Language Centre

Types of Definitions

March 2017

What is a definition?

- A definition answers the question: **"what is it"**?
- A definition gives readers information about the meanings of terms and concepts.
- Providing definitions is important to ensure that readers understand the concept as you intend (words can have multiple meanings).

When to provide definitions?

- Always define **new terms** and concepts.
- Define terms you use in a **non-standard** way.
- Define the terms you use if you are **unsure** readers will understand them.
- **The less readers know** about the topic, **the more you need to explain** the terms using language they can understand.

Types of definitions

1. Parenthetical definition
2. Sentence definition
3. Extended definition

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Parenthetical definition

A **parenthetical definition** explains a term briefly in **parenthesis** or between **commas** using synonyms or examples.

A term **(**definition**)**

A term**,** definition**,**

Virtual Machine Monitor (VMM)

Virtual Local Area Networks (VLANs)

A USB flash drive**,** also known as a USB drive**,** is a …

Parenthetical definition

Virtual Machine Monitor (VMM) …

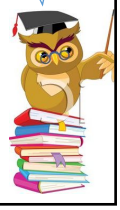
A hosted VMM sits alongside or above a host operating system above the hardware, and may share drivers from the host operating system to handle Input/Output (I/O). This cooperative model results in a VMM system that does not require hardware-specific drivers for VMM I/O operations, and allows the use of virtual machines within an existing environment.

…

The use of these technologies for virtualization offers a better level of CPU equivalence, and when combined with other technologies that can assist virtualization such as I/O Memory Management Units (IOMMU) (which handle VM memory to physical mappings in hardware)[5]

Source: M. Pearce, S. Zeadally, and R. Hunt, "Virtualization: Issues, security threats, and solutions", ACM Computing Surveys 45(2):17, February 2013. http://dx.doi.org/10.1145/2431211.2431216

Introduce abbreviations before use.



Common phrases used in parenthetical definitions

e.g. = exempli gratia = for example, for instance

such as = for example

including = for example.
1) There are several cases, but here are a few …
2) Highlighting an important example not to be forgotten.

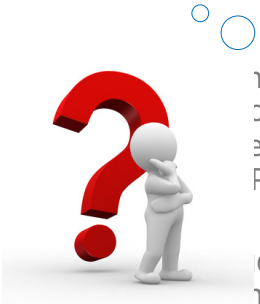
i.e. = id est = that is, in other words

Common phrases used in parenthetical definitions

e.g.	In light of this, many mobile computing researchers have tried to shield the mobility and make frequent disconnection transparent to end-users (**e.g.,** the Coda file system [SKM+93] and Mobile IP [PJ96] work).
such as	Any reliance on the user to explicitly provide contextual information**, such as** in Office Assistant projects**,** proves to be obtrusive and inconvenient for the user.
including	An entity is a person, place, or object that is considered relevant to the interaction between a user and an application**, including** the user and applications themselves [DA99].
i.e.	The system concentrates on providing a set of tools to assist in the fieldworker's observation and data-collection activities**, i.e.,** helping the user record information about their environment.

Source: Chen, G. and Kotz, D. (2000). A Survey of Context-Aware Mobile Computing Research. Dartmouth Computer Science Technical Report TR2000-381

Common phrases used in parenthetical definitions

e.g.	 What might this sentence type be called?
such as	
including	An entity is a person, place, or object that is considered relevant to the interaction between a user and an application**, including** the user and applications themselves [DA99].
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2.Sentence definition

3.Extended definition

Sentence definition

A typical, good sentence definition consists of **three elements**:

1.Term	= **object** / **concept** to be defined
2. Class	= **group** to which the thing belongs
3. Characteristics	= **specific details** that separate it from others in the same class.

Sentence definition

TERM	=	CLASS	+	CHARACTERISTICS
A car	is	**a** motor **vehicle**	**that**	is used for transporting passengers.
A media player	is	**an** eletronic **device**	**which**	can be used to store, transfer, and play back digital media, such as mp3 files and various video clips.
A house mouse	is	**a** small **rodent**	**that**	lives in a tiny hole and eats cheese.
An optical mouse	is	**a** pointing **device**	**that**	functions by detecting two-dimensional motion relative to its supporting surface.
A CEO	is	**a person**	**who**	is in charge of a corporation.
A university	is	**an organization**	**where / in which**	research and teaching is performed by scientists

Example 1: sentence definition

A context-aware network is a form of computer network that is a synthesis of the properties of dumb network and intelligent computer network architectures.

Identify the following elements:

1. **Term**
2. **Class**
3. **Characteristics**

Source: Context-aware network. Wikipedia. Available at https://en.wikipedia.org/wiki/Context-aware_network

Example 1: sentence definition

1 2 3

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Source: Context-aware network. Wikipedia. Available at https://en.wikipedia.org/wiki/Context-aware_network

Example 2: sentence definition

An operating system (OS) is system software that manages computer hardware and software resources and provides common services for computer programs.

Identify the following elements:

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Source: Operating system. Wikipedia. Available at https://en.wikipedia.org/wiki/Context-aware_network

Example 2: sentence definition

[1] **An operating system (OS)** [2] is system software [3] that manages computer hardware and software resources and provides common services for computer programs.

Identify the following elements:

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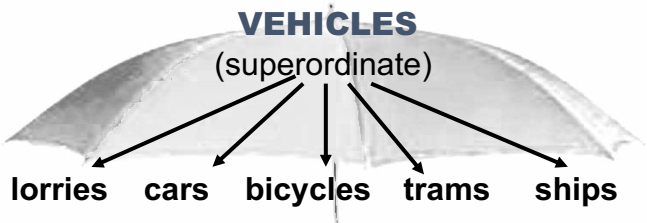
Source: Operating system. Wikipedia. Available at https://en.wikipedia.org/wiki/Context-aware_network

Superordinates

Umbrella terms that can stand for an entire class or category of things.



Typical superordinate terms:

Option	*Benefit*	*Technique*	*Reason*	*Phase*
Alternative	*Advantage*	*Method*	*Rationale*	*Stage*
Example	*Drawback*	*Strategy*	*Consequence*	*Step*
Criterion	*Problem*	*Approach*	*Effect*	*Effect*
Feature	*Issue*	*Solution*	*Motivation*	*Procedure*
Aspect				

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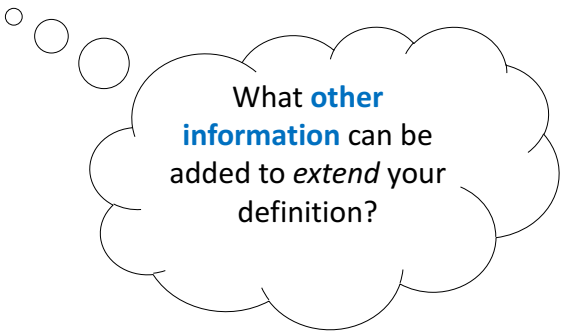
Extended definition

Extended Definitions usually begin with a **sentence definition**.



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Extended definition

Eight Methods for extending your definition:

4. Analysis of parts	*What are its parts? classes? types?*
5. Operating principles	*How does it work?*
6. Applications / Examples	*How is it used or applied?*
4. Analogy/ Comparison	*Is it similar to something familiar?*
5. History	*What is its origin? Who developed it?*
6. Advantages/ problems	
7. Requirements	*What is needed to make it work?*
8. Physical appearance/ features	*What does it look like? What are its characteristic features?*

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