

PART 8

Introduction

HTML

CSS

Dev

Infrastructure

The wrapping-up lesson

The wrapping-up lesson

Let's put together everything we've talked about:

The wrapping-up lesson

Let's put together everything we've talked about:

- HTML

The wrapping-up lesson

Let's put together everything we've talked about:

- HTML
- CSS

The wrapping-up lesson

Let's put together everything we've talked about:

- HTML
- CSS
- Dev

The wrapping-up lesson

Let's put together everything we've talked about:

- HTML
- CSS
- Dev
- Infrastructure

Originals aims

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This course was intended to:

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- Improve inter-team communication

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- Enhance understanding of the medium

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This course was intended to:

- Improve inter-team communication
- Enhance understanding of the medium
- Practical skill: edit designs in the browser

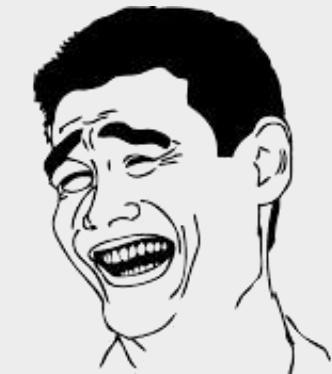
Originals aims

This course was intended to:

- Improve inter-team communication
- Enhance understanding of the medium
- Practical skill: edit designs in the browser
- ... ultimately allow us to ship better products

Originals aims

Also I (sort of) learnt how to use Sketch



Let's review what we've done...

PART 8

Introduction

HTML

CSS

Dev

Infrastructure

HTML in a nutshell

HTML in a nutshell

HTML is just a way of describing a document in terms of content and hierarchy and doesn't impart any stylistic information.

The New York Times

The world's most trusted perspective.

Sunday, August 21, 2016 | Today's Paper | Video | 63°F | S. & P. 500 -0.14% ↓

4 weeks. Just €1.

World U.S. Politics N.Y. Business Opinion Tech Science Health Sports Arts Style Food Travel Magazine T Magazine Real Estate ALL

The New York Times

The world's most trusted perspective.

Get 4 weeks of The Times. Just €1.

ELECTION 2016

In Trump's Empire, Hazy Ties and \$650 Million in Debt

By SUSANNE CRAIG

Ruddy Roye for The New York Times

Segregation, the Neighbor That

Sunday Review

OP-ED | VANESSA BARBARA
I Criticized the Olympics. It Doesn't Make Me a Traitor.
In Brazil, many of us are so obsessed with how the outside world sees us that we won't recognize our own faults.

- Editorial: How Can America Recover From Donald Trump?
- Douthat: The Virtues of Reality
- Dowd: An Open Letter From Mr. Trump
- Kristof: This Land Is My Land (And Yours, Too!)
- Kirk: Conquering the

Zika: The Millennials' S.T.D.? By KELLY MCBRIDE FOLKERS
Zika could threaten my son's life. I'm scared.



[SECTIONS](#) [SEARCH](#)[SUBSCRIBE NOW](#)[LOG IN](#)

U.S. INTERNATIONAL 中文 ESPAÑOL

The world's most
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Zika: The Millennials' S.T.D.?

By KELLY MCBRIDE FOLKERS

Zika could threaten my pregnancy. I'll never

The screenshot shows the top navigation bar of The New York Times website. It includes links for 'SECTIONS' (with a search icon), 'SUBSCRIBE NOW', 'LOG IN', and a gear icon. Below the main title 'The New York Times' are links for 'U.S.', 'INTERNATIONAL', '中文' (Chinese), and 'ESPAÑOL'. The main headline on the left says 'The world's most trusted perspective.' Below the navigation bar is a horizontal menu with categories like World, U.S., Politics, N.Y., Business, Opinion, Tech, Science, Health, Sports, Arts, Style, Food, Travel, Magazine, T Magazine, Real Estate, and ALL. A sidebar on the right offers a deal: '4 weeks. Just €1.'

```
<nav>
  <ul>
    <li>World</li>
    ...
  </ul>
</nav>
```

This is the HTML
for this element



Segregation, the Neighbor That

- Douthat: The Virtues of Reality
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day Review



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Zika could threaten my



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```
<nav>
  <ul>
    <li>World</li>
    ...
  </ul>
</nav>
```

the `<nav>` tag
denotes navigation



Segregation, the Neighbor That

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```
<nav>
  <ul>
    <li>World</li>
    ...
  </ul>
</nav>
```

the `` tag denotes an un-ordered list of items



Segregation, the Neighbor That

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Zika: The Millennials' S.T.D.?

By KELLY MCBRIDE FOLKERS

Zika could threaten my



The screenshot shows the top navigation bar of The New York Times website. It includes links for 'SECTIONS' (with a three-line icon), 'SEARCH' (with a magnifying glass icon), 'SUBSCRIBE NOW', 'LOG IN', and a gear icon for settings. Below the main header, there are language links: U.S., INTERNATIONAL, 中文 (Chinese), and ESPAÑOL (Spanish). The main title 'The New York Times' is prominently displayed. A sidebar on the left says 'The world's most trusted perspective.' and another on the right says '4 weeks. Just €1.' Below the main navigation, there is a secondary horizontal menu with links for World, U.S., Politics, N.Y., Business, Opinion, Tech, Science, Health, Sports, Arts, Style, Food, Travel, Magazine, T Magazine, Real Estate, and ALL.

The screenshot shows the same homepage as above, but with a large portion of the left side covered by a semi-transparent overlay containing the following HTML code:

```
<nav>
  <ul>
    <li>World</li>
    ...
  </ul>
</nav>
```

To the right of the code, the text 'the tags denotes each list element' is displayed. The rest of the page content is visible through the overlay.



Segregation, the Neighbor That

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Zika: The Millennials' S.T.D.?

By KELLY MCBRIDE FOLKERS
Zika could threaten my

The screenshot shows the top navigation bar of The New York Times website. It includes links for 'SECTIONS' and 'SEARCH', and buttons for 'SUBSCRIBE NOW', 'LOG IN', and a gear icon. Language options like 'U.S.', 'INTERNATIONAL', '中文', and 'ESPAÑOL' are also present. The main headline 'The New York Times' is displayed prominently. Below the navigation, there's a sidebar with the text 'The world's most trusted perspective.' and a large advertisement for a 4-week subscription offer.

SECTIONS SEARCH SUBSCRIBE NOW LOG IN

U.S. INTERNATIONAL 中文 ESPAÑOL

The New York Times

Sunday, August 21, 2016 Today's Paper Video 63°F S. & P. 500 -0.14% ↓

4 weeks. Just €1.

World U.S. Politics N.Y. Business Opinion Tech Science Health Sports Arts Style Food Travel Magazine T Magazine Real Estate ALL

The screenshot shows the main content area of The New York Times homepage. A large text block in the center reads: 'But none of these tell us that it's a center aligned, set in size 13px font and has a border top 2px and grey border bottom'. To the left, a portion of the navigation code is visible:

```
<nav>
  <ul>
    <li>World</li>
    ...
  </ul>
</nav>
```

On the right side, there's a sidebar with a 'day Review' section featuring a small image of a soccer ball.

The screenshot shows a news article from The New York Times. The headline reads 'Segregation, the Neighbor That'. Below the article, there's a sidebar with a list of related articles:

- Douthat: The Virtues of Reality
- Dowd: An Open Letter From Mr. Trump
- Kristof: This Land Is My Land (And Yours, Too!)
- Kirk: Conquering the

Zika: The Millennials' S.T.D.? By KELLY MCBRIDE FOLKERS Zika could threaten my generation's ability to have children. I'm not alone.

[≡ SECTIONS](#) [S](#)[The New York Times](#)[SUBSCRIBE](#)[LOG IN](#)

Trump's Empire: A Maze of Debts and Opaque Ties

By SUSANNE CRAIG AUG. 20, 2016



Trump Tower on Fifth Avenue in Manhattan. An investigation into the real estate holdings of Donald J. Trump, the Republican presidential nominee, found complex partnerships and debts of at least double the amount to be gleaned from public filings he has made amid his campaign.

Damon Winter/The New York Times

The New York Times

Trump's Empire: A Maze of Debts and Opaque Ties

By SUSANNE CRAIG AUG. 20, 2016









```
<h1>
  Trump's Empire: A Maze
  of Debts and Opaque Ties
</h1>
```

similarly the `<h1>` tag lets us know what the page is about and that this heading precedes any content

Trump Tower on Fifth
Donald J. Trump, the F
at least double the amount to be gleaned from public filings he has made amid his campaign.
Damon Winter/The New York Times

Tags for all the things

Tags for all the things

The HTML5 spec contains over 200 tags that covers almost any conceivable type of content including...

Tags for all the things

Tags for all the things

`<abbr>` Abbreviations

`<abbr>lel</abbr>`

Tags for all the things

`<abbr>` Abbreviations

`<abbr>lel</abbr>`

`<time>` Times (who'd have guessed)

`<time>12:00</time>`

Tags for all the things

`<abbr>` Abbreviations

```
<abbr>lel</abbr>
```

`<time>` Times (who'd have guessed)

```
<time>12:00</time>
```

`<kbd>` Keyboard Input

```
<kbd>Option-Z</kbd>
```

Tags for all the things

`<abbr>` Abbreviations

```
<abbr>lel</abbr>
```

`<time>` Times (who'd have guessed)

```
<time>12:00</time>
```

`<kbd>` Keyboard Input

```
<kbd>Option-Z</kbd>
```

`<sup>` Superscript

conditions apply²

Attributes

Attributes

Some tags would be pointless without attributes.

Attributes

Some tags would be pointless without attributes.

This is an image tag but if we don't know what it's referencing then it's got no use.

Attributes

Some tags would be pointless without attributes.

This is an image tag but if we don't know what it's referencing then it's got no use.



Attributes

Some tags would be pointless without attributes.

```

```

In this case `` has
a required 'src' attribute.

Attributes

Some tags would be pointless without attributes.

```

```

Much better.



New tags

New tags

Some of the most important recent additions to the HTML specification were `<picture>`, `<audio>` and `<video>` which introduce a wider range of media options for the web.

New tags

Some of the most exciting additions to the HTML specification were `<picture>`, `<audio>` and `<video>` which introduce augmented media options for web pages.

Retro demo time

PART 8

Introduction

HTML

CSS

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Infrastructure

Cascading Style Sheets

Cascading Style Sheets

CSS is the style layer of a web page. It applies design to the structure and content defined by the HTML.

Cascading Style Sheets

CSS is most commonly written using classes to define styles, however tags can also be used.

Cascading Style Sheets

CSS is most commonly written using classes to define styles, however tags can also be used.

```
h1 {  
    font-family: Georgia;  
}  
.quote {  
    background-color: green;  
}
```

Cascading Style Sheets

CSS is most commonly written using classes to define styles, however tags can also be used.

```
h1 {  
    font-family: Georgia;  
}  
.quote {  
    background-color: green;  
}
```

This selector applies the font ‘Georgia’ to all elements with the `<h1>` tag.

Cascading Style Sheets

CSS is most commonly written using classes to define styles, however tags can also be used.

```
h1 {  
    font-family: Georgia;  
}  
.quote {  
    background-color: green;  
}  


...</div>


```

This selector applies a green background color to all elements with the class ‘quote’.

Inline vs block

Inline vs block

Most styles can be separated into inline or block.

Inline vs block

Most styles can be separated into inline or block.

Block level styles are paragraphs, headings and other units that comprise a self contained unit.

Inline vs block

Most styles can be separated into inline or block.

Inline styles relate to dependent styles such as italics or bold.

Inline vs block

|||
Lorem ipsum dolor sit amet,
consectetur adipisicing elit, sed
do eiusmod tempor incididunt
ut labore et dolore magna
aliqua. Ut enim ad minim
veniam.

Block

|||
Lorem ipsum dolor sit amet,
consectetur adipisicing elit, sed
do eiusmod tempor incididunt
ut labore et dolore magna
aliqua. Ut enim ad minim
veniam.

Inline

Boxiness

All block level elements in CSS are boxes with content, padding, border and margin.

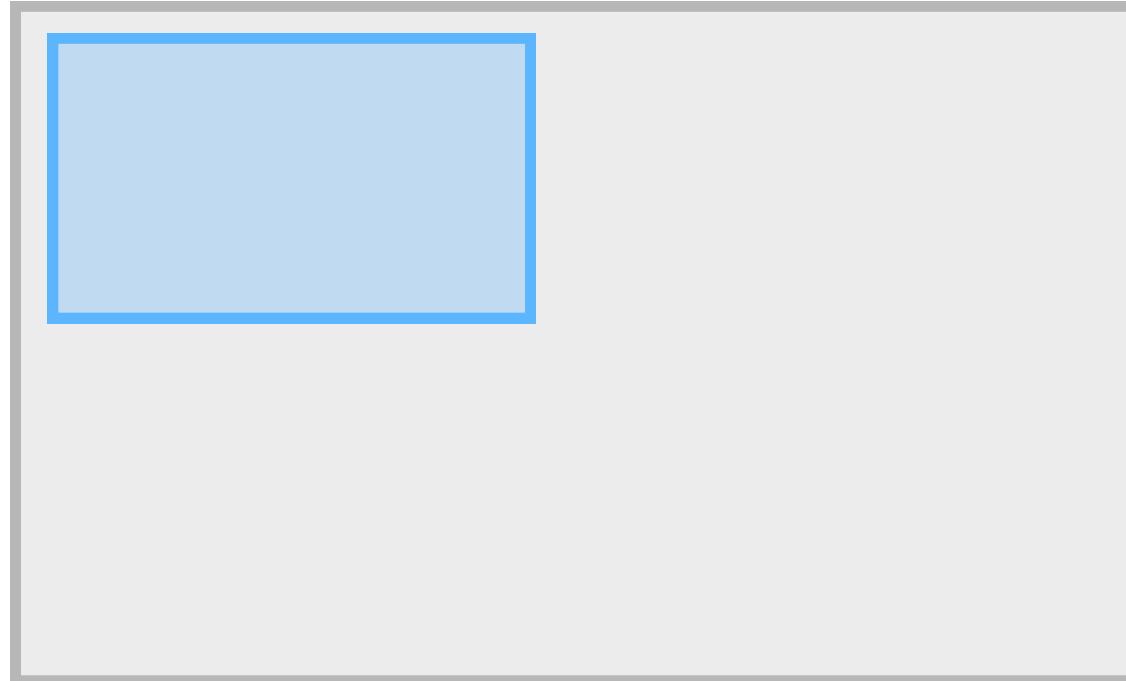


Layouts

Layouts

Most layouts are achieved using a style property called float. Floats allow elements to sit side-by-side creating the foundation for grid layouts.

Layouts



```
.my-div {  
  width: 50%;  
}
```

Layouts



```
.my-div {  
  width: 50%;  
}
```

Layouts



```
.my-div {  
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```

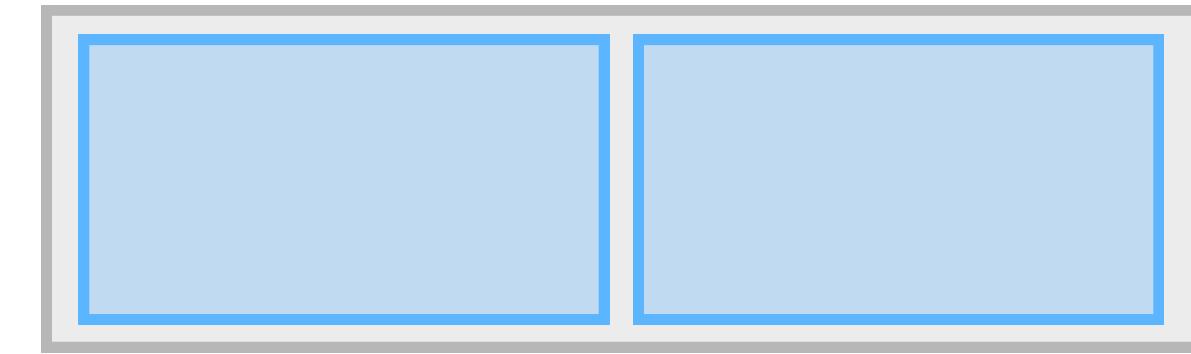


```
.my-div {  
  width: 50%;  
  float: left;  
}
```

Layouts



```
.my-div {  
  width: 50%;  
}
```



```
.my-div {  
  width: 50%;  
  float: left;  
}  
  
.my-parent-div { clear: fixed; }
```

Typography

To display fonts on a user's browser that the user doesn't have pre-installed, a website must use webfonts.

Typography

Unfortunately vendor differences mean we must use several file types for the same font.

Typography

```
@font-face {  
  font-family: 'Journal';  
  src: url('http://your-own.site/fonts/journal.woff') format('woff'),  
       url('http://your-own.site/fonts/journal.svg#Journal') format('svg'),  
       url('http://your-own.site/fonts/journal.ttf') format('truetype'),  
       url('http://your-own.site/fonts/journal.eot'),  
       url('http://your-own.site/fonts/journal.eot?#iefix') format('embedded-opentype');  
  font-weight: normal;  
  font-style: normal;  
}
```

Animation

Animation

Most basic CSS animation method is transitions.

Animation

Most basic CSS animation method is transitions.

- Transitions animate changes in CSS properties

Animation

Most basic CSS animation method is transitions.

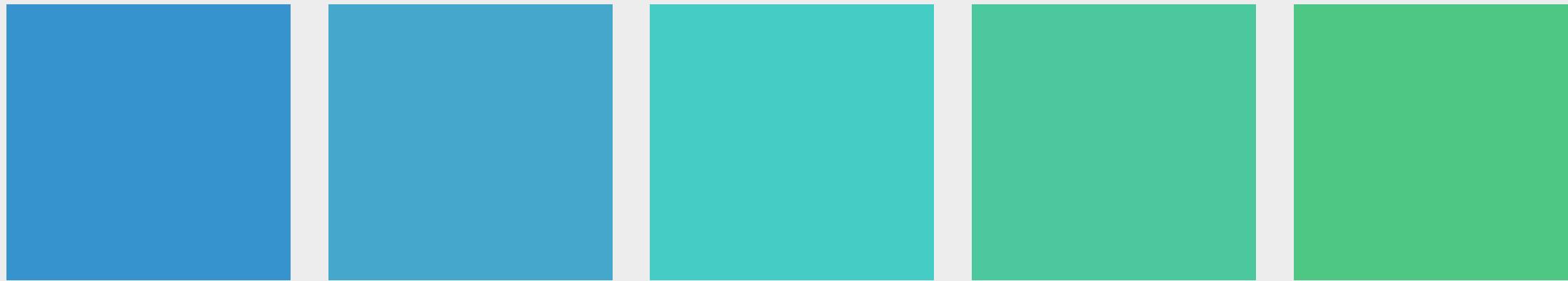
- Transitions animate changes in CSS properties
- Not all properties can be transitioned

Animation

Most basic CSS animation method is transitions.

- Transitions animate changes in CSS properties
- Not all properties can be transitioned

Animation



```
<div class="element"></div>
```

```
.element {  
  background: #3693CE;  
  transition: background 1s  
}
```

```
<div class="element green"></div>
```

```
.green {  
  background: #4EC784;  
}
```

Animation

Demo time

Transformations

Transformations

- Alter the co-ordinate space

Transformations

- Alter the co-ordinate space
- The element remains in the same ‘position’

Transformations

- Alter the co-ordinate space
- The element remains in the same ‘position’
- Skews, translations, rotations and scale

Transformations

- Alter the co-ordinate space
- The element remains in the same ‘position’
- Skews, translations, rotations and scale
- Are two or three dimensional

Transformations

- Alter the co-ordinate space
- The element remains in the same ‘position’
- Skews, translations, rotations and scale
- Are two or three dimensional

Demo time

Timeline animation

Timeline animation

- Animations are defined using @keyframes

Timeline animation

- Animations are defined using @keyframes
- Progress is defined in percentiles

Timeline animation

- Animations are defined using @keyframes
- Progress is defined in percentiles
- Animations assigned using selectors

Timeline animation

- Animations are defined using `@keyframes`
- Progress is defined in percentiles
- Animations assigned using selectors

```
@keyframes my-anim {  
  0% { opacity: 0; }  
  50% { opacity: 1; }  
 100% { opacity: 1; }  
}  
  
.my-element {  
  animation-name: my-anim;  
  animation-duration: 1s;  
  animation-iteration-count: infinite;  
}
```

Timeline animation

Demo time

PART 8

Introduction

HTML

CSS

Dev

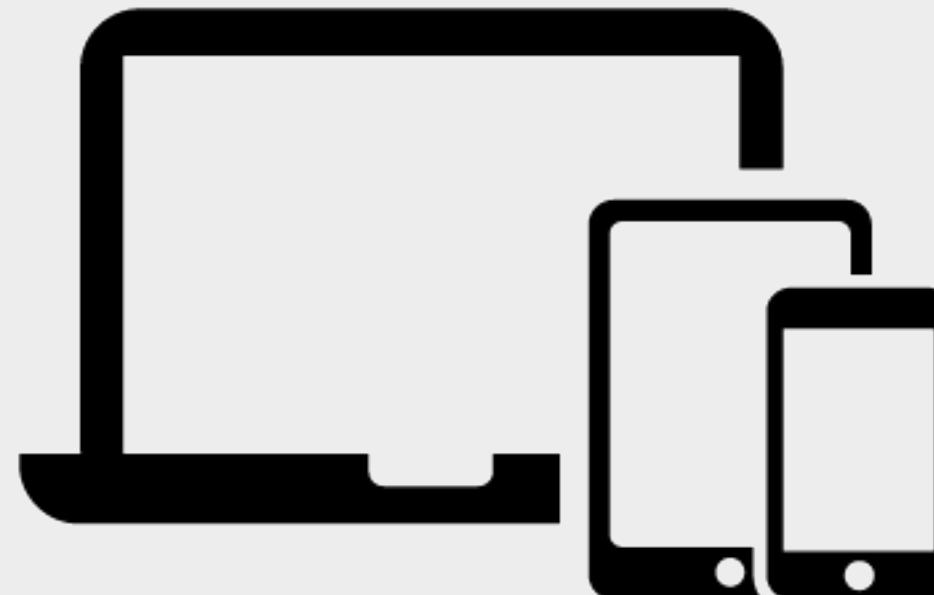
Infrastructure

Front-end / Back-end

Development is split between two major types.

Front-end / Back-end

The **front-end** is concerned with everything that happens in the browser.



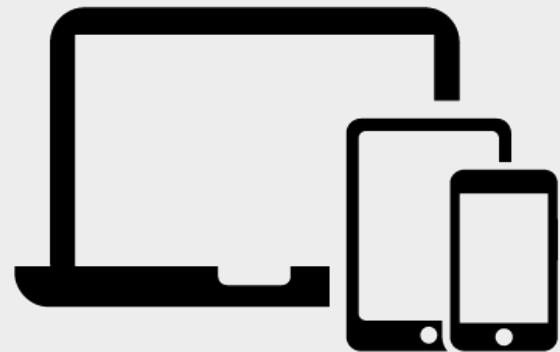
Front-end / Back-end

The **back-end** is concerned with everything that happens before content is delivered to the browser.



Front-end / Back-end

Traditionally the languages of both were separate.



HTML, CSS, Javascript



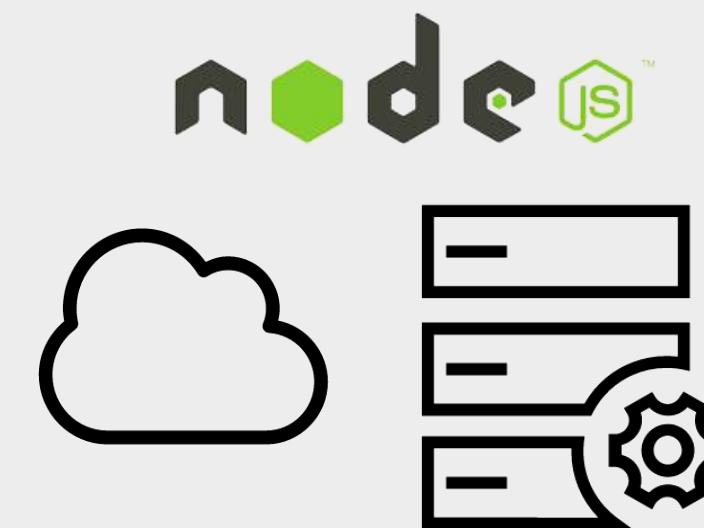
Java, PHP, Ruby, C

Front-end / Back-end

NodeJS has changed this for some companies.



HTML, CSS, Javascript



Javascript

Agile

Agile

- A set of principles for modern software dev

Agile

- A set of principles for modern software dev
- Agile is meant to be what it sounds like;
Lightweight, fast, flexible, responsive

Agile

- A set of principles for modern software dev
- Agile is meant to be what it sounds like;
Lightweight, fast, flexible, responsive
- Implemented in response to the connected
and frequent nature of software delivery

Agile rituals

Agile rituals

Supporting the principles of agile, the following practices are applied by Nine Digital

Agile rituals

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Agile rituals

Supporting the principles of agile, the following practices are applied by Nine Digital

- Daily ‘stand-up’ to allow all team members to understand current progress

Agile rituals

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- Daily ‘stand-up’ to allow all team members to understand current progress
- Two-week ‘sprints’ to complete ‘stories’

Agile rituals

Supporting the principles of agile, the following practices are applied by Nine Digital

- Daily ‘stand-up’ to allow all team members to understand current progress
- Two-week ‘sprints’ to complete ‘stories’
- Retros at the end of ‘sprints’ to get feedback

Agile rituals

Supporting the principles of agile, the following practices are applied by Nine Digital

- Daily ‘stand-up’ to allow all team members to understand current progress
- Two-week ‘sprints’ to complete ‘stories’
- Retros at the end of ‘sprints’ to get feedback
- MVP principle

Git / Version Control

Git / Version Control

- Every commit (code change) by a dev is logged

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- Pull-request reviews ensure the code on master branch maintains its integrity

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Git / Version Control

- Every commit (code change) by a dev is logged
- Pull-request reviews ensure the code on master branch maintains its integrity
- Any changes that cause bugs can be identified and isolated
- Any breaking changes can be wound back as the code can be reverted to any stage

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Continuous Integration

Continuous Integration

- Every commit (code change) by a dev is logged

Continuous Integration

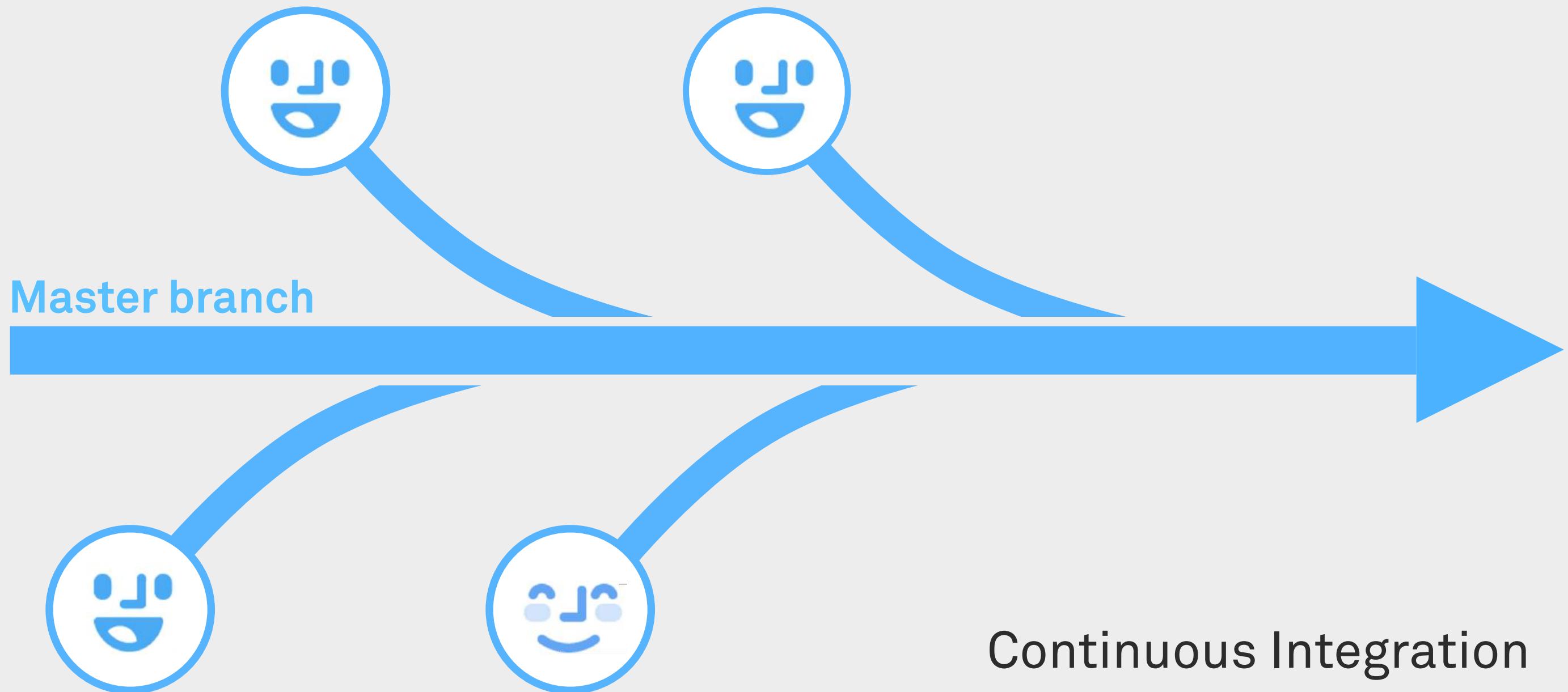
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Continuous Integration

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CI Server

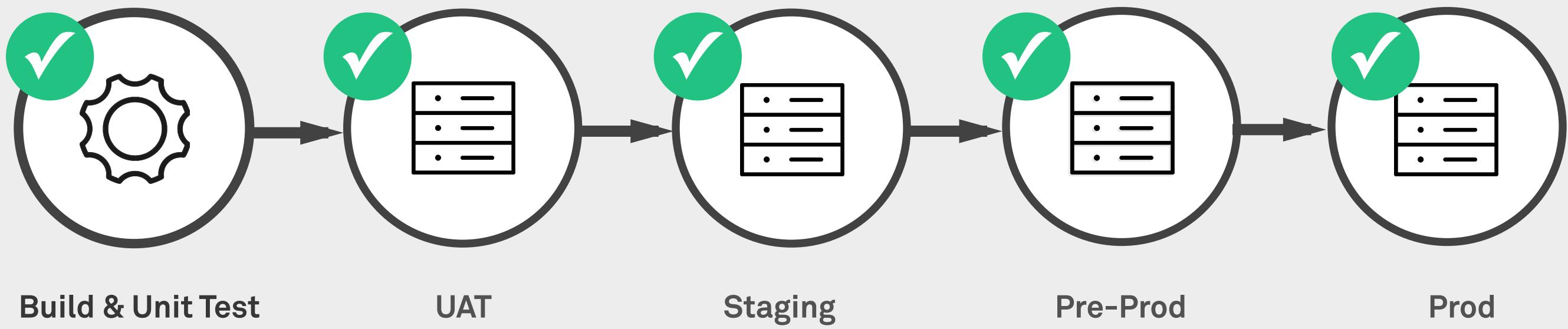
CI Server

- The CI server refers to the deployment pipeline of the application, from test all the way to production

CI Server

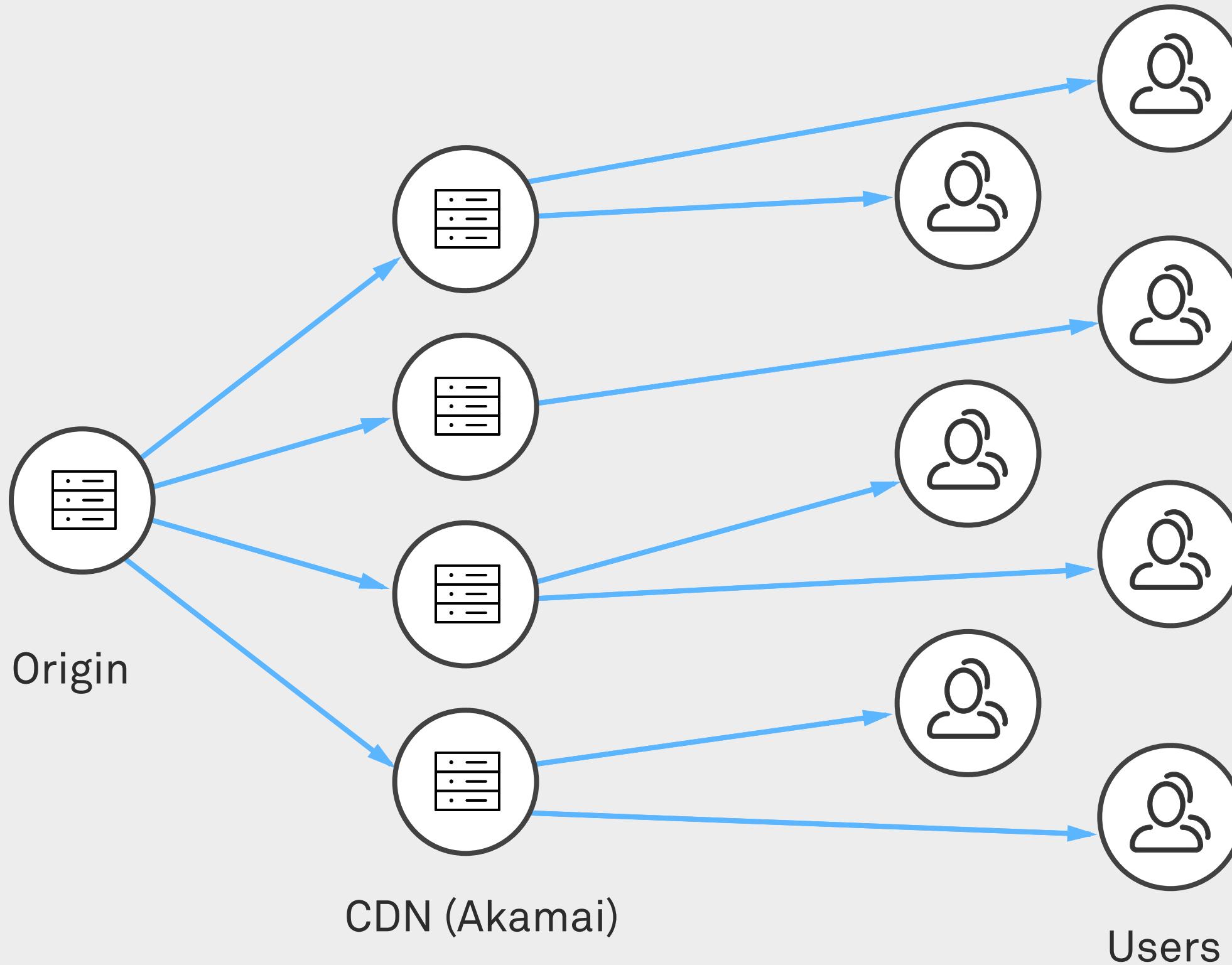
- The CI server refers to the deployment pipeline of the application, from test all the way to production
- Related to the concept of continuous integration is ‘continuous deployment’ which marries the agile concept of short release cycles.

CI Pipeline



CDNs

- The CI server refers to the deployment pipeline of the application, from test all the way to production
- Related to the concept of continuous integration is ‘continuous deployment’ which marries the agile concept of short release cycles.



What we've discussed

What we've discussed

HTML

What it is

Tags

Attributes

Picture

Video

What we've discussed

HTML

What it is

Tags

Attributes

Picture

Video

CSS

What it is

Box model

Positioning

Layouts

Typography

Responsiveness

Animation

What we've discussed

HTML	CSS	Dev
What it is	What it is	Front / back
Tags	Box model	Agile
Attributes	Positioning	JIRA
Picture	Layouts	Git / Stash
Video	Typography	
	Responsiveness	
	Animation	

What we've discussed

HTML

What it is
Tags
Attributes
Picture
Video

CSS

What it is
Box model
Positioning
Layouts
Typography
Responsiveness
Animation

Dev

Front / back
Agile
JIRA
Git / Stash

Infrastructure

Cont. Integration
Deployment
CDN / Akamai
Image Resizer



Thank you.