WEB DEVELOPMENT

in practice

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TOPICS

- Overview
- In Practice
- What’s next?

Overview

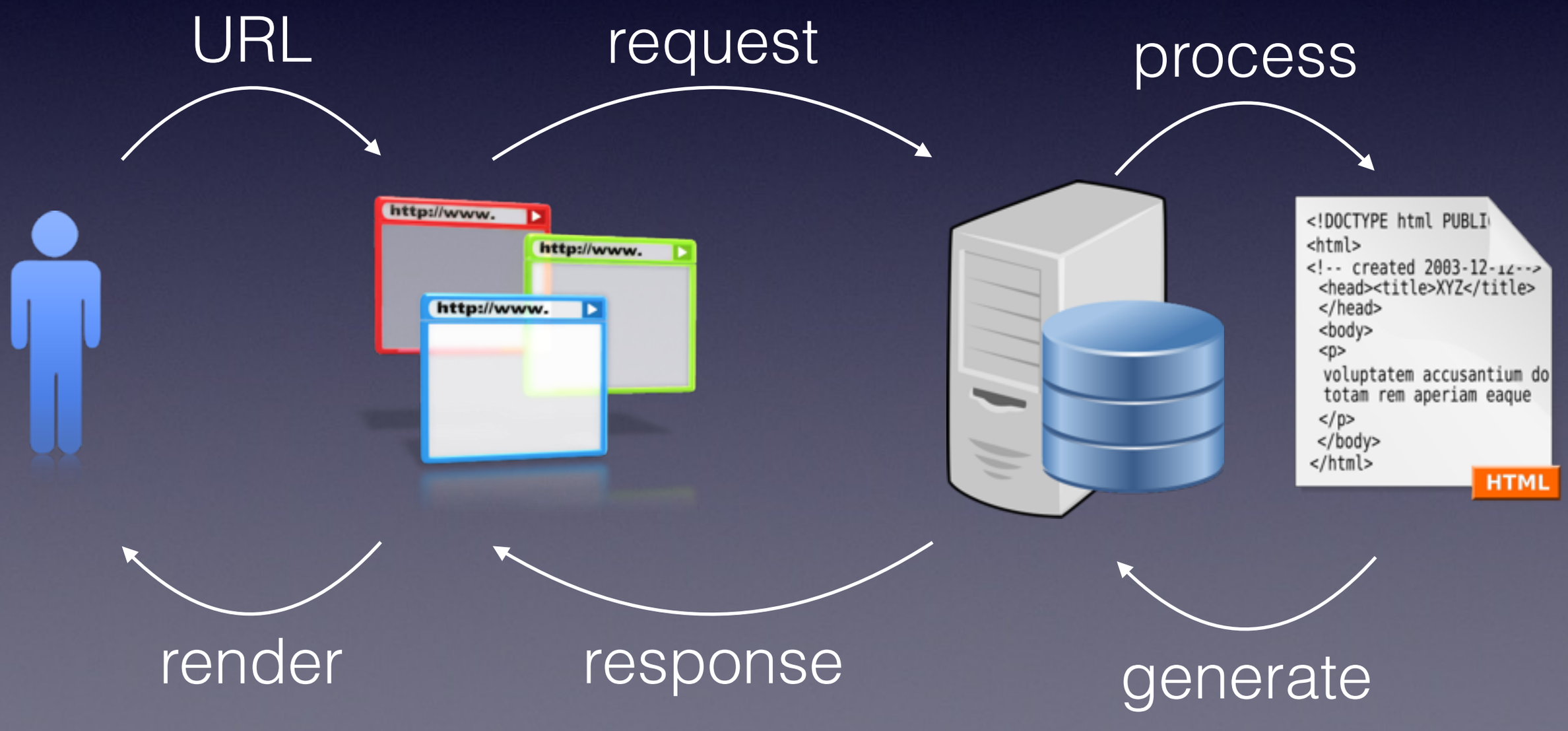
What is Web Development?

What is Web?

- **Web, World Wide Web (www)**: Inter-connected sites (hypertext documents). vs the Internet.
- **Internet Key Layers**

(http://goo.gl/Mxb6Nr)
- **Components**: Browser, Request, Web Server, Response, HTML
- **Web Browser**: retrieve resources, presenting resources/info/data (display, render), traversing other info (navigation, follow links)

What is Web?


URL
request
process
http://www.
http://www.
http://www.
<!DOCTYPE html PUBLI
<html>
<!-- created 2003-12-
<head><title>XYZ</title>
</head>
<body>

voluptatem accusantium do
totam rem aperiam eaque

</body>
</html>
HTML
render
response
generate

What is Development?

- Software development: writing program/code
- Program/Code:
  - Instructions in a foreign language
  - syntax, data structure, business logic, algorithm
- I/O:
  - Inputs: API, DB, Library
  - Outputs: DB, File, returns
- Software Development:
  - Write instructions using the syntax of a programming language
  - Write business logics/rules using the grammar of a foreign language

What is Web Development?

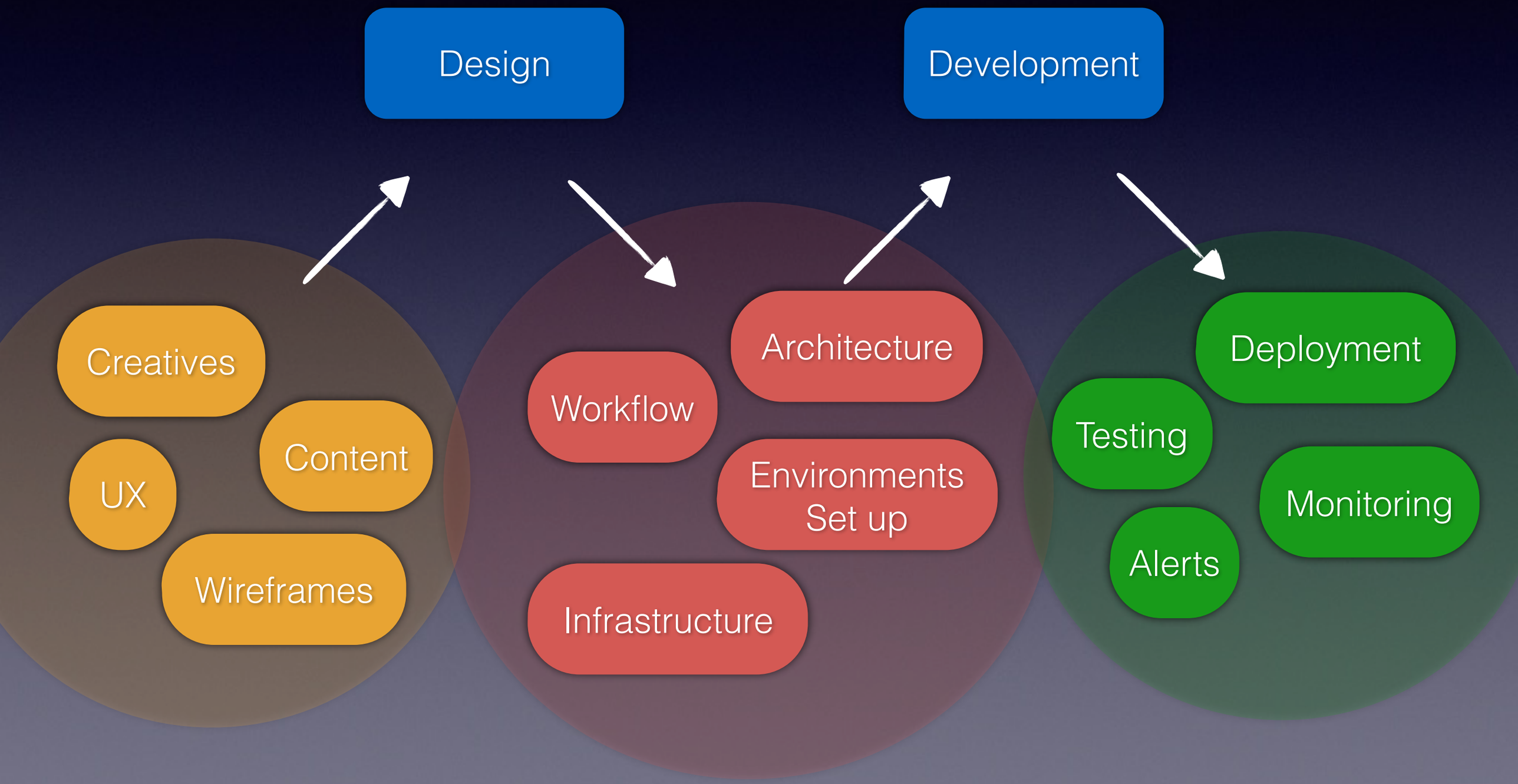
- HTML (HyperText Markup Language):
  - describes the structure (layout) and the semantic (meaning) of the content in a web document
  - Markup (Meta) language vs Programming language
- CSS (Cascading Style Sheets):
  - describes the style (look and formatting) of the content in a web document
  - Style Sheet (Meta) language vs Programming language
- Javascript (JS)
  - facilitates the interactions of the users (on the web browser) with the data/content in the web document
  - Programming language with statements
- Backend Programming languages (PHP, Python, Ruby, Java, .NET, etc.)
  - handles dynamic content and any back and forth needed between the web browser and the server/DB
  - Programming languages with statements

So, what is Web Development?

In Practice

The “true” Web Development day-to-day

Process


Design
Development
Creatives
Content
UX
Wireframes
Workflow
Architecture
Environments
Set up
Infrastructure
Deployment
Testing
Monitoring
Alerts

Web Development Roles

Frontend

- Layout (HTML, CSS)
- Mobile-friendly / Responsive Layout (HTML, CSS)
- Effects / Animations (CSS, JS)
- APIs Integration (JS, XML, JSON)

Backend

- Model-View-Controller (MVC model):
  - Model: DB, object interactions
  - View: layout, HTML-construction
  - Controller: logic, functionals
- Types:
  - Logics & Functionals & HTML-construction (typical)
  - CMS, Admin Panel
  - APIs

Who else involve?

- **Creatives**: Art Designer
- **Wireframes**: UX Designer
- **UX**: UX Designer
- **Content**: Writer
- **Design**: Art Designer, Designer, Production Artist
- **Workflow**: Project Manager, Technical Lead
- **Management**: Product Owner, Project Manager, Client
- **Infrastructure**: DevOp, SysAdmin
- **Environments Setup**: DevOp, Developer
- **Architecture**: Architect, Technical Lead
- **Development**: …
- **Testing**: Developer, Project Manager, Tester
- **Deployment**: DevOp, Developer
- **Monitoring/Alerts**: DevOp, SysAdmin, Developer

How is it like?

What working for a development firm looks like?

How is it like?

- Best Practices (conventions, processes, etc.)
- Collaborations & Team work
- Communications: Noise vs Signal
- Time-management & Self-management
- Deadlines & Pressures & Stress

What do employers look for?

- Skills & knowledge
- The ability to learn and to grow
- Attitude (proactive, take initiatives, can-do)

What’s next?

What to expect in the near future for Web Development?

Current Issues and What's ahead

- Cross platforms/browsers
- Mobile friendly version (dynamic layout)
- High level of effects/animations compared to native desktop applications
- Frameworks: Sass/Less, Bootstrap, Angular.js, Node.js, etc.

work vs life …

make sure you enjoy your work.