

Game Project

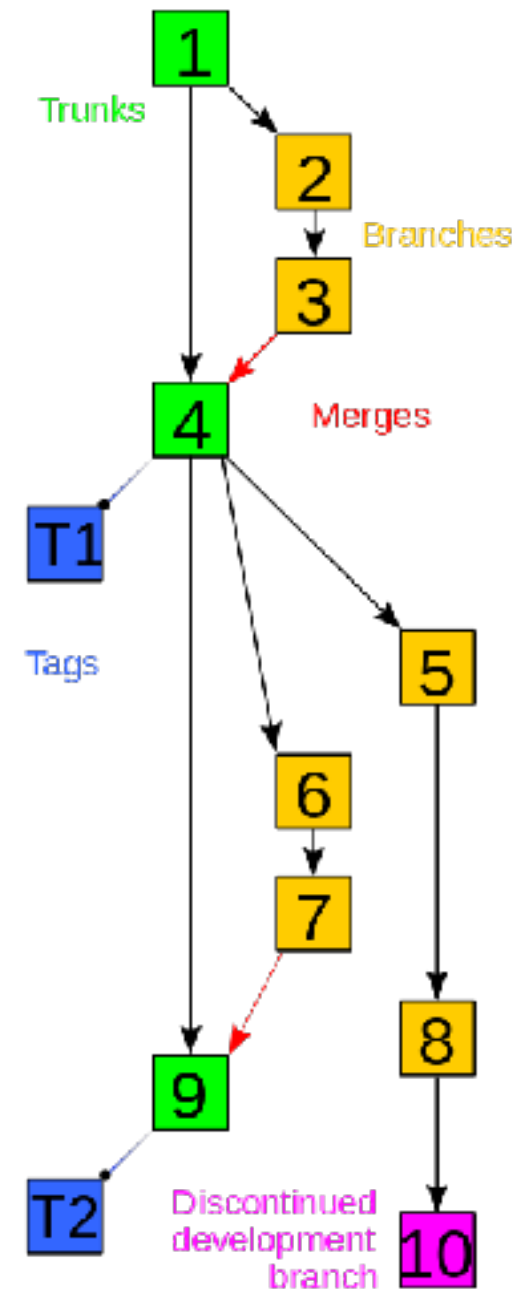
Week 2

Agenda

- HTTP basics
- API basics
- HTML basics
- Build crawler in Python
- Advanced topics

Version Control

- Best practice
- Lab



HTTP Basics

Hypertext Transfer Protocol (Secure)

LAYER

Application Layer

Transport Layer

Network Layer

Network Interface Layer

Hardware

PROTOCOL

APPLICATION

UDP

TCP

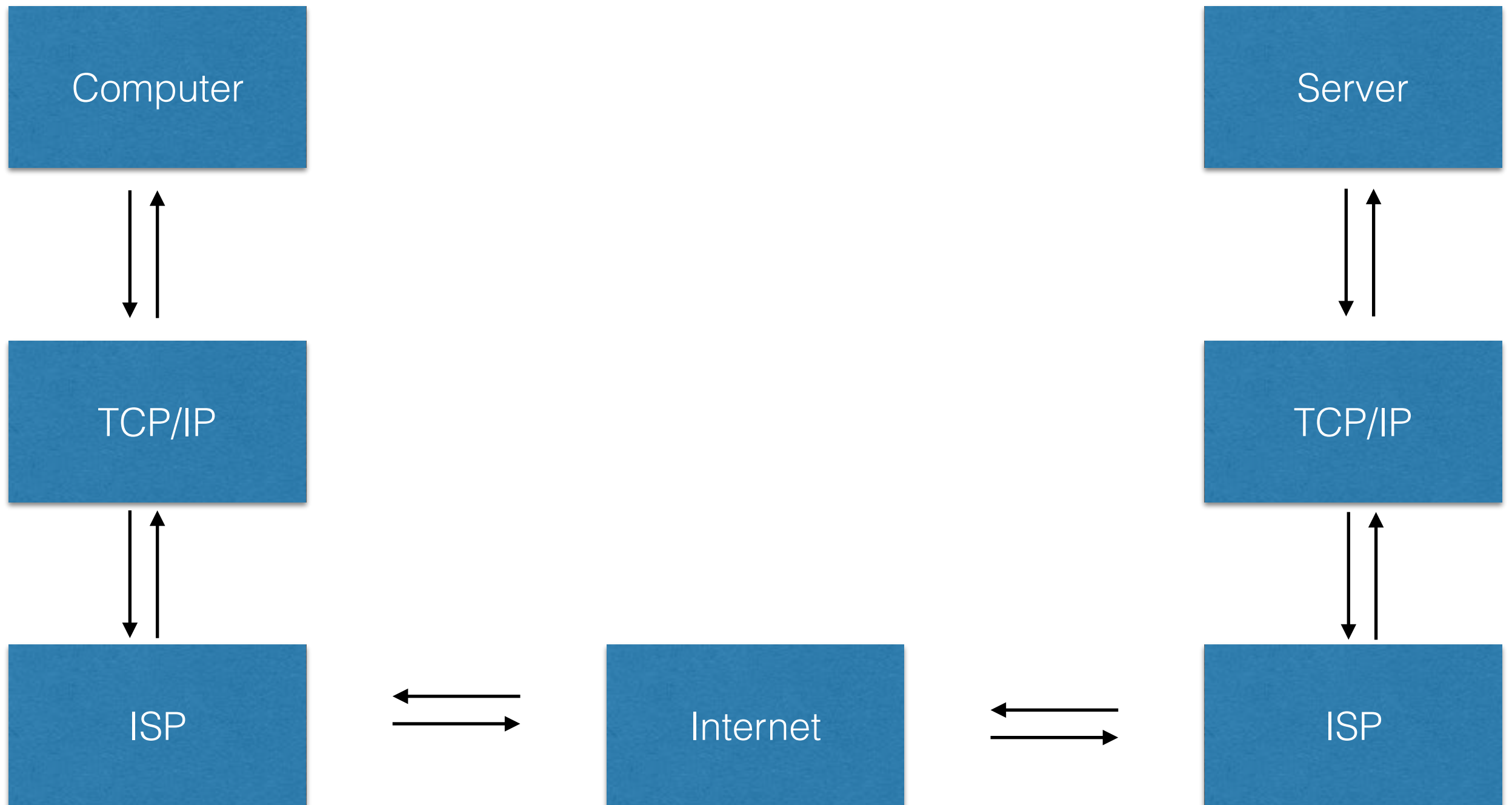
INTERNET PROTOCOL

NETWORK INTERFACE

PHYSICAL NETWORK

https://en.wikipedia.org/wiki/Hypertext_Transfer_Protocol

HTTP Basics



HTTP Basics

- Methods:
 - GET - requests a representation of the specified resource.
 - POST - requests that the server accept the entity enclosed in the request
 - PUT
 - DELETE
 - etc.

HTTP Basics

▼ Response Headers

alt-svc: quic=":443"; ma=2592000; v="36,35,34,33,32"
cache-control: private, max-age=0
content-encoding: gzip
content-type: text/html; charset=UTF-8
date: Fri, 23 Sep 2016 22:53:15 GMT
expires: -1
server: gws
set-cookie: DV=; expires=Mon, 01-Jan-1990 00:00:00 GMT; path=/; domain=www.google.com
set-cookie: DV=; expires=Mon, 01-Jan-1990 00:00:00 GMT; path=/; domain=.www.google.com
set-cookie: DV=; expires=Mon, 01-Jan-1990 00:00:00 GMT; path=/; domain=google.com
set-cookie: DV=; expires=Mon, 01-Jan-1990 00:00:00 GMT; path=/; domain=.google.com
status: 200
strict-transport-security: max-age=86400
x-frame-options: SAMEORIGIN
x-xss-protection: 1; mode=block

▼ Request Headers

:authority: www.google.com
:method: GET

:path: /
:scheme: https
accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,*/*;q=0.8
accept-encoding: gzip, deflate, sdch, br
accept-language: en-US,en;q=0.8
cache-control: max-age=0
cookie: NID=87=tjwyEVryOp0ys9FVnzDatnDSrwoCtKifPf9uw-m3DG4qTTJwV322vv_h2yhmrPHVGF8f8G7sdx_CEKaS0wlvse3g5dLlRneMLaY-TXS9S0j7G9SNHDfsmgnkojHBAvZdWDrUhoiaqjmKA; DV=EjUs-kXcKNsaLEWZLaMIXfTLE4GyrgI; OGPC=5062209-5:
referer: https://www.google.com/
upgrade-insecure-requests: 1
user-agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10_12_0) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/53.0.2785.116 Safari/537.36

API Basics

- Application Programming Interface
- Request structure:
 - method
 - URL
 - endpoints (optional)
 - auth (optional)

API Basics

- Understand each API
 - auth?
 - quota
 - parameters
- Google YouTube API
 - Get video info
 - Get video stats