Domain Name System (DNS)

The Domain Name System (DNS) is a system devised to associate text names, known as domain names, with IP numbers.

A domain name is composed of a Top Level Domain (TLD) and one or more preceding subdomains. See "Domain Name" on Wikipedia.

Examples of TLD's include .com, .org, and .edu.

Domain name registration follows rules set out long ago in RFC 1591 Domain Name System Structure and Delegation (https://tools.ietf.org/html/rfc1591)

The actual relationship between a domain name and its associated IP address is maintained by the authoritative DNS name server.

ICANN authorizes registrars to add the identities of authoritative DNS name servers in the DNS system.

Examples of registrars include Go Daddy and GKG, but there are hundreds of them.

When you register a domain name, you are actually registering the name of your authoritative DNS name server, along with your domain name.

Domain names are converted to IP numbers by resolving each part of the domain name in reverse sequence. See "Address resolution mechanism" on Wikipedia.

Communication Networks/DNS – Iterated Queries
(https://en.wikibooks.org/wiki/Communication_Networks/DNS#Iterated_Queries)

A local name resolver may cache a copy of the records sent by an authoritative DNS name server. When such a local resolver responds to a DNS request, the local resolver is known as a non-authoritative server.

For more info on how DNS servers work, see "How Domain Name Servers Work" on How Stuff Works (http://computer.howstuffworks.com/dns.htm).