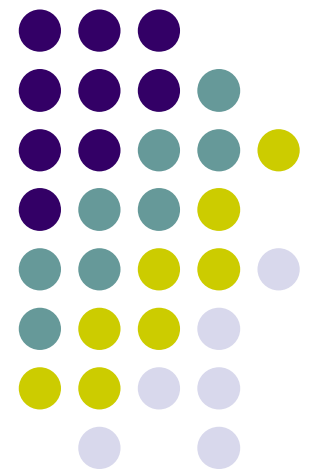


Application Software Lecture

by

Amit Kumar

CHAPTER





Competencies

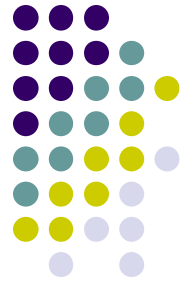
Software applications

Common software features

General-purpose applications

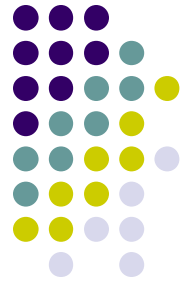
Software suites

Integrated software



Software Applications

- General-purpose application
 - Widely used software
 - Common tasks
- Special-purpose application
 - Narrowly focused software
 - Specific tasks



Common Features

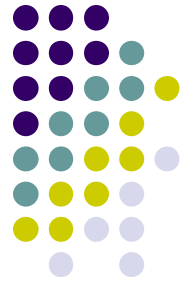
- User Interface
 - Important part of software
 - Portion where the user interacts with the software
- Graphical User Interface (GUI)
 - Windows
 - Menus
 - Toolbars
 - Help



Windows

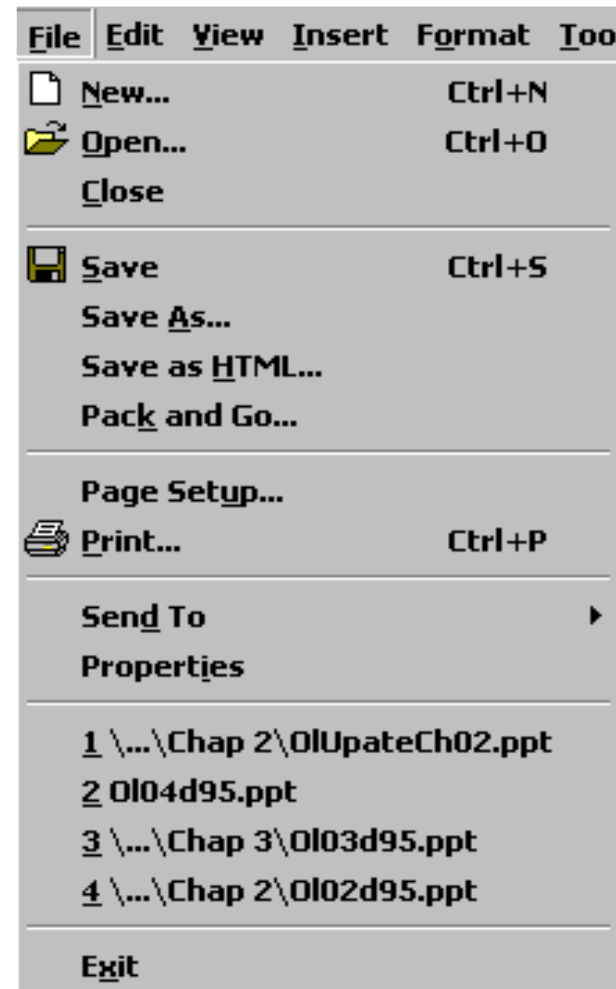


- Rectangular area that displays information
- Multiple applications in different windows
- Can be resized, moved, and closed



Menus

- Display commands
- Present options
- Drop down list
- Held in menu bars





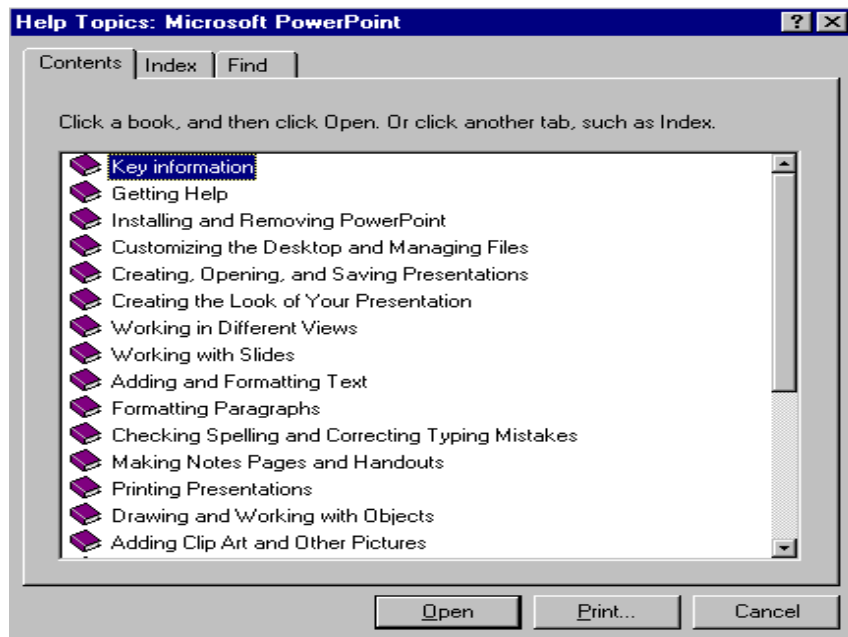
Toolbars

- Contain buttons and menus
- Commonly used commands
- Common to many applications
 - Formatting toolbar
 - Standard toolbar





Help



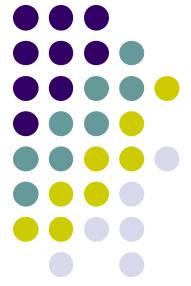
- Contains useful information
- Access methods
 - Table of Contents
 - Keyword index
 - Text search



Office Assistant

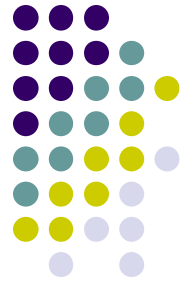
The screenshot shows the Microsoft Word Help menu on the left, with a mouse cursor pointing to the 'What's This?' option. The menu items are: Microsoft Word Help F1, Contents and Index, What's This? Shift+F1, Microsoft on the Web, WordPerfect Help..., Avery Wizard Help..., and About Microsoft Word. To the right is the Office Assistant dialog box, which is yellow and titled 'What would you like to do?'. It contains a text input field with the placeholder text 'Type your question here, and then click Search.' and a 'Search' button. Below the input field are three buttons: 'Tips', 'Options', and 'Close'. A small window with a cat icon is visible below the Office Assistant dialog box.

Click once to access or F1



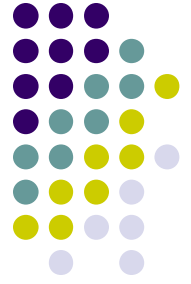
Web-based Apps

- ASP – Application Service Provider
- Provide access to different programs
 - Don't need to upgrade
- Store data files on the ASP site
 - Can access data from any location
- Privacy and Security
 - Data may be compromised



Browsers

- Connect to the Web
- Open and transfer files
- Display text and images
- Web site address
 - How a browser locates a web page
 - Uniform Resource Locator (URL)



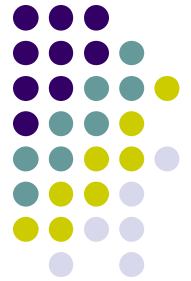
Web Page

- Document file that contains
 - Text and Images
 - Hypertext Markup Language (HTML)
 - Commands that describe layout of page
 - Hyperlinks
 - Connections to other documents
 - Navigating the Web



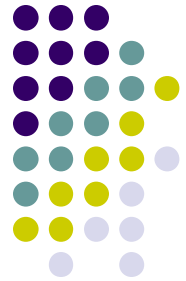
Searching the Web

- Search services provide databases of Web pages and Internet sites
- Topic Search
 - Successively select categories
- Keyword Search
 - Specific word or phrase



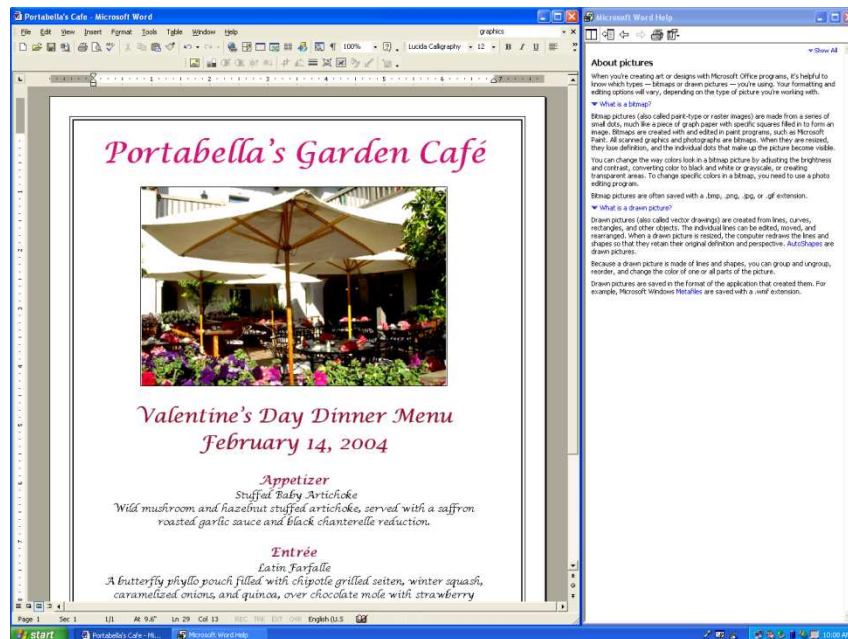
Word Processing Programs

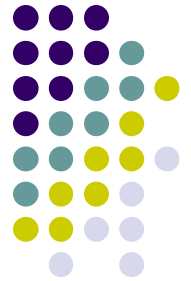
- Create text-based documents, reports, letters, and memos
- Widely used in business, school, and home
- Most popular
 - Microsoft Word
 - Corel WordPerfect
 - Lotus Word Pro



Word Processor Features

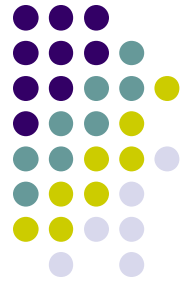
- Common features
 - Word Wrap, formatting
 - Spelling/Grammar Checkers
 - Thesaurus
 - Search and Replace
- Multimedia object
 - Graphs, tables
 - Audio, video clips





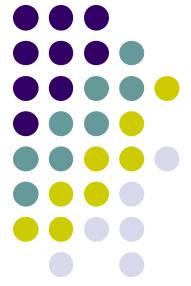
Spreadsheets

- Organize, analyze, and graph numeric data
- Widely used in many professions
- Most popular
 - Microsoft Excel
 - Corel Quattro Pro
 - Lotus 1-2-3



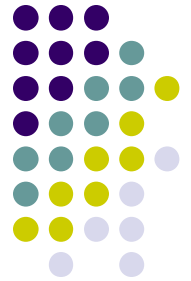
Spreadsheet Features

- Manipulate numeric data
- Grid of rows and columns
 - Data stored in cells
- Common features
 - Functions
 - Formulas
 - What-if Analysis
 - Graphs and charts



Database Management Systems

- Organize related data for easy access
- Database is a specially formatted file that contains data
 - Structured
- Most popular DBMS
 - Microsoft Access
 - Corel Paradox
 - Lotus Approach



Database Structures

- Relational
 - Most common, simple to create
- Hierarchical
 - Older, more complex
- Network (CODASYL)
 - Powerful, complex schemas
- Object-oriented
 - Data stored as objects



table

Product ID	Product Name	Supplier	Category
1	Chai	Exotic Liquids	Beverages
2	Chang	Exotic Liquids	Beverages
3	Aniseed Syrup	Exotic Liquids	Condiment
4	Chef Anton's Cajun Season	New Orleans Cajun Delights	Condiment
5	Chef Anton's Gumbo Mix	New Orleans Cajun Delights	Condiment
6	Grandma's Boysenberry Sp	Grandma Kelly's Homestead	Condiment
7	Uncle Bob's Organic Dried I	Grandma Kelly's Homestead	Produce
8	Northwoods Cranberry Sau	Grandma Kelly's Homestead	Condiment
9	Mishi Kobe Niku	Tokyo Traders	Meat/Poulti
10	Ikura	Tokyo Traders	Seafood
11	Queso Cabrales	Cooperativa de Quesos 'Las	Dairy Prodi
12	Queso Manchego La Pastor	Cooperativa de Quesos 'Las	Dairy Prodi
13	Konbu	Mayumi's	Seafood
14	Tofu	Mayumi's	Produce
15	Genen Shouyu	Mayumi's	Condiment
16	Pavlova	Pavlova, Ltd.	Confection
17	Alice Mutton	Pavlova, Ltd.	Meat/Poulti
18	Carnarvon Tigers	Pavlova, Ltd.	Seafood
19	Teatime Chocolate Biscuits	Specialty Biscuits, Ltd.	Confection
20	Sir Rodney's Marmalade	Specialty Biscuits, Ltd.	Confection
21	Sir Rodney's Scones	Specialty Biscuits, Ltd.	Confection

field names

field value

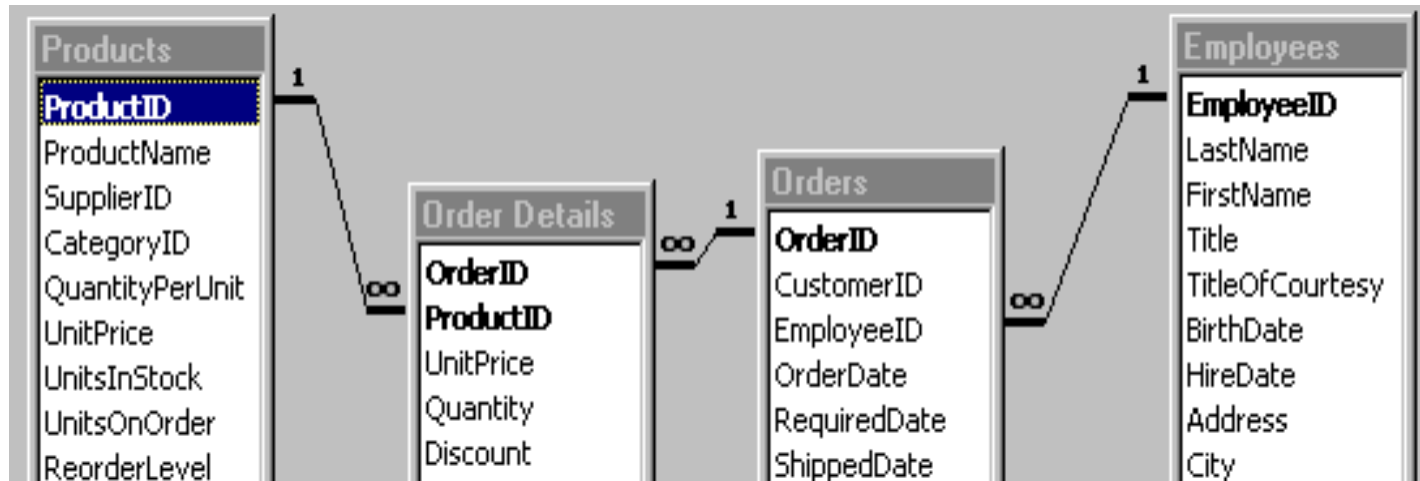
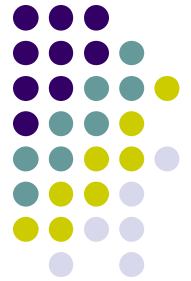
record

Relational Database



DBMS Features

- Capability to locate and display data
- Sort and analyze data
- Programming control language
 - Structure Query Language (SQL)
 - Used to create complex, sophisticated applications



Link tables using a common (key) field



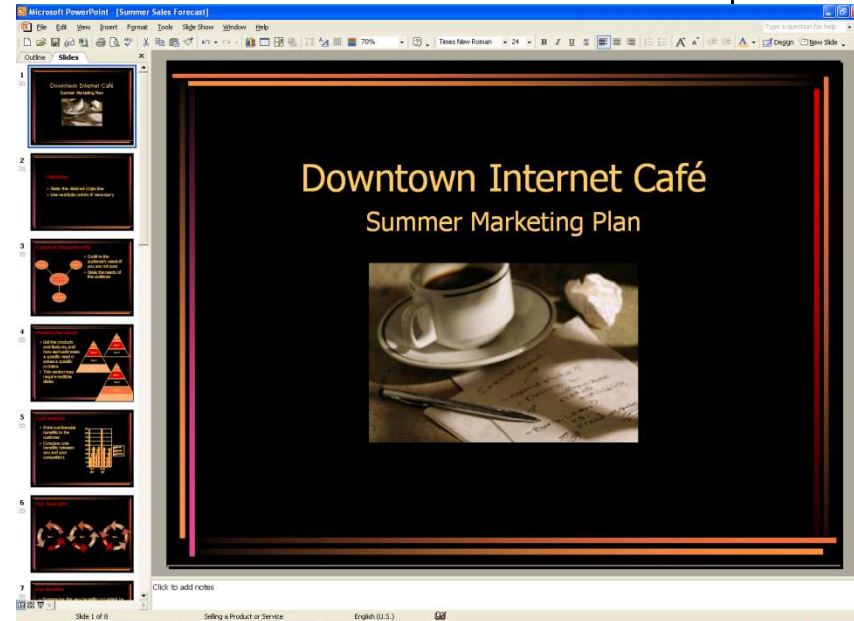
Presentation Graphics

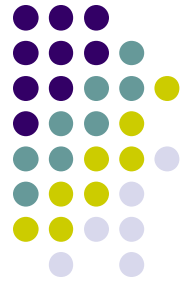
- Create interesting, professional presentations
- Combine visual objects, audio/video, text
- Most Widely Used
 - Microsoft PowerPoint
 - Corel Presentations
 - Lotus Freelance Graphics



Presentation Graphics Features

- Layout files
- Templates
 - Text layout
 - Background colors and patterns
 - Borders
- Animations
 - Visual effects
 - Audio effects





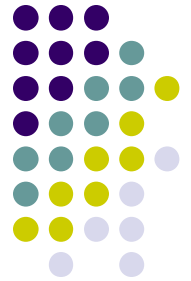
Software Suites

- Separate applications bundled and sold together
 - Less expensive
 - More convenient
- Ability to share data between applications
 - Object Linking and Embedding (OLE)
- Most popular
 - Microsoft Office



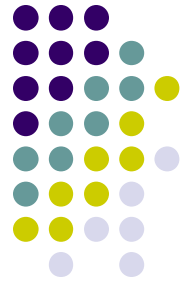
Object Linking

- Sharing of information between applications
- Destination file linked to source file
- Data is automatically updated
- Always displays most up-to-date data



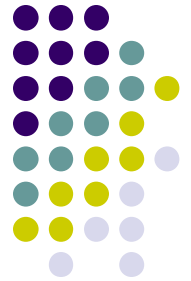
Object Embedding

- Object is part of destination document
- Data is not automatically updated
- Object can be opened and edited from inside destination document



Integrated Packages

- Single program
- Multiple functionality
 - Word processor, spreadsheet, DBMS
- Compared to Suites
 - Lower cost
 - Simpler
 - Capabilities not as extensive
- Microsoft Works



A Look to the Future



- Web-based application software
- Pay as you go
- Access only when needed