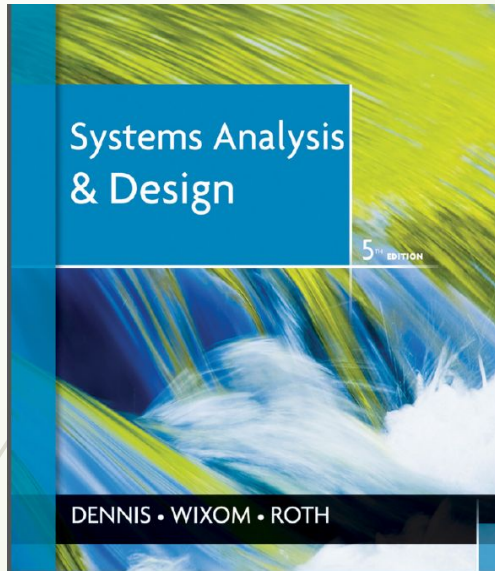
- 1)Single sign on(SSO)
- 2)Localization(Multi-Languages)
- 3)Role Management & Menu Management etc.
- 4)Integrate with payment System.

Write down your system's new feature lists.

8)Run/Show project/System(7 mins)
(မိမိတို့ရဲ့ project/system ကို run ပြခြင်း၊
မိမိရေးသားခဲ့သည့်အပိုင်းများကိုရှင်းပြခြင်း။)

- ❑ Time to run yours Project/System
- ❑ ကဲ Project/System ကို run ပြလို့ရပါပီ။
- ❑ မိမိရေးသားခဲ့သည့်အပိုင်းများကို run ပြလို့ရပါပီ။
- ❑ ရေးထားတဲ့ အစွမ်းတွေထုတ်လို့ရပါပီ။ :D

Further Studies or to read next Level!!!





CASE Tools Reference and Links

- starUML
- Microsoft Visio Tool
- Edrawsoft.Edraw.Network.Diagram
- https://www.tutorialspoint.com/uml/uml_interaction_diagram.htm
- https://www.tutorialspoint.com/uml/uml_building_blocks.htm
- <https://online.visual-paradigm.com/>



Any Comments and Open Discussion!!!



Thank you all very much.