

## ASCII CHARACTER SET

ASCII is a 7-bit character set containing **128 characters**. It contains the numbers from 0-9, the upper and lower case English letters from A to Z, and some special characters. The character sets used in modern computers, in HTML, and on the Internet, are all based on ASCII

## UTF 8 CHARACTER SET

A variable-length character encoding (1 to 4 bytes long). UTF-8 is backwards compatible with ASCII and the preferred encoding for e-mail and web pages.

## UTF 16 CHARACTER SET

A variable-length character encoding. UTF-16 is used in all major operating systems like Windows, IOS, and Unix.

## SERCH ENGINE

A **search engine** is a [software system](#) that finds web pages that match a [web search](#).<sup>[1]</sup> They search the [World Wide Web](#) in a systematic way for particular information specified in a textual [web search query](#). The [search results](#) are generally presented in a line of results, often referred to as search engine results pages (SERPs). The [information](#) may be a mix of hyperlinks to [web pages](#), images, videos, [infographics](#), articles, and other types of files. Some search engines also [mine data](#) available in [databases](#) or open directories. Unlike [web directories](#) and [social bookmarking sites](#), which are maintained by human editors, search engines also maintain [real-time](#) information by running an [algorithm](#) on a [web crawler](#). Any internet-based content that cannot be indexed and searched by a web search engine falls under the category of [deep web](#).

