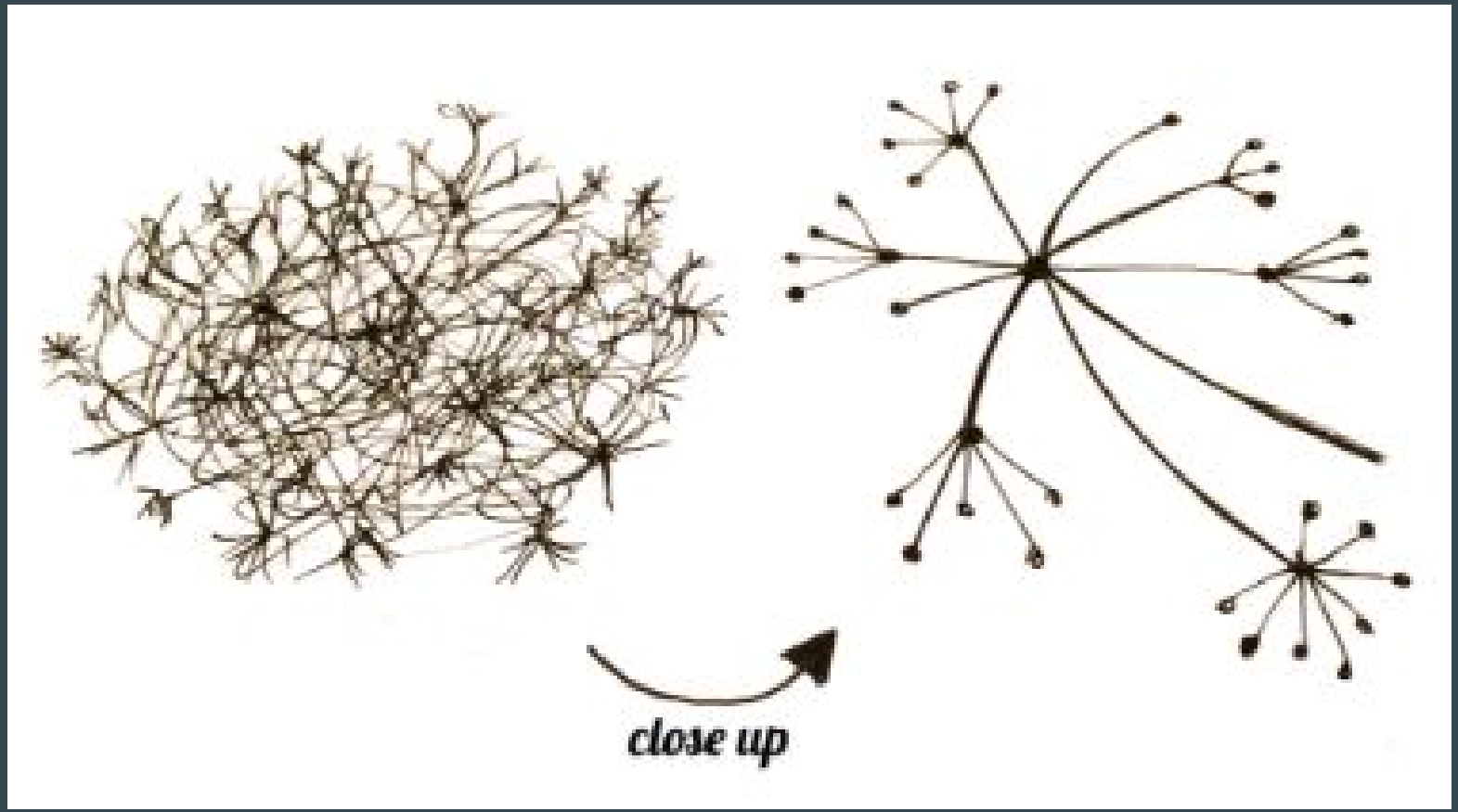
How the Internet Works

Djangogirls tutorial

http://tutorial.djangogirls.org/pt/how_the_internet_works/

What is the Internet?

A network hundreds of thousands of machines, connected directly or indirectly (the web).

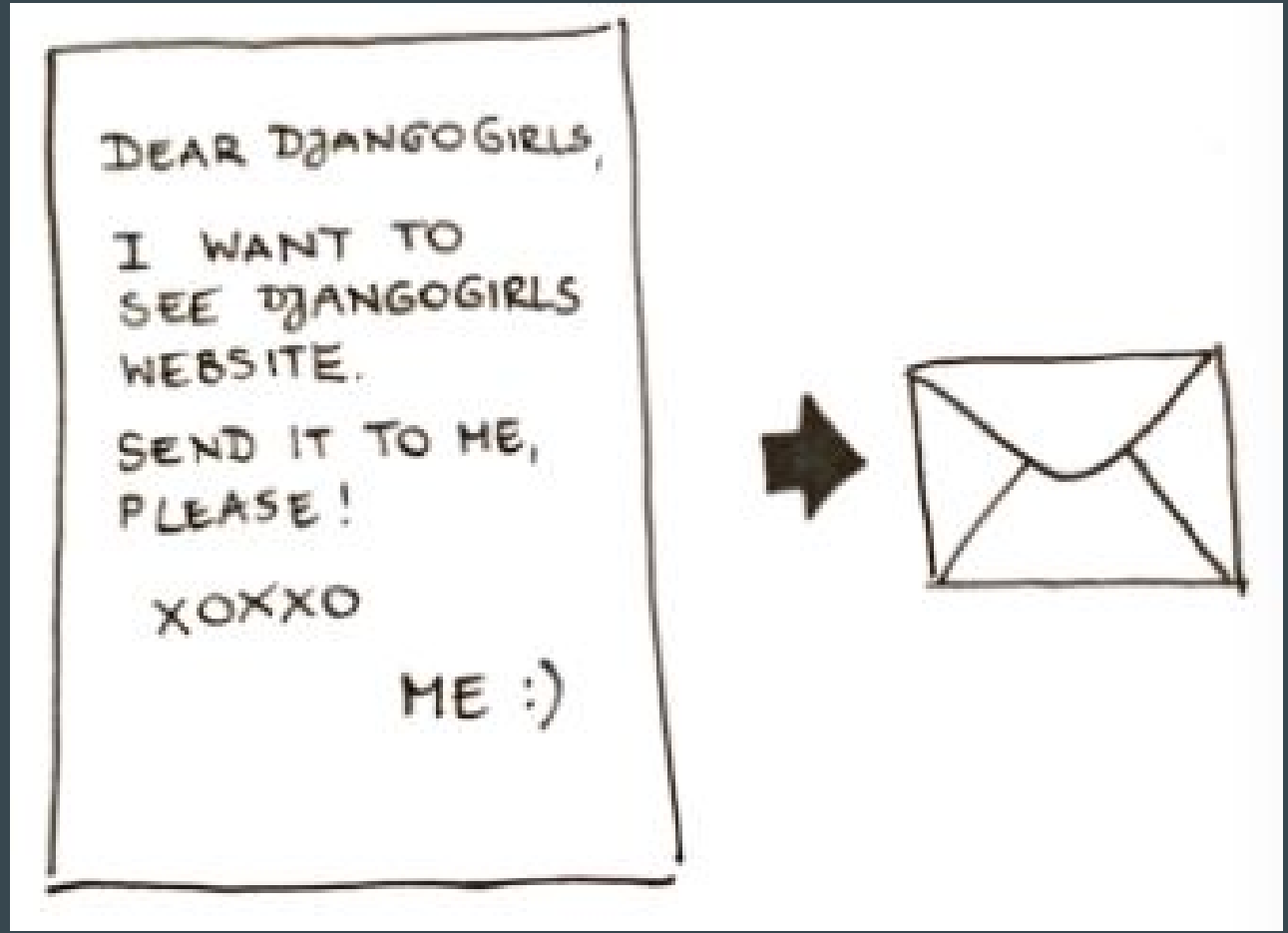


Each node is a connected device.

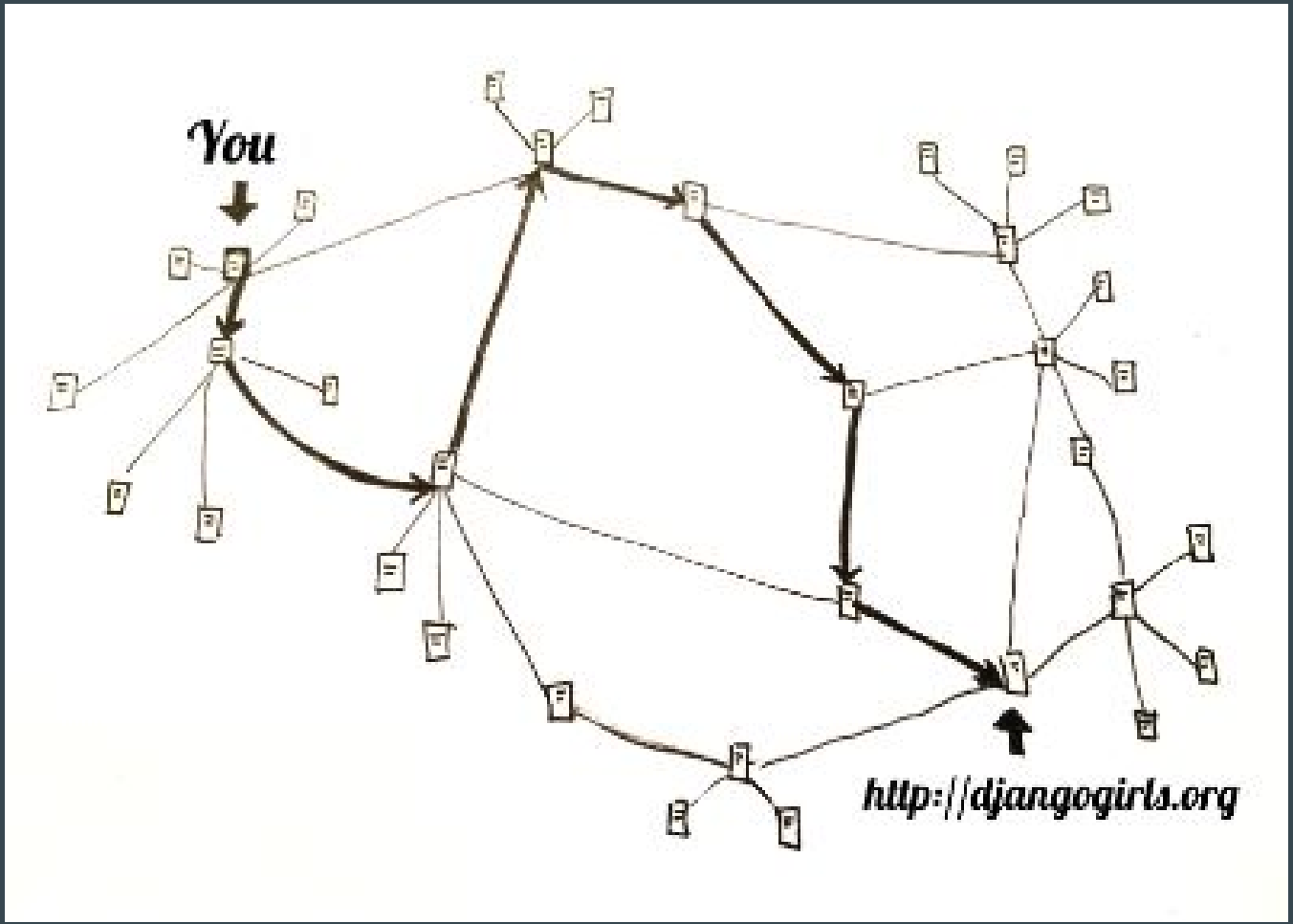
Using the Internet

What happens when you type an address (say, https://djangogirls.org) into your browser and press “Enter”?

Imagine that when you type an address, you send a letter (data packets), saying:


DEAR DJANGOGIRLS,
I WANT TO SEE DJANGOGIRLS WEBSITE.
SEND IT TO ME, PLEASE!
XOXXO
ME :)

To make sure our “letter” gets to the right place, your computer will communicate to each of the computers closest to it to find the computer (server) on which the website djangogirls.org is stored. Those next computers “ask” the computers closest to them, etc.


You
http://djangogirls.org

Rather than address with street name, city, zip code and country name, we use IP (Internet Protocol) addresses. First your computer asks the DNS (Domain Name System) to translate djangogirls.org to the IP address of the server that contains djangogirls.org.

Just like a letter needs an address, stamp, and to be written in a language your recipient understands to reach and be read, the data packages that you send to see a site use a protocol called HTTP (Hypertext Transfer Protocol) or HTTPS (encrypted and more secure).

Basically, each website has a server where the its files stay. The server, when on and connected, waits for requests (our “letters”) received and send back the files that make up the website.

How does Django fit into all this? Well, you wouldn't want to respond to every letter you receive the same way, right? Django allows you to customize your "responses."