

UNIVERSITY of INFORMATION TECHNOLOGY  
Faculty of Information Systems

Chapter 5

# User Interface Design

Dr. Cao Thi Nhan

# CONTENT

1. Introduction
2. Principles of User-centered design
3. Designing the User interface
4. Output design
5. Input design

# Introduction

# Introduction

1. User Interface
2. Evolution of the User Interface
3. Human-Computer Interaction

# Introduction

- User interface (UI)
  - ✓ UI describes how users interact with a computer system that affect two-way communications.
  - ✓ UI is what you see, hear, touch, or talk to when you use a computer (IBM)
- The importance of User Interface
  - ✓ System is easy to learn and use
  - ✓ Customer tends to judge all systems by User Interfaces

# Introduction

## ● Human-Computer Interaction

- ✓ Command line
- ✓ Graphic user Interface (GUI)

```
Enter today's date (m-d-y): 08-04-81

The IBM Personal Computer DOS
Version 1.00 (C)Copyright IBM Corp 1981

A>dir *.com
IBMBIO      COM          1920  07-23-81
IBMDOS      COM          6400  08-13-81
COMMAND     COM          3231  08-04-81
FORMAT      COM          2560  08-04-81
CHKDSK      COM          1395  08-04-81
SYS          COM           896  08-04-81
DISKCOPY    COM          1216  08-04-81
DISKCOMP    COM          1124  08-04-81
COMP        COM          1620  08-04-81
DATE        COM           252  08-04-81
TIME        COM           250  08-04-81
MODE        COM           860  08-04-81
EDLIN       COM          2392  08-04-81
DEBUG       COM          6049  08-04-81
BASIC       COM         10880  08-04-81
BASICA      COM         16256  08-04-81

A>_
```

# Introduction

## ● Human-Computer Interaction

## ✓ Command line

- ✓ Graphic user Interface (GUI)

Left		Files		Commands		Options		Right	
Name								Name	
..		Help	F1					DEMO	
ansi		User menu	F2					SAMPLES	
append		View	F3					123view	exe
attrib		Edit	F4					dbview	exe
chkdsk		Copy	F5					nc	exe
chkstate		Rename/Move	F6					ncsmall	exe
choice		Make directory	F7					read	me
command		Delete	F8						
country									
country		Quit	F10						
dblwin									
debug	exe	edit	hlp	intersvr	exe				
defrag	exe	ega	cpi	iso	cpi				
defrag	hlp	ega2	cpi	keyb	com				
deltree	exe	ega3	cpi	keyboard	sys				
diskcomp	com	emm386	exe	keybrd2	sys				
diskcopy	com	expand	exe	label	exe				
display	sys	fasthelp	exe	license	bet				
droospace.bin		66294	5-31-94	6:22a				read.me	577 9-16-88 2:01p

A:\>
1Help
2User
3View
4Edit
5Copy
6RenMov
7Mkdir
8Delete
9Menu
10Quit

# Introduction

- Human-Computer Interaction

- ✓ Command line

- ✓ Graphic user Interface (GUI)



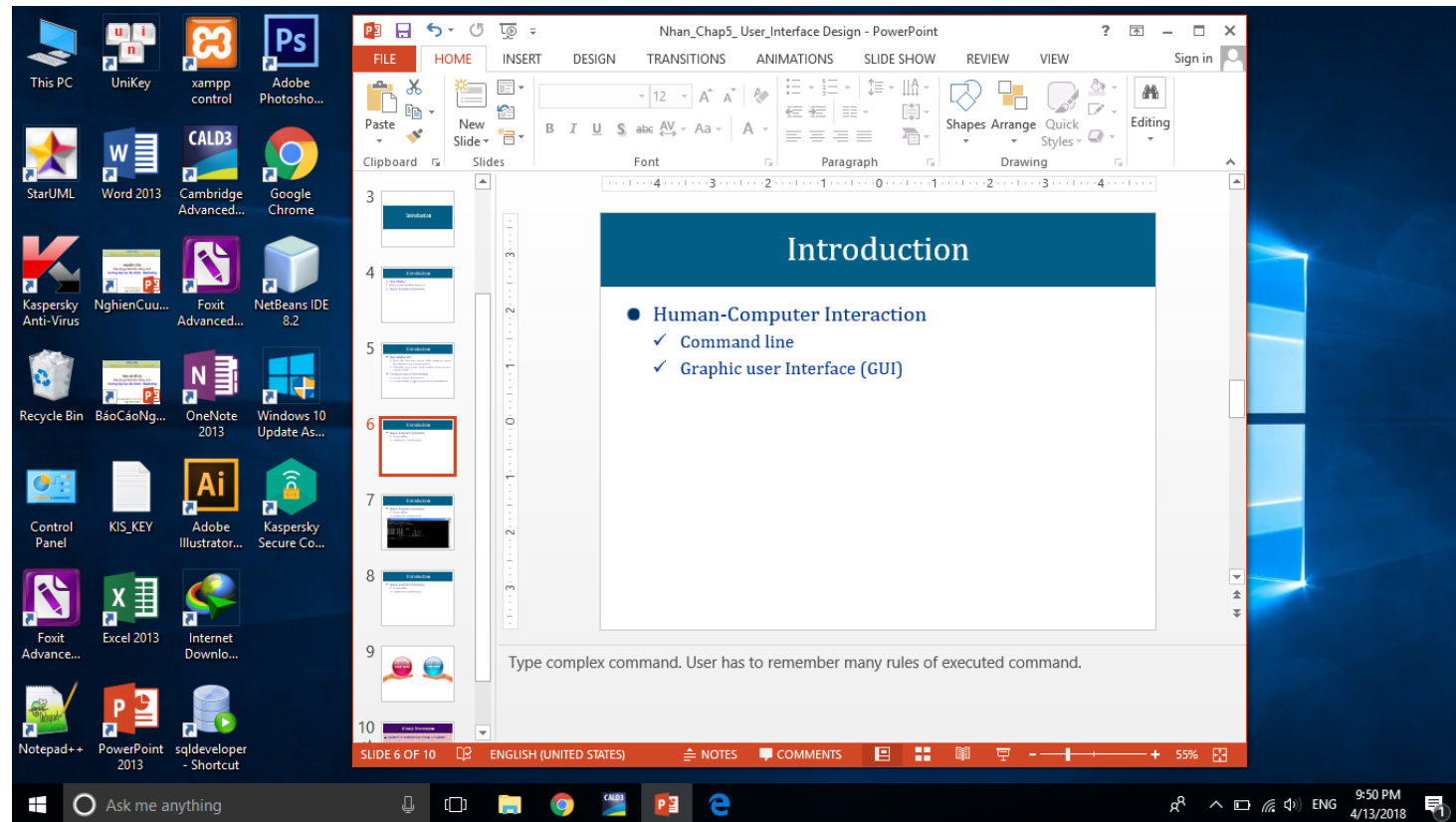


# Introduction

- Human-Computer Interaction

- ✓ Command line

- ✓ Graphic user Interface (GUI)



# Introduction

- Human-Computer Interaction

- ✓ Command line

- ✓ Graphic user Interface (GUI)

## Search Reservation

Reservation Number:

\*

Family  
Name:

\*

Middle and Given  
Name:

\*

Departure

\*

Search Reservation

[Nhập điểm thi](#)[Quản lý điểm thi](#)

## THÔNG TIN NHẬP ĐIỂM THI

Điểm

Giữa kỳ

Học kỳ

Học kỳ 1

Năm học

2018-2019

Xem danh sách lớp

Mã lớp

IS208.J12.HTCL

Tải danh sách sinh viên

**Thầy Cô Nhấn vào tải danh sách để lấy danh sách sinh viên, sau khi nhập điểm vào danh sách, Thầy Cô nhập điểm lên hệ thống bằng cách chọn file và nhấn vào Nhập điểm bên dưới.**

**Lưu ý: Sinh viên vắng thi để ô trống.**

**Nếu gặp trở ngại, vui lòng liên hệ P.DTDH hoặc VP.CTDB để được hỗ trợ.**

File điểm sinh viên

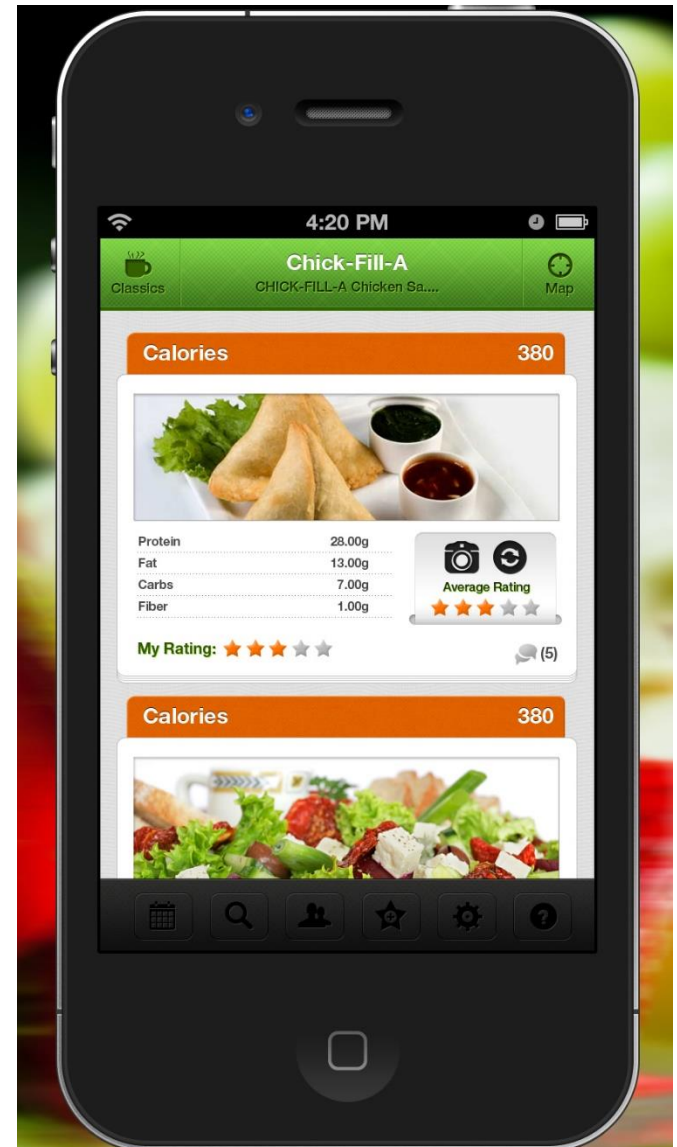
Choose File

No file chosen

Nhập điểm

# Introduction

- Human-Computer Interaction
  - ✓ Command line
  - ✓ Graphic user Interface (GUI)



# Introduction

- Human-Computer Interaction
  - ✓ Command line
  - ✓ Graphic user Interface (GUI)



# Introduction

- Human-Computer Interaction

- ✓ Command line

- ✓ Graphic user Interface (GUI)



# Principles of User-centered design

# Principles of user-centered design

1. Understand the Business
2. Maximize Graphical Effectiveness
3. Think like a User
4. Use Models and Prototypes
5. Focus on Usability
6. Invite Feedback
7. Document Everything



# Principles of user-centered design

## 1. Understand the Business

- ✓ To design interfaces that helps users to perform their jobs.
- ✓ Interface designer must understand the business functions and how the system supports individual, departmental and enterprices goals.

## 2. Maximize Graphical Effectiveness

- ✓ Graphical User Interfaces are easy to learn and use.
- ✓ Well-designed interface helps users learn new system quickly.
- ✓ User can display and work with some windows on a single screen and transfer data between programs.

# Principles of user-centered design

## 3. Think like a User

- ✓ Should understand user experiences, knowledge, and skill levels. If they are wide range of things → interface should be flexible enough to accommodate both novices and experienced users.
- ✓ Designer must think like a user and see the system through user's eyes.

## 4. Use Models and Prototypes

- ✓ It is essential to construct models and prototypes for user approval.
- ✓ Users must test all aspects of the interface design and provide feedback to the designers.

# Principles of user-centered design

## 5. Focus on Usability

- ✓ User interface should include all tasks, commands, and communications between users and information system.
- ✓ Present the most common choice as a default, and allow user to select other options.

## 6. Invite Feedback

- ✓ Based on user's feedback, improvement the system.

## 7. Document Everything

- ✓ All screen designs should be documented for later use by programmers.

# Designing User Interface

# Designing User Interface

## Basic guidelines

1. Design a transparent interface.
2. Create an interface that is easy to learn and use.
3. Enhance user productivity.
4. Make it easy for users to obtain help or correct errors.
5. Minimize input data problems.
6. Provide feedback to users.
7. Create an attractive layout and design.
8. Use familiar terms and images.
9. Add control features

# Designing User Interface

## 1. Design a transparent interface

- ✓ Facilitate the system design objectives, rather than calling attention to the interface.
- ✓ Create a design that is easy to learn and remember.
- ✓ Design the interface to improve user efficiency and productivity.
- ✓ Write commands, actions, and system responses that are consistent and predictable.
- ✓ Minimize data entry problems.
- ✓ Allow users to correct errors easily.
- ✓ Create a logical and attractive layout.

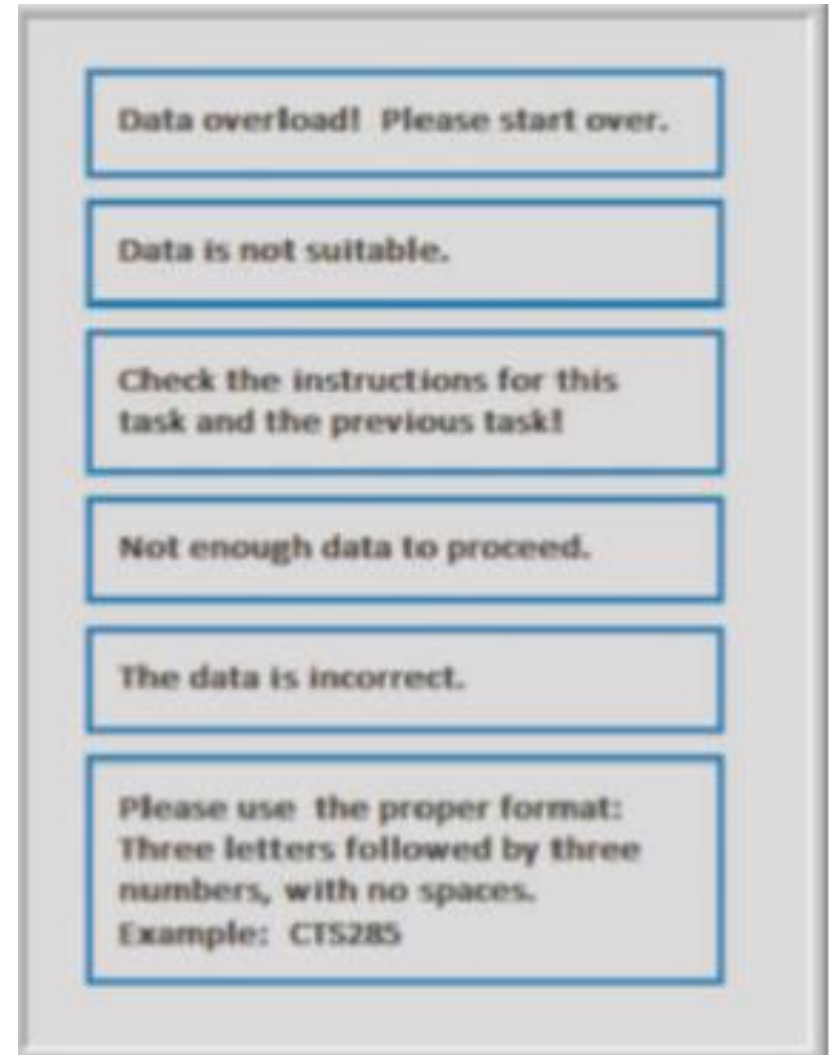
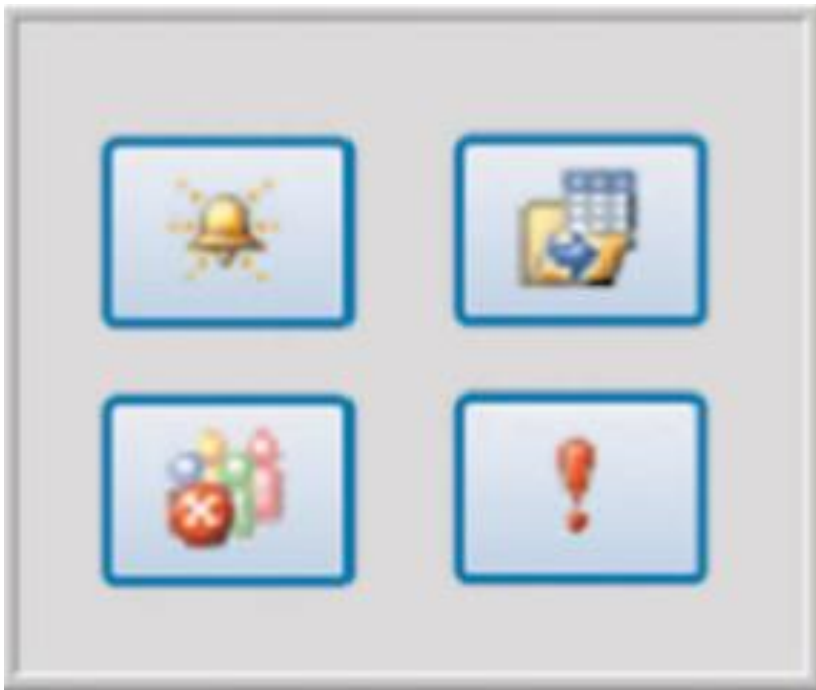
# Designing User Interface

## 2. Create an interface that is easy to learn and use

- ✓ Clearly label all controls, buttons, and icons
- ✓ Select images that user can understand easily.
- ✓ Provide on-screen instructions that are logical, concise, and clear.
- ✓ Show all commands in a list of menu items, but dim any commands that are not currently available.
- ✓ Make it easy to navigate or return to any level in the menu structure

# Designing User Interface

## 2. Create an interface that is easy to learn and use





# Designing User Interface

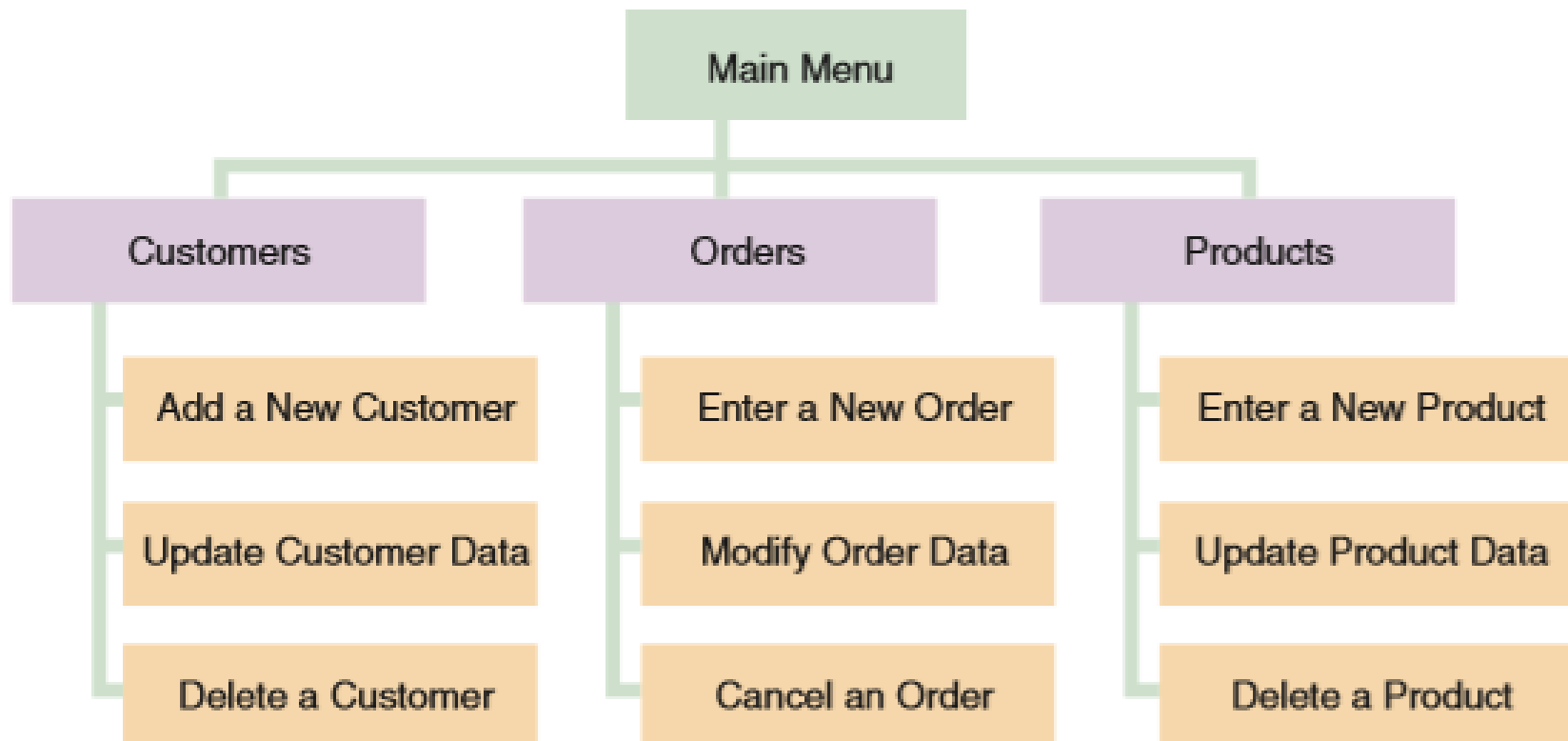
## 3. Enhance user productivity

- ✓ Organize tasks, commands, and functions in groups that resemble actual business operations.
- ✓ Depending on user, create alphabetical menu lists or place the selections used frequently at the top of the menu list.
- ✓ Use shortcut keys, use default values (in case almost of values in a field are the same)
- ✓ Use a duplicate value function that enables users to insert the value from the same field in the previous record
- ✓ Provide a fast-find feature that displays a list of possible values as soon as users enter the first few letters.
- ✓ Use a natural language feature that allows users to type commands or requests in normal English phrases

# Designing User Interface

## 3. Enhance user productivity

### Customer Order Tracking System



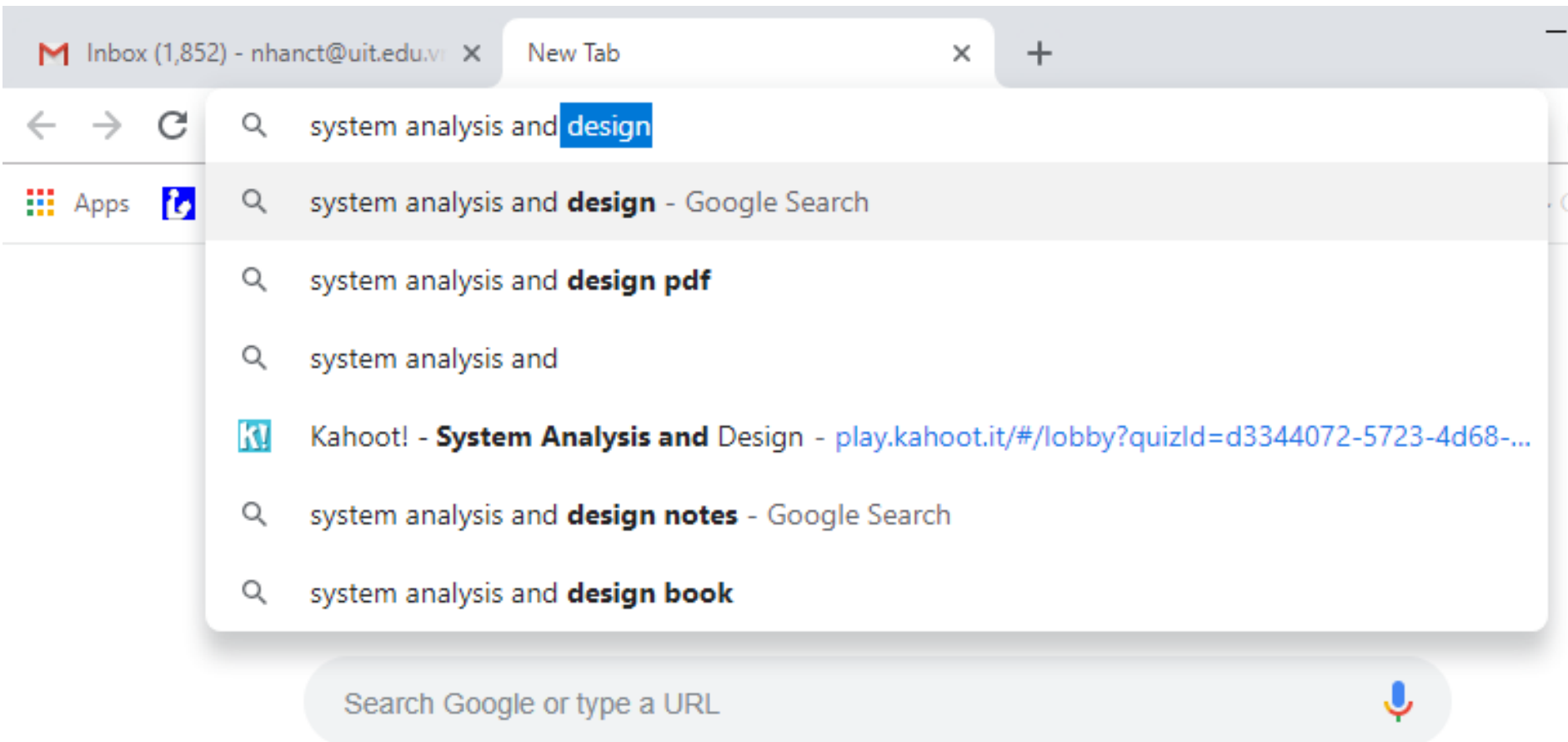
# Designing User Interface

## 3. Enhance user productivity

Order	Date	Saleperson	Amount
1010	9/24/2009	Wells	\$805.16
1011	9/24/2009	Davis	\$277.55
1012	9/25/2009	Carlson	\$504.83
1013	9/28/2009	Wells	\$563.49
1014	9/28/2009	Craig	\$849.08
1015	9/28/2009	Farmer	\$278.44
1016	9/29/2009	Wells	\$704.32
1016	9/29/2009	Wells	

# Designing User Interface

## 3. Enhance user productivity



# Designing User Interface

3. Enhance user productivity

<https://www.speechtexter.com/>

# Designing User Interface

## 4. Make it easy for users to obtain help or correct errors

- ✓ Ensure that help is always available.
- ✓ When a user-entered command contains an error, highlight the erroneous part and allow the user to make the correction without retyping the entire command.

## 5. Minimize input data problems

- ✓ Use input masks and data validation rules
- ✓ Display event-driven messages and reminders.
  - When exiting the system, ask user if they want to save the current data.
  - Confirm in case that the user deletes data.

# Designing User Interface

## 5. Minimize input data problems

**Input Mask Wizard**

Which input mask matches how you want data to look?

To see how a selected mask works, use the Try It box.

To change the Input Mask list, click the Edit List button.

Input Mask:	Data Look:
Phone Number	(206) 555-1212
Social Security Number	831-86-7180
Zip Code	98052-6399
Extension	63215
Password	*****
Long Time	1:12:00 PM

Try It:

# Designing User Interface

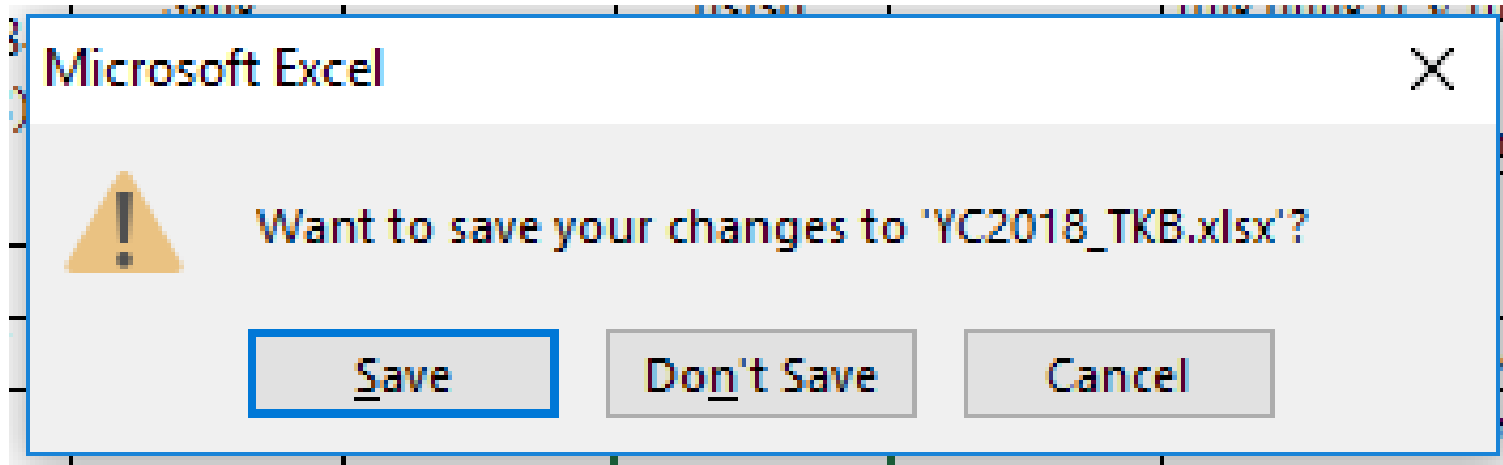
## 6. Provide feedback to users

- ✓ Display consistent messages at a logical place on the screen.
- ✓ Display messages on the screen for users to read them. In some cases, the screen should display messages until the user takes an action.
- ✓ Display whether the task or operation was successful or not. Ex: use messages such as **Update completed**, **All transactions have been posted**, or **ID Number not found**.
- ✓ Use messages that are specific, understandable, and professional.



# Designing User Interface

## 6. Provide feedback to users



# Designing User Interface

## 7. Create an attractive layout and design

- ✓ Use appropriate colors to highlight different areas of the screen.
- ✓ *Use special effects sparingly.*
- ✓ Group related objects and information.
- ✓ Display titles, messages, and instructions in a consistent manner and in the same general locations on all screens.
- ✓ Use consistent terminology. Ex: term Add, Delete, Cancel show the same action, same sound for same event...

# Designing User Interface

## 8. Use familiar terms and images

- ✓ Use familiar commands/icon if possible (Cut, Copy, and Paste)
- ✓ Provide a Windows look and feel in your interface design if users are familiar with Windows-based applications
- ✓ Avoid complex terms and technical terms; instead, select terms that come from everyday business processes.

# Designing User Interface

## 9. Add control features

- ✓ Use menu bars, toolbars, dialog boxes, text boxes, radio buttons, list boxes, scroll bars, drop-down list boxes, option buttons, check boxes, command buttons, calendar controls...

### 1. Do you have pets?

☒ Yes

☐ No

### 2. Which pets do you have?

☒ Dog

☒ Cat

☐ Lizard

☐ Bird

# Designing User Interface

## 9. Add control features

- ✓ Use menu bars, toolbars, dialog boxes, text boxes, radio buttons, list boxes, scroll bars, drop-down list boxes, option buttons, check boxes, command buttons, calendar controls...

Date	Region	Product	Qty	Cost	Amt
1-Aug	East	Paper	20	12.95	\$ 259.00
2-Aug	West			-	\$ -
		Staples		-	\$ -
		Binders		-	\$ -
		Erasers		-	\$ -
		Envelopes		-	\$ -
		Paper clips			

# Designing User Interface

## 9. Add control features

- ✓ Use menu bars, toolbars, dialog boxes, text boxes, radio buttons, list boxes, scroll bars, drop-down list boxes, option buttons, check boxes, command buttons, calendar controls...

The screenshot shows a web form with several input fields and a calendar control. The form fields are:

- SKU \*
- Weight \*
- Set Product as New from Date
- Set Product as New
- Status \*
- URL Key
- Visibility \*
- Country of Manufac
- Enable RMA

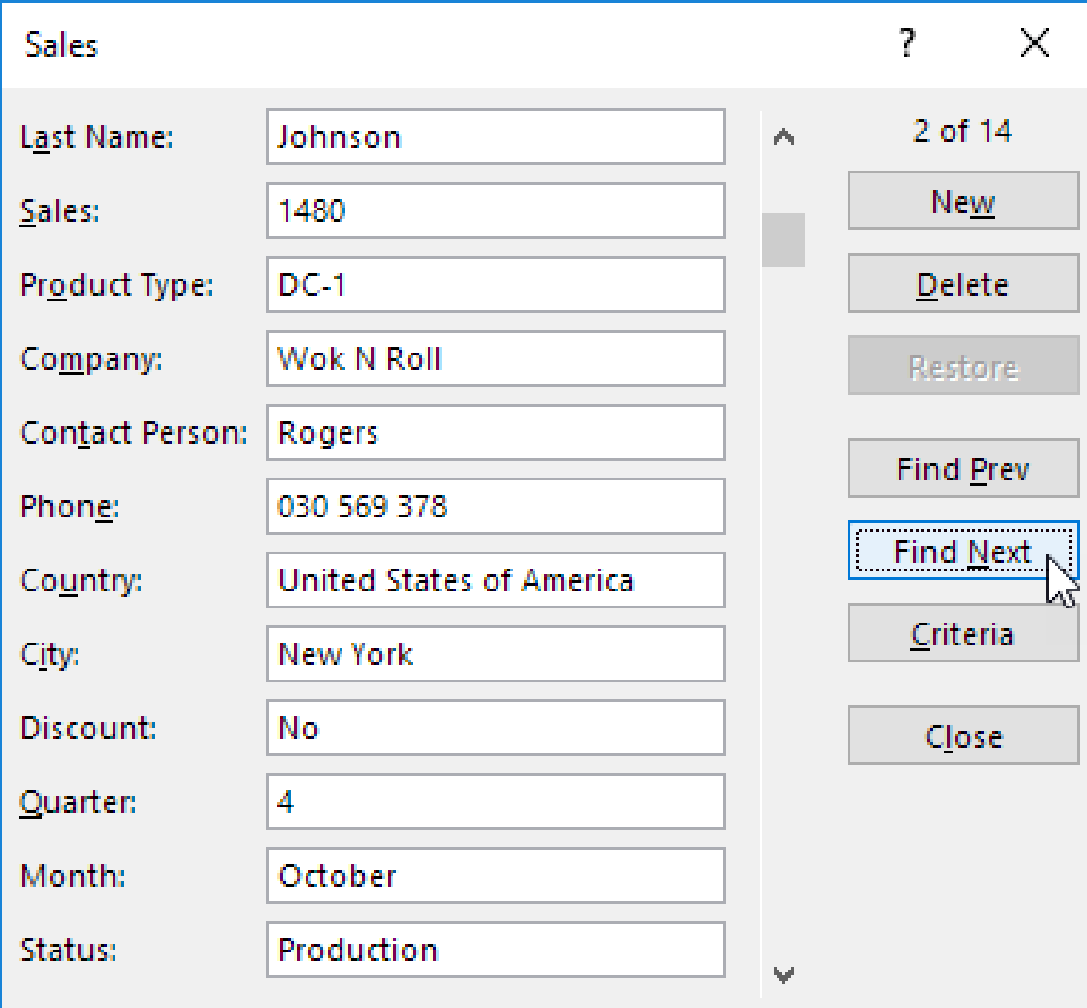
A calendar control is open, showing the month of December 2011. The calendar has a header with navigation buttons (back, forward, today, etc.) and a table of dates. The date 6 is highlighted.

Week	Sun	Mon	Tue	Wed	Thu	Fri	Sat
47					1	2	3
48	4	5	6	7	8	9	10
49	11	12	13	14	15	16	17
50	18	19	20	21	22	23	24
51	25	26	27	28	29	30	31

Select date

# Designing User Interface

## 9. Add control features: command button



The image shows a software window titled "Sales" with a standard Windows-style title bar (containing a question mark and a close button). The window is divided into two main sections. The left section contains a series of labeled text input fields, each with a label and a corresponding value:

Label	Value
Last Name:	Johnson
Sales:	1480
Product Type:	DC-1
Company:	Wok N Roll
Contact Person:	Rogers
Phone:	030 569 378
Country:	United States of America
City:	New York
Discount:	No
Quarter:	4
Month:	October
Status:	Production

The right section of the window contains a vertical stack of command buttons. At the top of this section is a label "2 of 14" with an upward-pointing arrow to its left. Below this are the following buttons: "New", "Delete", "Restore", "Find Prev", "Find Next", "Criteria", and "Close". The "Find Next" button is highlighted with a dashed rectangular border, and a mouse cursor is pointing at it. A downward-pointing arrow is located at the bottom of the right section.

# Output design



# Output design

1. Introduction
2. Types of reports
3. User involvement in Report Design
4. Report design principles
5. Discussion

# Introduction

Answer some common questions before designing output:

1. What is the purpose of the output?
2. Who wants the information, why is it needed, and how will it be used?
3. What specific information will be included?
4. Will the output be printed, viewed on-screen, or both?  
What type of device will the output go to?
5. When will the information be provided, and how often must it be updated?
6. Do security or confidentiality issues exist?

# Introduction

- ✓ Produce reports that are attractive and user friendly
- ✓ Reports must be easy to read and well organized
- ✓ Printed reports: maybe colours are not the same on-screen and printed report

# Question?

- ❑ Graphical reports and character-based reports, which one do you prefer? Why?

# Output design

## 2. Types of reports

A report must include the information that a user needs.

- ✓ Detail report
- ✓ Exception report
- ✓ Summary report

# Output design

## 2. Types of reports

- ✓ Detail report: produces one or more lines of output for each record processed.

Employee Hours week ending date: 6/24/11					Page 1
Store Number	Employee Name	Position	Regular Hours	Overtime Hours	Total Hours
8	Andres, Marguerite	Clerk	20.0	0.0	20.0
8	Bogema, Michelle	Clerk	12.5	0.0	12.5
8	Davenport, Kim	Asst Mgr	40.0	5.0	45.0
8	Lemka, Susan	Clerk	32.7	0.0	32.7
8	Ramirez, Rudy	Manager	40.0	8.5	48.5
8	Ullery, Ruth	Clerk	20.0	0.0	20.0
17	De Martini, Jennifer	Clerk	40.0	8.4	48.4
17	Haff, Lisa	Manager	40.0	0.0	40.0
17	Rittenbery, Sandra	Clerk	40.0	11.0	51.0
17	Wyer, Elizabeth	Clerk	20.0	0.0	20.0
17	Zeigler, Cecille	Clerk	32.0	0.0	32.0

detail lines

FIGURE 8-21 A detail report with one printed line per employee.

# Output design

## 2. Types of reports

- ✓ Exception report: displays only those records that meet a specific condition or conditions.

Overtime Report week ending date: 6/24/11			Page 1
Store Number	Position	Employee Name	Overtime Hours
8	Asst Mgr Manager	Davenport, Kim	5.0
		Ramirez, Rudy	8.5
	Store 8 totals:		13.5
17	Clerk Clerk	De Martini, Jennifer	8.4
		Rittenbery, Sandra	11.0
	Store 17 totals:		19.4
Grand total:			32.9

**FIGURE 8-22** An exception report that shows information *only* for employees who worked overtime.

# Output design

## 2. Types of reports

- ✓ Summary report: displays total figures and do not need supporting details (manager)

Employee Hours Summary week ending date: 6/24/11				Page 1
Store Number		Regular Hours	Overtime Hours	Total Hours
8		181.2	13.5	194.7
17		172.0	19.4	191.4
		—	—	—
	Totals:	337.2	32.9	370.1

**FIGURE 8-23** A summary report displays totals without showing details.



# Output design

## 3. User involvement in Report Design

- ✓ Users should approve all report designs in advance.
- ✓ Prepare a sample report (mock-up, prototype) for users to review.

# Output design

## 4. Report design principles

- ✓ Report Headers and Footers
- ✓ Page Headers and Footers
- ✓ Column Heading Alignment
- ✓ Column spacing,
- ✓ Field order, and
- ✓ Grouping of detail lines

Employee Hours week ending date: 6/24/11					
Store Number	Employee Name	Position	Regular Hours	Overtime Hours	Total Hours
8	Andres, Marguerite	Clerk	20.0	0.0	20.0
8	Bogema, Michelle	Clerk	12.5	0.0	12.5
8	Davenport, Kim	Asst Mgr	40.0	5.0	45.0
8	Lemka, Susan	Clerk	32.7	0.0	32.7
8	Ramirez, Rudy	Manager	40.0	8.5	48.5
8	Ullery, Ruth	Clerk	20.0	0.0	20.0
Store 8 totals:			165.2	13.5	178.7
17	De Martini, Jennifer	Clerk	40.0	8.4	48.4
17	Haff, Lisa	Manager	40.0	0.0	40.0
17	Rittenbery, Sandra	Clerk	40.0	11.0	51.0
17	Wyer, Elizabeth	Clerk	20.0	0.0	20.0
17	Zeigler, Cecille	Clerk	32.0	0.0	32.0
Store 17 totals:			172.0	19.4	191.4
Grand totals:			337.2	32.9	370.1

Page 1

# ABC Company

[Street Address] [Address 2] [City, ST ZIP code]

Weekly Time Sheet with Breaks

Employee:	Mark	Employee phone:	09836582174
Employee e-mail:	<a href="mailto:Mark@abc.com">Mark@abc.com</a>	Pay period start date:	1/1/2006
Manager:	David	Pay period end date:	1/14/2006

Day	Date	Regular Hours	Overtime Hours	Sick	Vacation	Total
Monday	1/1/2006	8.00				8.00
Tuesday	1/2/2006	8.00	2.00			10.00
Wednesday	1/3/2006			8.00		8.00
Thursday	1/4/2006				8.00	8.00
Friday	1/5/2006	4.00	1.00			5.00
Saturday	1/6/2006	6.00				6.00
Sunday	1/7/2006		4.00			4.00
Sunday	1/14/2006	7.00				7.00
	Total	33.00	7.00	8.00	8.00	56.00
Rate per hour		10.00	15.00	10.00	10.00	
Total pay		\$330.00	\$105.00	\$80.00	\$80.00	\$595.00

Employee signature

Date

Manager signature

Date

**BÁO CÁO SỐ LƯỢNG HÀNG ĐÃ BÁN****TRONG NGÀY 20/3/2015**

Đơn vị tiền tệ: VNĐ

STT	Mã hàng	Tên hàng	Số lượng	Đơn giá	Thành tiền	Ghi chú
1	TV01	Ti vi Sony 19 inch	3	4.000.000	12.000.000	
2	TL02	Tủ lạnh LG	1	6.000.000	6.000.000	
3	XM03	Xe máy Dream 2	2	28.000.000	56.000.000	
4	MS02	Máy sấy tóc Philip	5	170.000	850.000	
Tổng cộng					74.850.000	

(Bằng chữ: Bảy mươi bốn triệu tám trăm năm mươi nghìn đồng)

Ngày giờ lập: 23h00 20/03/15.

Tp. HCM, ngày 20 tháng 03 năm 2015

Giám đốc

Phụ trách BP bán hàng

Lập bảng

Nguyễn Văn Hoàng

Trần Trọng Hữu

Lê Thị Mai



# Input design

# Input design

1. Introduction
2. Data Entry Screens
3. Input masks
4. Validation Rules
5. Discussion



# Introduction

- ✓ Input design requires attention to human factors and technology issues
- ✓ Good form layout makes the form easy to complete and provides enough space for users to enter the data.

# Introduction

## ✓ Caption technique examples

Last Name \_\_\_\_\_ First Name \_\_\_\_\_

Birth Date \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Telephone (\_\_\_\_) \_\_\_\_\_

on the line

Last Name First Name

\_\_\_\_\_  
Birth Date \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Telephone (\_\_\_\_) \_\_\_\_\_

above the line

\_\_\_\_\_  
Last Name

\_\_\_\_\_  
First Name

\_\_\_\_ / \_\_\_\_ / \_\_\_\_  
Birth Date

(\_\_\_\_) \_\_\_\_\_  
Telephone

below the line

Name \_\_\_\_\_  
Last First

Birth Date \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Telephone (\_\_\_\_) \_\_\_\_\_  
month day year area code number

combination

# Introduction

## ✓ Box Caption, Check box caption examples

The diagram illustrates two types of captions for form elements: box captions and check box captions.

**Box Caption Examples:**

- in the box:** A text box with the label "Last Name" inside the top-left corner.
- below the box:** A text box with the label "Last Name" positioned below the bottom-left corner.

**Check Box Caption Examples:**

- horizontal:** A row of four check boxes with labels "Freshman", "Sophomore", "Junior", and "Senior" placed to the left of each box.
- vertical:** A vertical list of four check boxes with labels "Freshman", "Sophomore", "Junior", and "Senior" placed to the left of each box, preceded by the text "Enter your class status:".

# Data Entry Screens

- ✓ Input screen
- ✓ Determine how data will be captured and entered into the system.
  - Data capture: uses operated device to identify source data and convert it into computer-readable form. Examples: credit card scanners, bar code readers.
  - Data entry: is the process of manually entering data into the information system usually in the form of keystrokes, mouse clicks, touch screens, or spoken words.

# Data Entry Screens

- ✓ Input screen
- ✓ Determine how data will be captured and entered into the system.
  - Data capture: uses operated device to identify source data and convert it into computer-readable form. Examples: credit card scanners, bar code readers.
  - Data entry: is the process of manually entering data into the information system usually in the form of keystrokes, mouse clicks, touch screens, or spoken words.

# Data Entry Screens

## ✓ Some tips

1. All captions/Labels have to be short, clear.
2. Special data: user does not enter. System generates and puts it into the form
3. Display the data corresponding to ID for checking.
4. Display a sample format
5. Display default values. If the default value is not appropriate, the operator can change it.
6. Use suitable objects (label, list, combo box, button...)
7. Provide users with an opportunity to confirm information.
8. Show the running situation.

# Homework

- ❑ Number of members/group: 5 students.
- ❑ Design a receipt. Some tables of the relational data model are:
  1. CUSTOMER (CustomerID, FullName, Phone, Address, IdentityID, Email, CustomerType, Score)
  2. ORDER (OrderID, DateofOrder, CustometID, StaffID, Total)
  3. OrderDetail (OrderID, ItemID, Quantity, Discount)
  4. ITEM (ItemID, ItemName, Suggested\_Price, Description)
  5. STAFF (StaffID, S\_Name, S\_Phone)

# Data Entry Screens

- ✓ Input design:

1. 1 table: CUSTOMER, ITEM,...
2. 2 tables: ORDER and OrderDetail...



# Group Discussion

- ❑ Number of members per group: 5 students
- ❑ Time: 5 mins / 1 situation
- ❑ For each interface below, show:
  1. Good sides
  2. Are there any things can do better? If yes, show your improvements?

# Discussion

Feedback informs the user that input was not in the correct form and lists options. (1) Good sides; (2) Improvements

**SOA Online Newsletter Subscription List**

First Initial	<input type="text" value="M"/>	Middle Initial	<input type="text" value="C"/>	Last Name	<input type="text" value="HURST"/>
Number	<input type="text" value="3349"/>	Street	<input type="text" value="SOUTH STREET"/>	Apartment	<input type="text"/>
City	<input type="text" value="LINCOLN"/>	State	<input type="text" value="NE"/>	Zip Code	<input type="text" value="68506"/>
Subscription Length in Weeks	<input type="text" value="14"/>	Method of Payment	<input type="text" value="CHK"/>		

The subscription length you entered is not currently being offered. Please choose either 13, 26, or 52 weeks.

# Discussion


Feedback tells the user that there will be a delay during printing.

(1) Good sides; (2) Improvements

The image shows a web form titled "SOA Online Newsletter Subscription List" with several input fields: "First Initial", "Middle Initial", "Last Name", "Number", "City", "Subscription L", "ment", "ode", and "ht". A modal dialog box is overlaid on the form, indicating a printing process. The dialog box contains an hourglass icon, the text "Printing is now in progress.", and "To halt printing just type P." with a "WAIT" button.

# Discussion

A form-fill interface. (1) Good sides; (2) Improvements



The image shows a screenshot of a 'Purchase Order' form. At the top left is a graphic of a globe with a dollar sign and a pencil. The title 'Purchase Order' is in large yellow letters. Below the title are three fields: 'Order Date: 05/14/2006', 'Required by: 06/12/2006', and 'Requisition No.: MTC30023'. The form is divided into two main sections: 'Vendor Name and Address' and 'Ship To'. The 'Vendor Name and Address' section contains the text: 'Hamingson Office Supplies', '100 Nathan Lane', 'Rochester, NY 14604'. The 'Ship To' section contains the text: 'Jonathan Harris', '2001 Biltmore Blvd.', 'Samsel, NY 14225'. Below these sections is a table with five columns: 'Part No.', 'Description', 'Quantity', 'Unit Price', and 'Extended Price'. The table contains three rows of data and four empty rows at the bottom.

Part No.	Description	Quantity	Unit Price	Extended Price
OS23561	Note pads, 4 in. x 6 in., box of 25	10	9.95	99.50
OS93851	Clear tape, 12mmx33mm, box of 100	3	19.99	59.97
OS83955	Hi-Liter, assorted colors, box of 12	2	8.56	17.12
				0.00
				0.00
				0.00
				0.00

# Discussion

Order. (1) Good sides; (2) Improvements

**DonDatHang**

## NHẬP ĐƠN ĐẶT HÀNG

Mã đặt hàng:  Ngày đặt hàng:   
Mã khách hàng:   Ngày hẹn giao hàng:   
Địa điểm hẹn giao hàng:   
Chi tiết đặt hàng:

	Mã hàng	Số lượng	Đơn giá
▶	MG05	70	3700000
	TV03	20	2600000
	XM01	100	15000000
*			

Record:       of 3

Record:       of 8

