Module-1 Section 1.2

Characteristics of Graphics Interface

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Advantages	**Disadvantages**	
Symbols recognized faster than text	Greater design complexity	1. Sophisticated Visual Presentation
Faster learning	Learning still necessary	2. Pick-and-Click Interaction
Faster use and problem solving	Lack of experimentally derived design guidelines	3. Restricted set of Interface Options
Easier remembering, More natural	Inconsistencies in technique and terminology	4. Visualization
Exploits visual/spatial cues	Working domain is the present	5. Object Orientation
Concrete thinking, Context, Few errors	Not always familiar	a. Properties or Attributes of Objects
Increases feeling of control	Human comprehension limitations	b. Application vs Objects or Data orientation
Immediate feedback	Window Manipulation requirements	
Predictable system response	Production Limitations	6. Views
Easily reversible actions	Few tested icons exist	7. Use of Recognition Memory
Less anxiety concerning use, Attractive	Inefficient for such typists, expert users	8. Concurrent Performance of Functions
May consume less space	Not always preferred / fastest style	
Easily augmented with text display	Increased chances of clutter and confusion	
Low typing requirements, Smooth transition from command language	The futz and fiddle factor, Consumer more screen space, Hardware Limitations	

Advantages

1. Symbols recognized faster than text
2. Faster Learning
3. Faster use and problem solving
4. Easier remembering
5. More natural
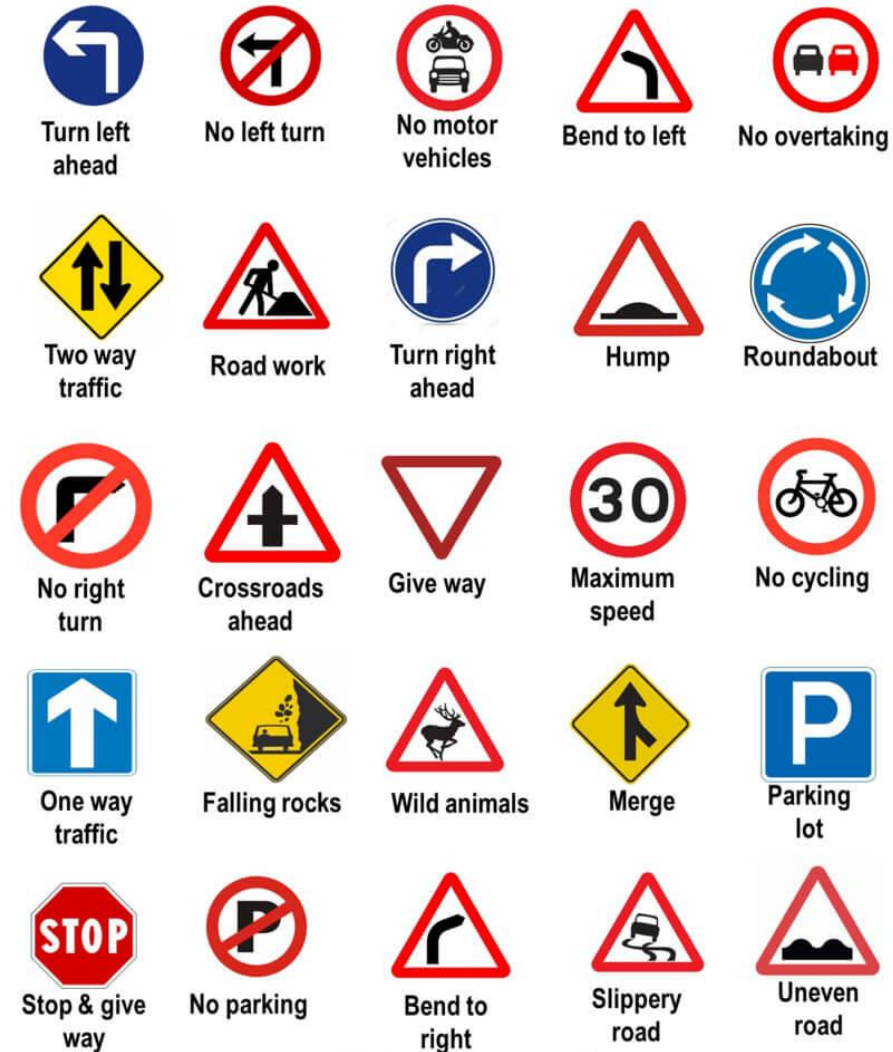
Advantages

1. Exploits visual / spatial cues
2. Concrete thinking
3. Context
4. Few Errors
5. Increases feeling of control
6. Immediate feedback
7. Predictable system response
8. Easily reversible actions
9. Less anxiety concerning use

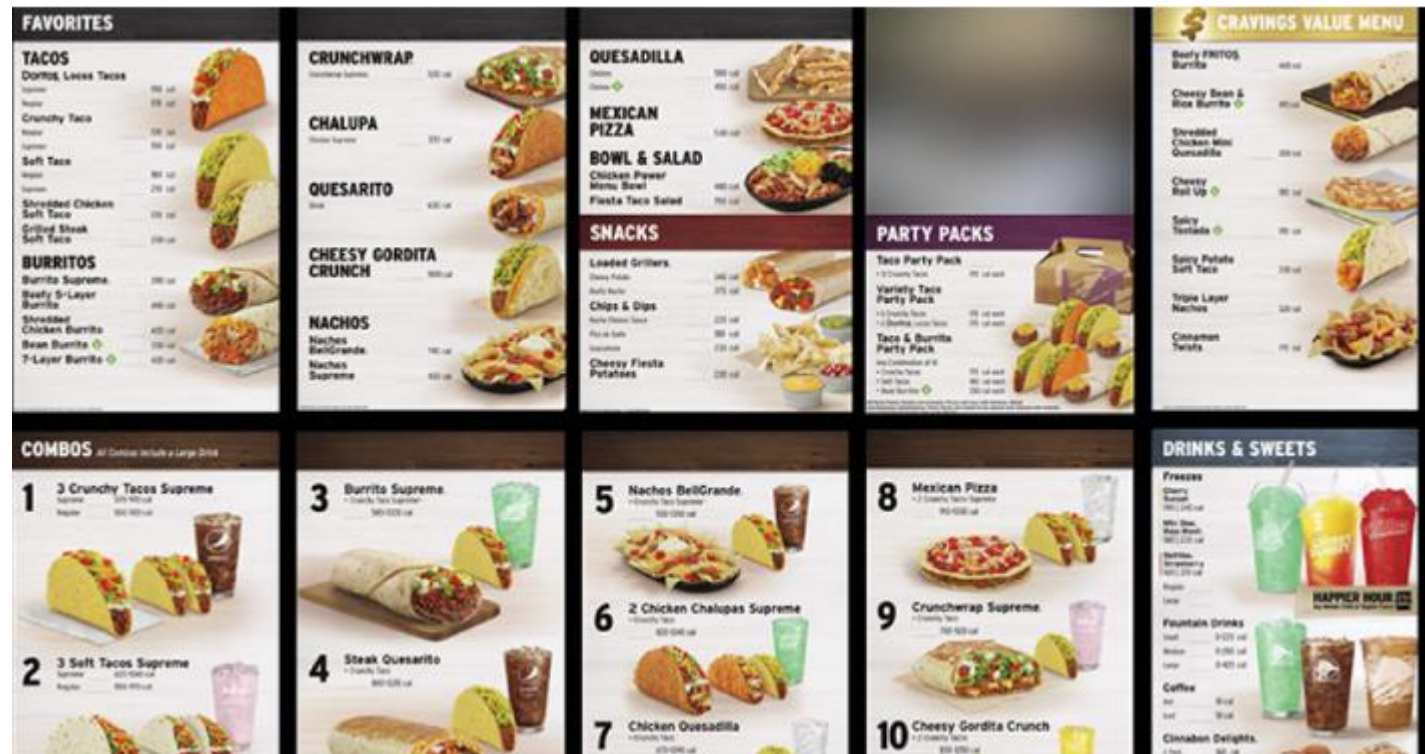# Advantages

10. Attractive
11. May consume less space
12. Easily augmented with text display
13. Low typing requirements
14. Smooth transition from command language

eMenu - digital menu for restaurants

Disadvantages

1. Greater design complexity
   - Elements and techniques available to graphic designer vs text-based screen designer
   - Choosing Proper window size, color, contrast,….is increasingly challenged

2. Learning still necessary
   - 8 hours to 30 hours training required to understand

3. Lack of experimentally derived design guidelines
   1. Builders of platform will not publish their study results
   2. Studies are often specific to a particular function/task, may not be generally applicable
   3. Takes time and effort to publish something

Thirukkural: 701

Who knows the sign, and reads unuttered thought, the gem is he,
Of earth round traversed by the changeless sea.

Couplet Explanation:
The minister who by looking (at the king) understands his mind without being told (of it), will be a perpetual ornament to the world which is surrounded by a never-drying sea.

Disadvantages

1. Inconsistencies in technique and terminology
2. Working domain is the present
3. Not always familiar
4. Human comprehension limitations
5. Window manipulation requirements
6. Production limitations
7. Few tested icons exists
8. Inefficient for touch typists
9. Inefficient for expert users
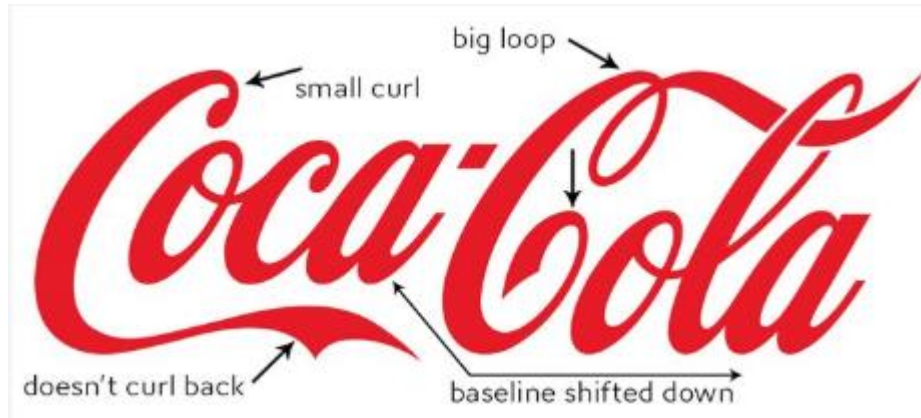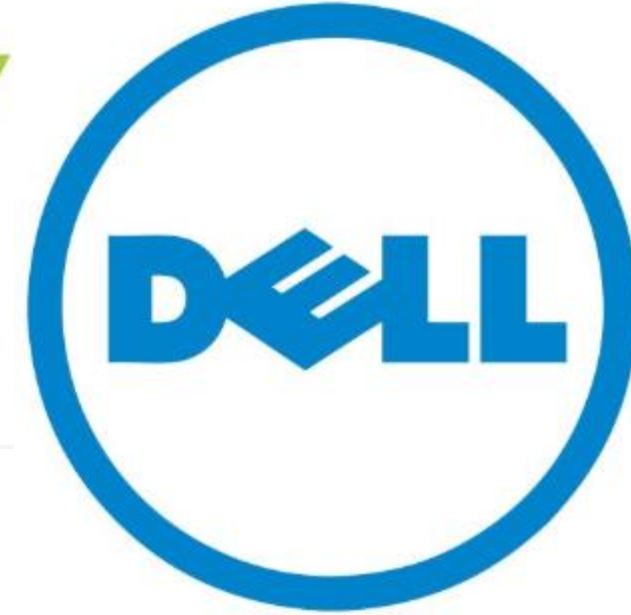
Disadvantages...

1. Not always the preferred style of interaction
2. Not always the fastest style of interaction
3. Increased chances of clutter and confusion
4. The futz and fiddle factor
5. May consume more screen space
6. Hardware limitations
   1. Required hardware of adequate power
   2. Processing speed
   3. Screen resolution
   4. Graphic Capability

Characteristics of Graphical user interface

1. Sophisticated visual representation
   - It is what people see on the screen
   - Objective: Reflect visually on the screen the real world of the user as realistically, meaningfully, simply, and clearly as possible
2. Pick-and-click interaction
   - Pick : Element for a proposed action
   - Click : The signal to perform an action
3. Restricted set of interface options : WYSIWYG =======➔
4. Visualization
5. Object Orientation
   - Document (paragraphs, sentence, word, letter)
   - Data, Container, Device
6. Views
   - Ways of looking at object's information
7. Use of Recognition Memory
8. Concurrent Performance of Functions
   - Multitasking

QUIZ...