



JÖNKÖPING UNIVERSITY

School of Engineering

RUNNING WEB APPLICATIONS

Server-side Web Development

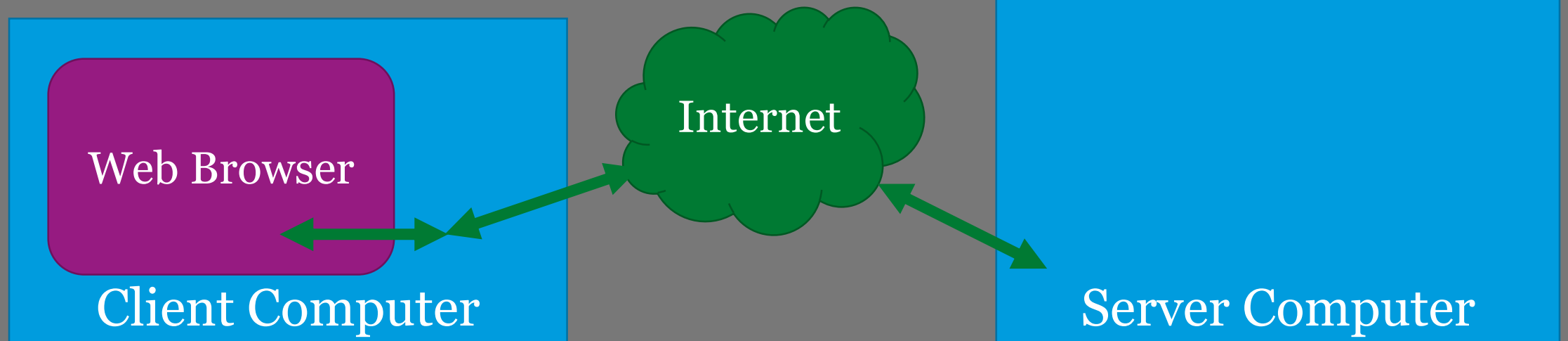
TPWK16 Spring 2017

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RECEIVING HTTP REQUESTS

Internet Corporation for Assigned Names and Numbers

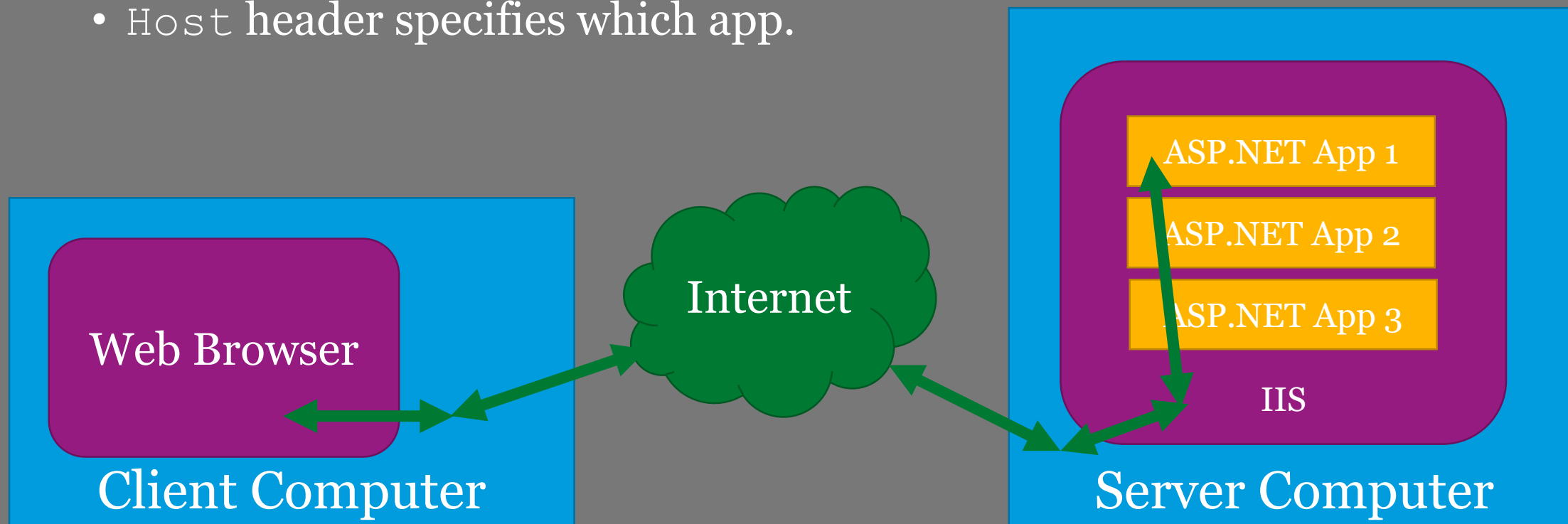
- Organization responsible for the Internet.
 - Domain Name System.
 - Reserved Port Numbers.
 - HTTP Requests: port 80.



RUNNING ASP.NET APPS

Internet Information Services can run ASP.NET applications.

- Can run multiple ASP.NET applications.
 - `Host` header specifies which app.



WHERE DO WE GET A SERVER?

Use a web hosting service.

- Easy to get started.
- Cheap (usually).
- Limited (can't install your own software).
- <https://www.seekdotnet.com/windows-hosting>

Rent a server.

- Quite cheap.
- Full control.
- <https://aws.amazon.com>

Use your own server.

- Expensive.
- Takes time to setup.
- Takes space.
- Makes noise.
- Consumes power.

AMAZON WEB SERVICES

Has many data centers around the world.



https://commons.wikimedia.org/wiki/File:Cern_datacenter.jpg

AMAZON WEB SERVICES

Has many data centers in different *Regions & Availability Zones*.



AMAZON WEB SERVICES

Includes many different services:

- Compute:
 - Elastic Compute Cloud (EC2).
 - Elastic Beanstalk.
- Database:
 - Relational Database Service (RDS).

AWS FREE TIER

Most AWS cost money to use.

- Services part of the free tier is free to user for new users for 1 year.
 - With some limitations...

<https://aws.amazon.com/free>

AWS ELASTIC COMPUTE CLOUD

Amazons virtual machines.

- <https://aws.amazon.com/ec2>

Pricing models:

- On demand.
- Reserved instance.
- Spot instance.

Free tier

- Run instances of `t2.micro` for free for 750 hours / month (31.25 days / month).

AWS RELATIONAL DATABASE SERVICE

Virtual Computer running a database.

- <https://aws.amazon.com/rds>

- Databases:

- Amazon Aurora.
- Oracle.
- Microsoft SQL Server.
- PostgreSQL.
- MySQL.
- MariaDB.

- Pricing models:

- On demand.
- Reserved instance.

Free tier

- Run instances of `t2.micro` for free for 750 hours / month (31.25 days).
- 20 GB of storage.

RECOMMENDED READING

Amazon Web Services Guide on Ping Pong.