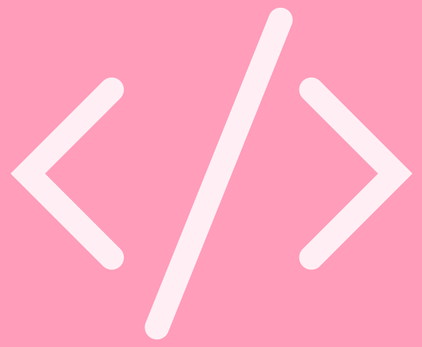
What We Cover

How The Web Works
HTML5
Semantic HTML
Accessibility
CSS3 Essentials
Flexbox & Layout
CSS Animations
Responsive Design
CSS Frameworks
Bootstrap 4 & 5
JavaScript Basics
All Modern JS Syntax

DOM Manipulation
Asynchronous JavaScript
AJAX & JSON
Working with API's
Using the Terminal
Unix Commands
NodeJS & NPM
Express
Web Frameworks
Templating
RESTful API's
Databases

Mongo DB
Developer Mindset
Security
Deploying
Mongo Cloud Atlas
Mongoose
Schema Design
Authentication
Authorization
Cookies & Sessions
Image Upload
Geocoding & Maps



Unit Goals

Things We'll Cover

What is the Internet?
The Internet vs. The Web
How Does the Web Work?
What are HTTP requests?
What Is A Web Server?
Front End Vs. Backend
Environment Setup!
What are HTML, CSS, & JS?
What do they each do?

THE INTERNET

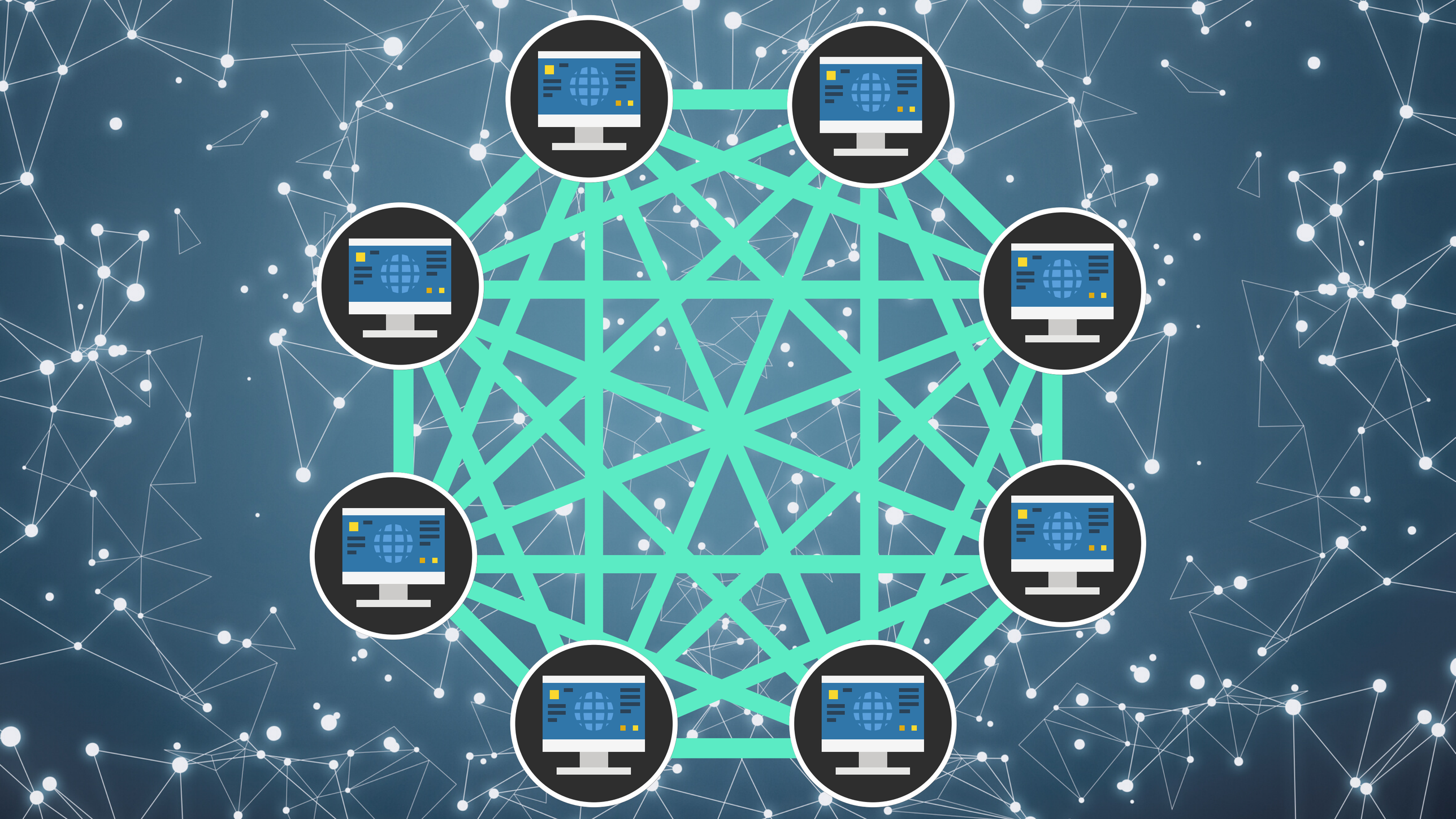
In a Couple of Minutes

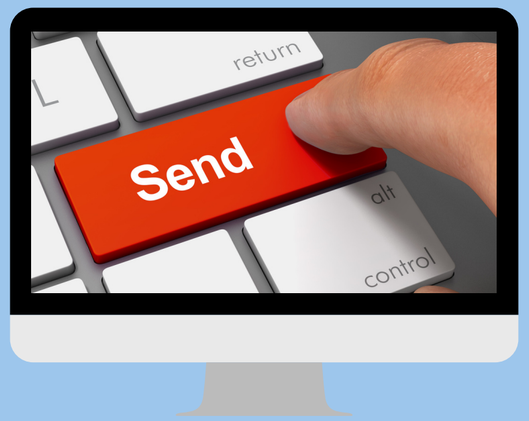
WHAT IS IT?

"A global network of networks."

(It's just a bunch of connected computers)

Hey

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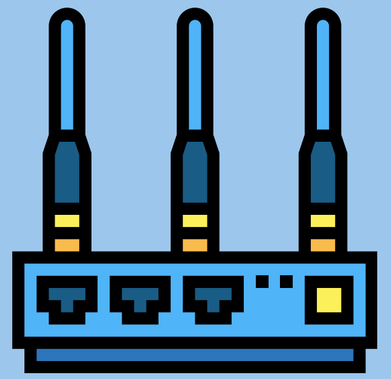

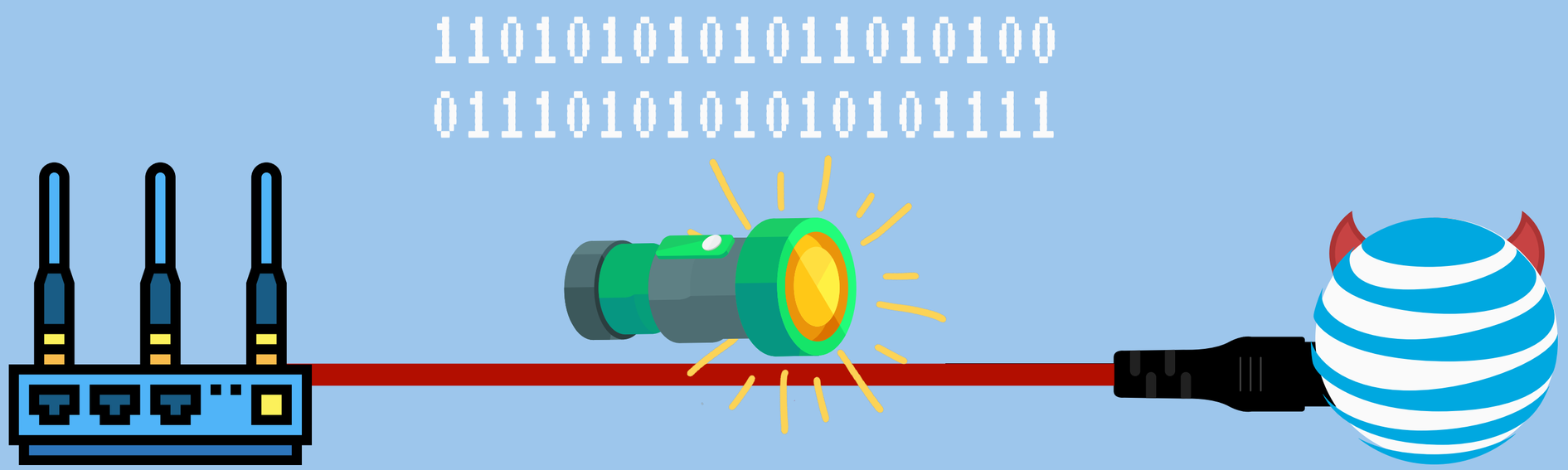
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THE INTERNET IS THE INFRASTRUCTURE THAT CARRIES THINGS LIKE:

- EMAIL
- THE WEB
- FILE SHARING
- ONLINE GAMING
- STREAMING SERVICES

THE INTERNET

Global network of interconnected computers that communicate via TCP/IP (don't worry about that for now).
Network of networks.

THE WEB

The World Wide Web is an information system where documents and others resources are available over the Internet.

Documents are transferred via **HTTP**.

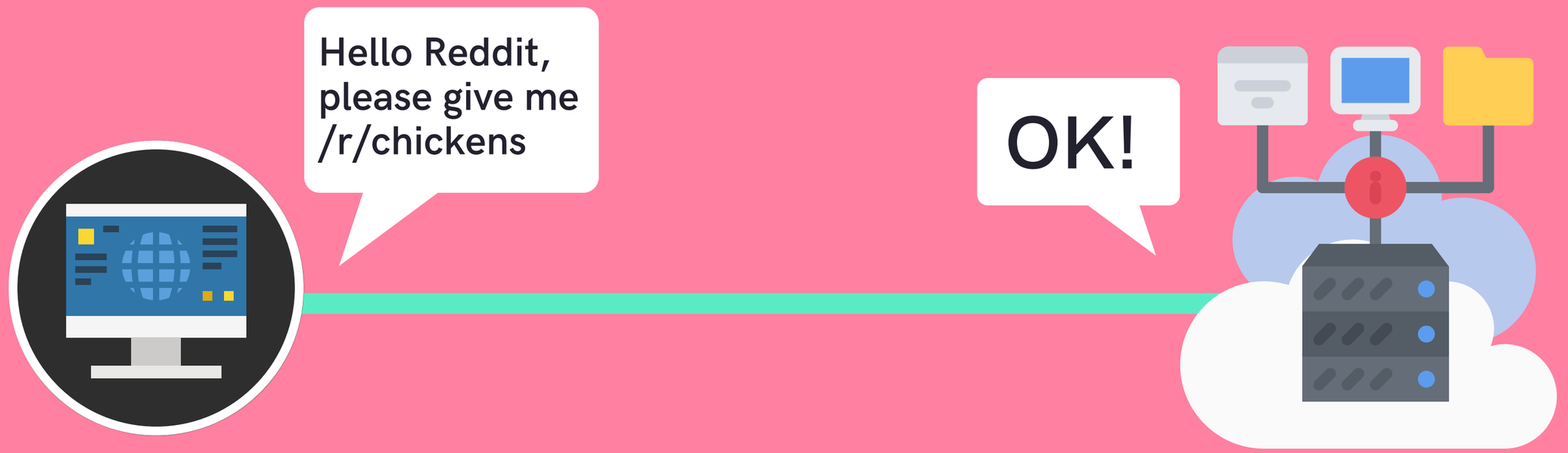
HTTP REQUESTS

- Foundation of communication on the World Wide Web
- "Hyper Text Transfer Protocol"
- Request -> *I would like this information please*
- Response -> *Ok, here you go!*

WEB SERVER

A computer* that can satisfy requests on the Web.

* "server" is also used to refer to the software running on the computer



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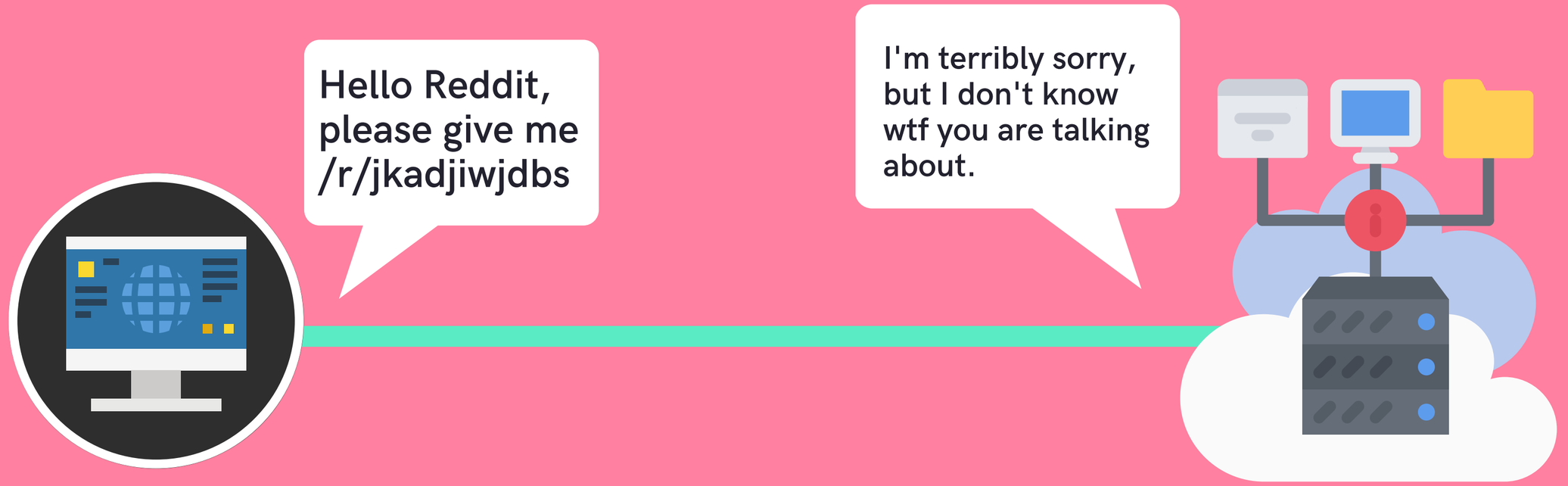
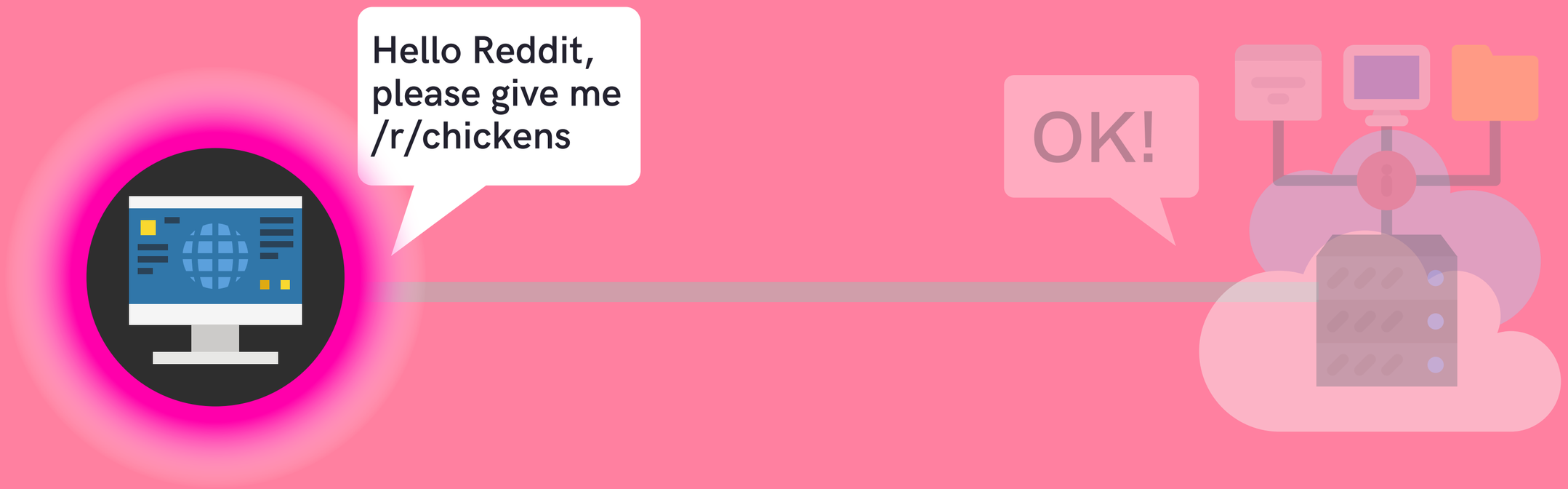
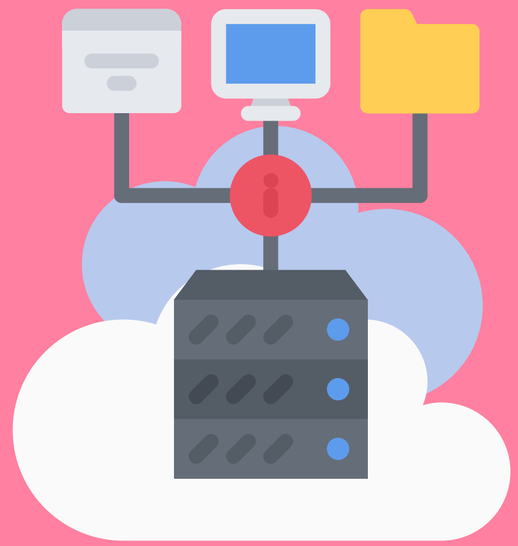


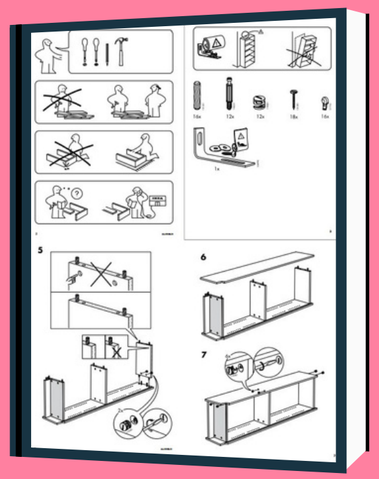
CLIENT

The computer that accesses a server



A SERVER SOMEWHERE





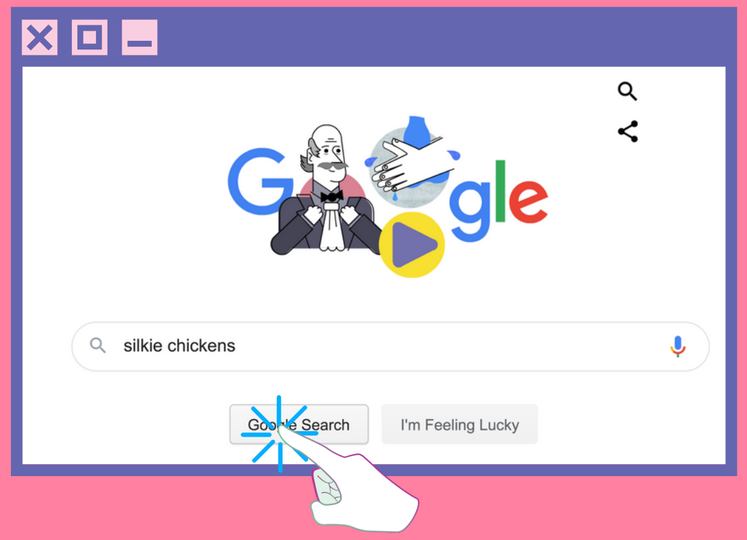
Here are the instructions!

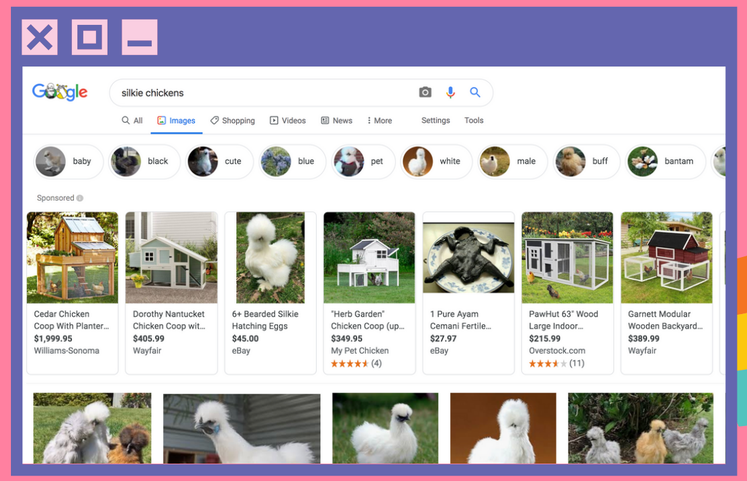
YOUR BROWSER

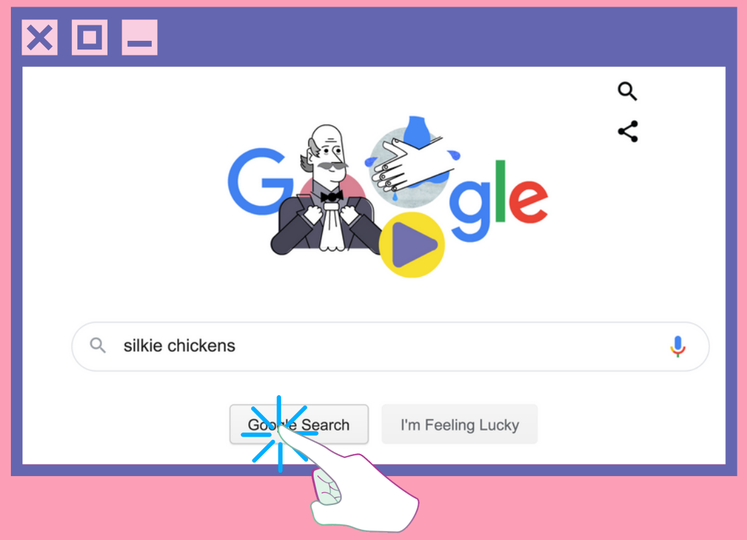
Look What I Made!

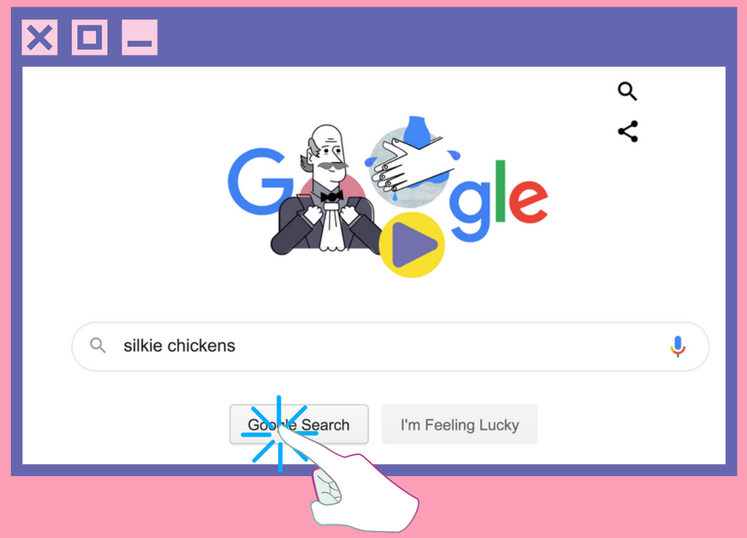
PLEASE GIVE ME

GOOGLE.COM/SEARCH?Q=CHICKENS



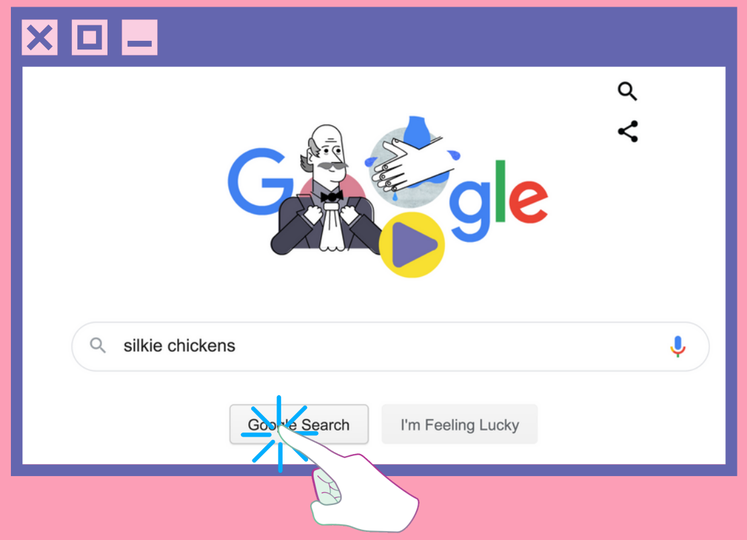



silkie chickens
I'm Feeling Lucky



PLEASE GIVE ME

GOOGLE.COM/SEARCH?Q=CHICKENS

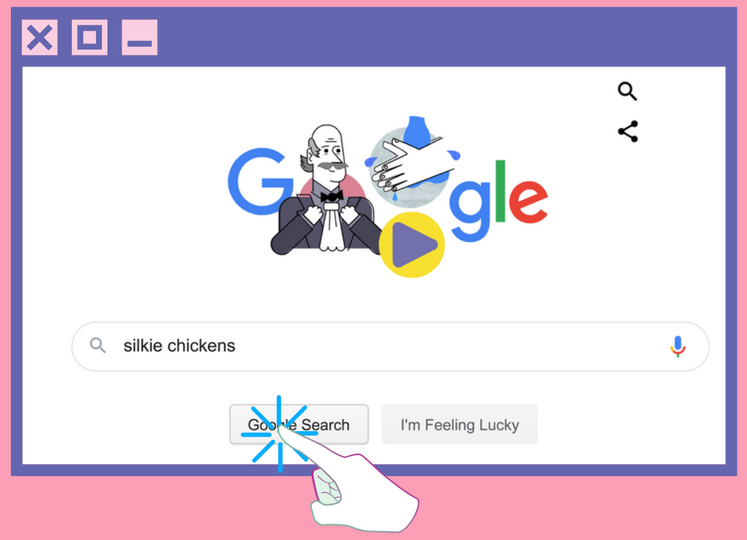


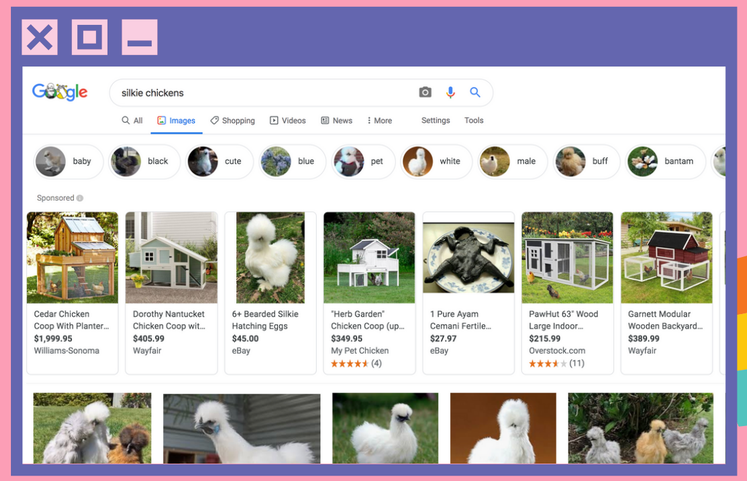
PLEASE GIVE ME

GOOGLE.COM/SEARCH?Q=CHICKENS

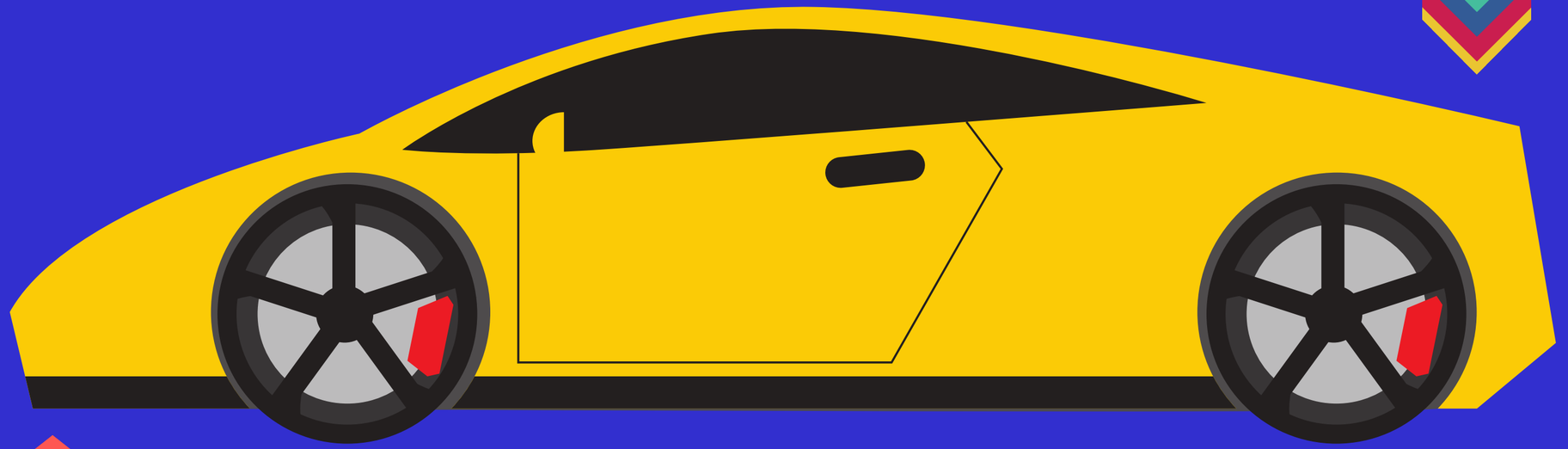
PLEASE GIVE ME

GOOGLE.COM/SEARCH?Q=CHICKENS





BACK END



FRONT END

BACK END

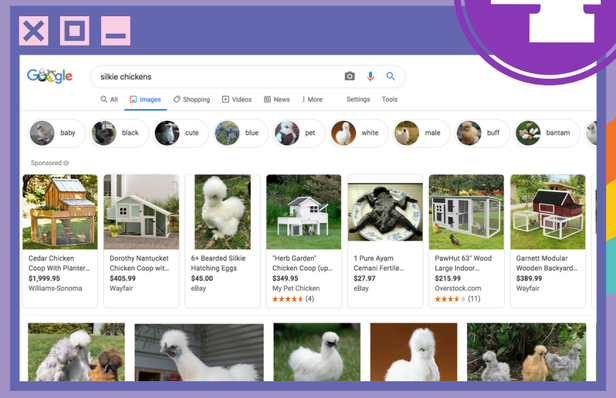
FRONT END

BACK END

RECEIVES THE ORDER AND ASSEMBLES THE PIZZA

FRONT END

YOU STILL NEED TO BAKE IT AT HOME! (THE BROWSER)

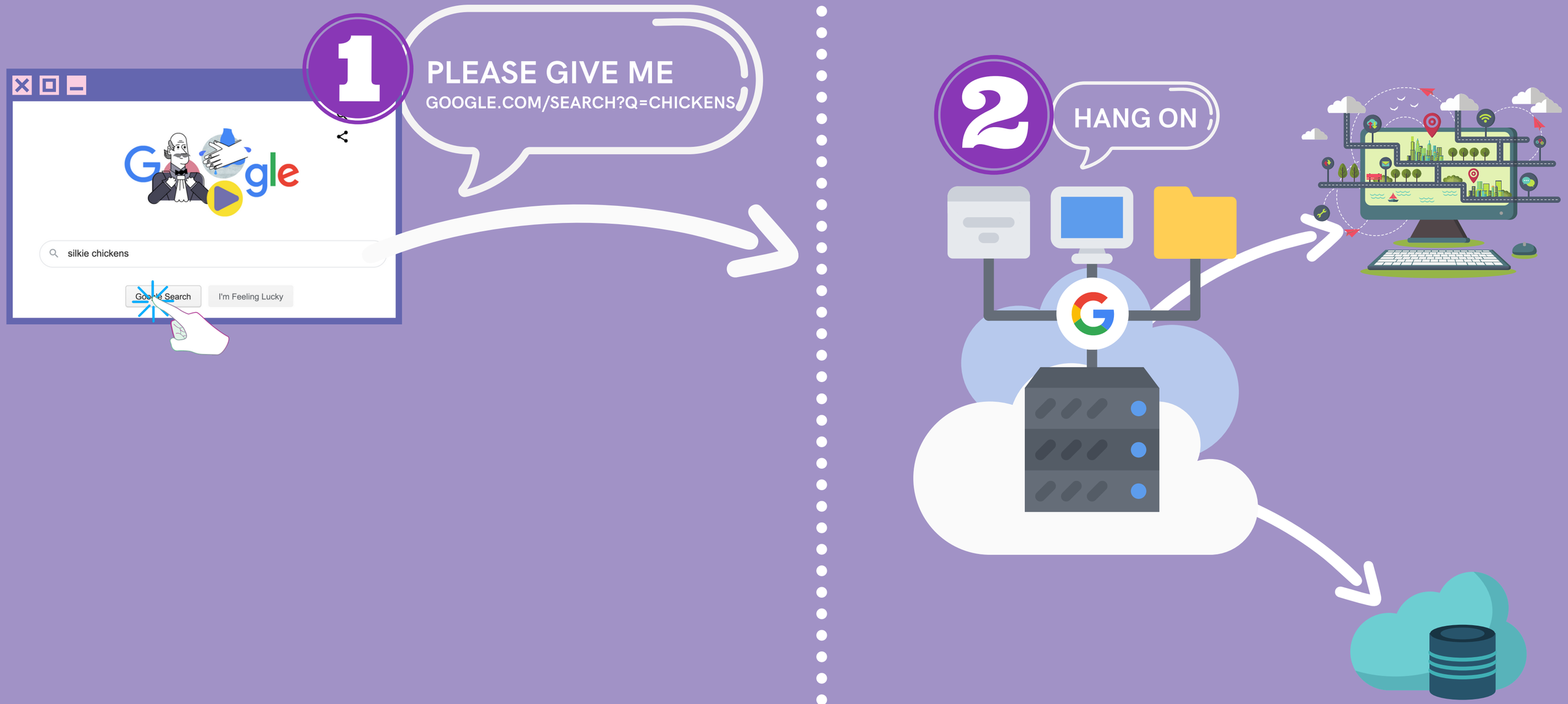


FRONT END

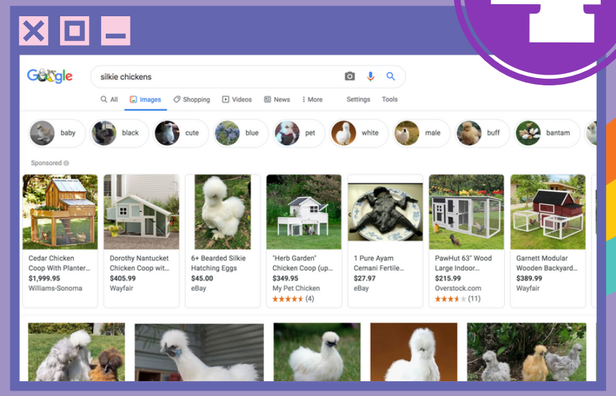
BACK END

FRONT END

BACK END


1
PLEASE GIVE ME
GOOGLE.COM/SEARCH?Q=CHICKENS
silkie chickens
Google Search
I'm Feeling Lucky
2
HANG ON
FRONT END
BACK END

1
PLEASE GIVE ME
GOOGLE.COM/SEARCH?Q=CHICKENS
silkie chickens
Google Search
I'm Feeling Lucky
2
HANG ON
HTML
CSS
ES
6
3
HERE YOU GO!
FRONT END
BACK END



FRONT END

BACK END

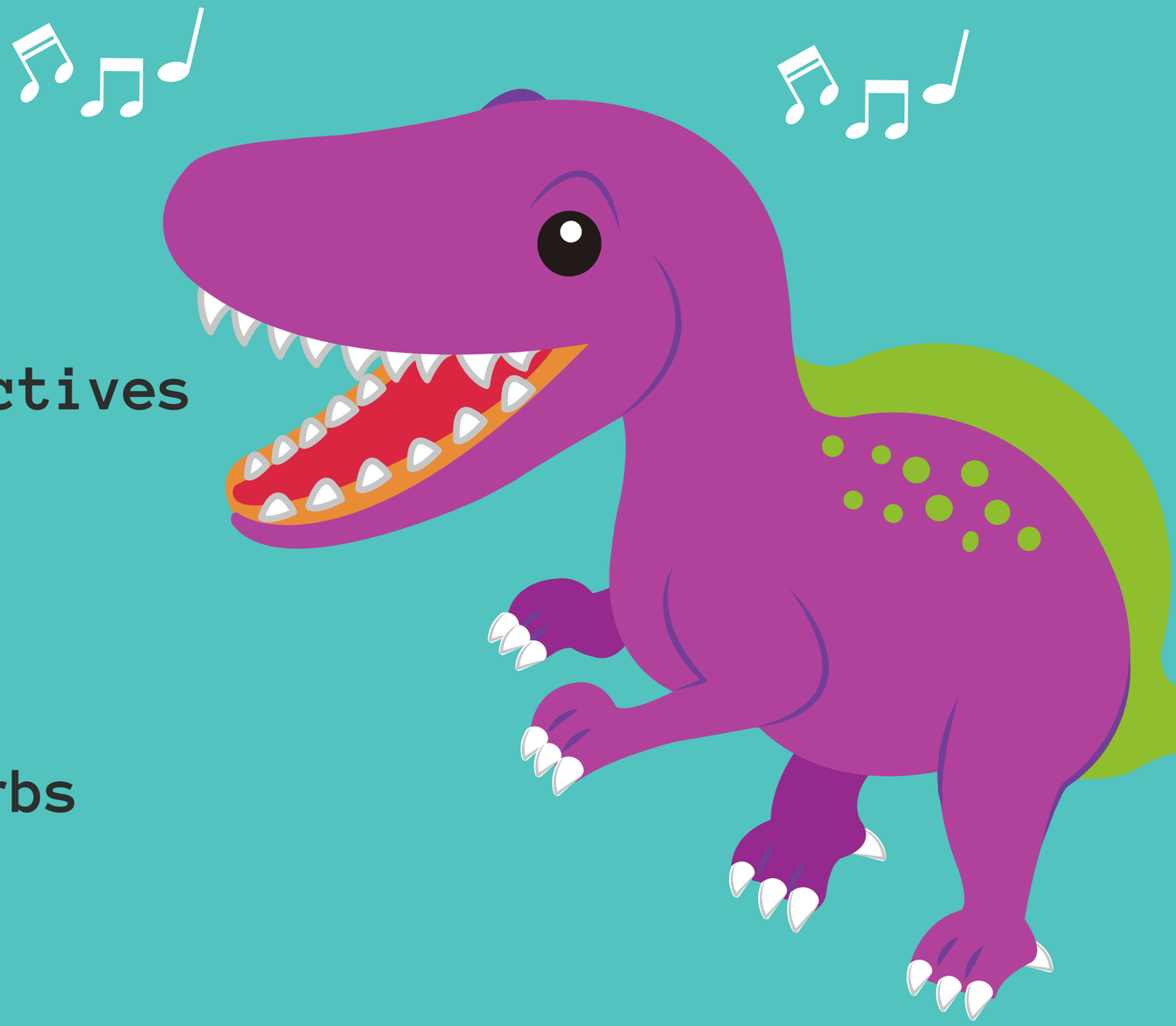
HTML
JS
CSS

THE

PURPLE CSS - adjectives

DINO HTML - nouns

DANCED JS - verbs



THE TOOLS WE NEED

CHROME
Web Browser

VSCODE
Text Editor

SPECTACLE