

Web Programming with Python and JavaScript

Lecture 1: HTML, CSS, and Bootstrap

June 26, 2018

Admin

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- Sections
 - Wednesdays from 3:15pm to 4:45pm, in-person (location TBA)
 - Fridays from 3:15pm to 4:45pm, online (cs50.ly/web50)
- Office Hours
 - After section on Fridays until 6:00pm (cs50.ly/web50)
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- Set up on your own machine? Check course website!

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Last Time

Last Time

- Git
- HTML
- CSS

This Time

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This Time

- Git
 - Branching, Forking, Remotes, Pull Requests
- HTML
 - Links, Forms, HTML4 vs. HTML5
- CSS
 - Precision selectors, Media queries, Flexboxes, and Grids
- Bootstrap
- Sass

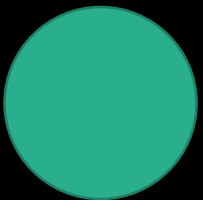
Git, continued

Git

- We use Git commits to create a history of how our code evolves.

Git

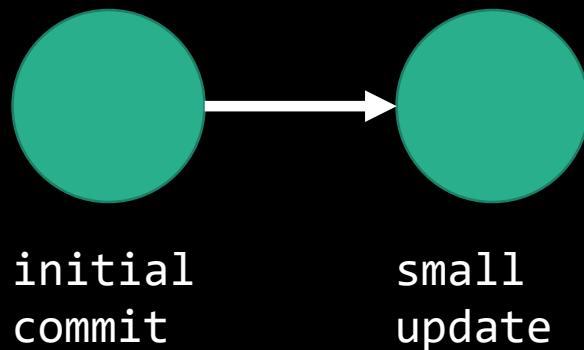
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initial
commit

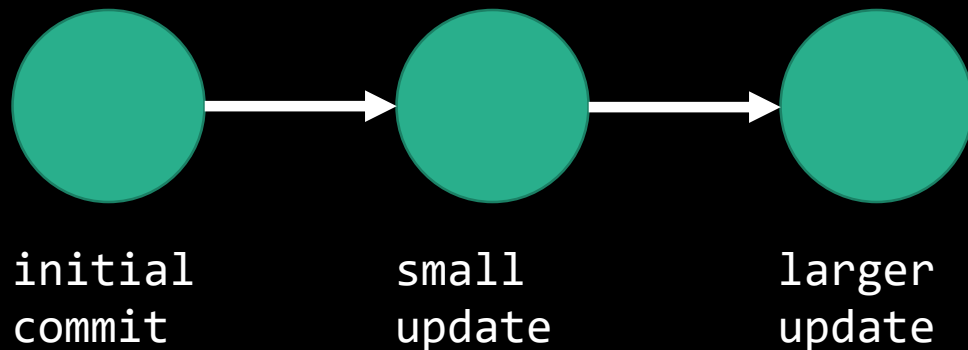
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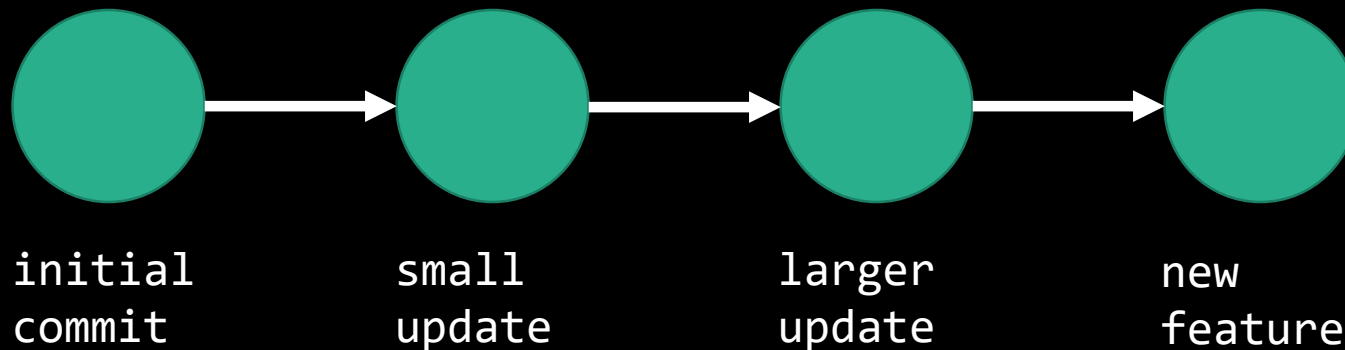
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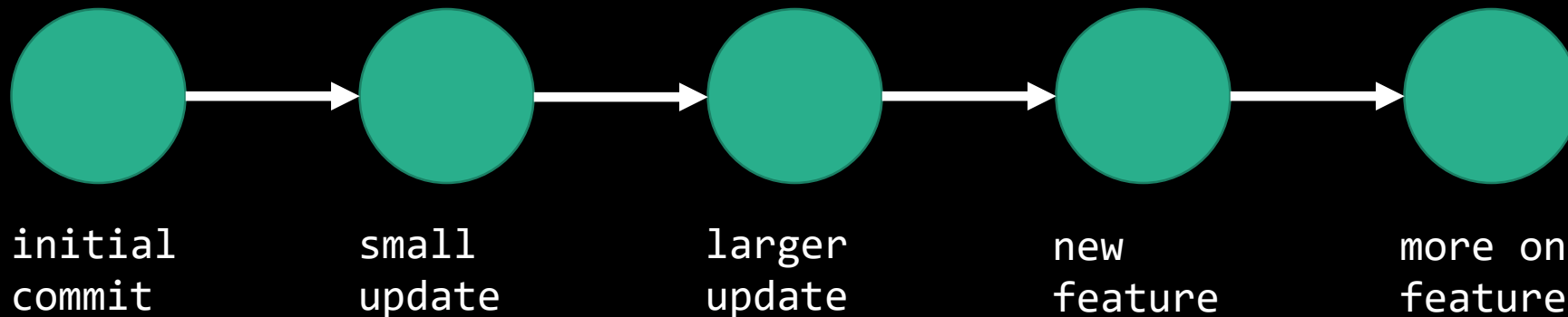
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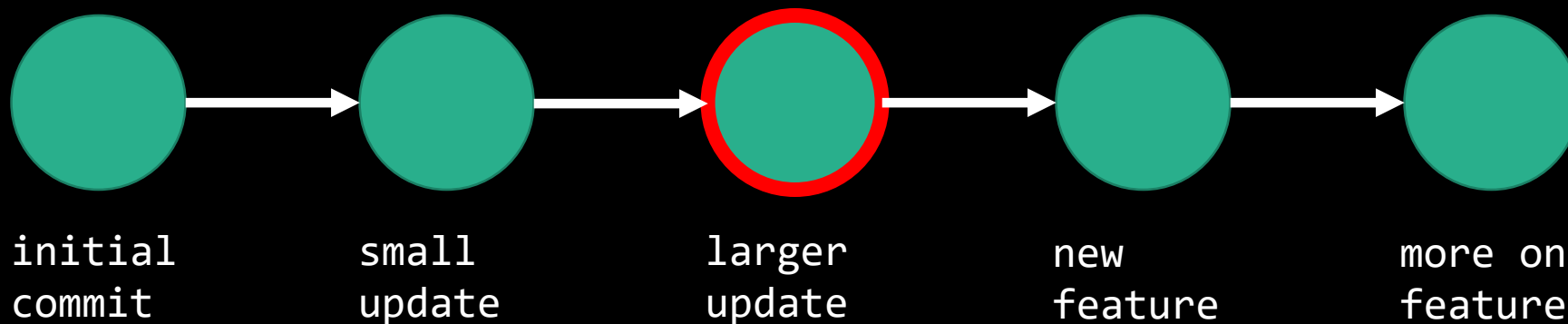
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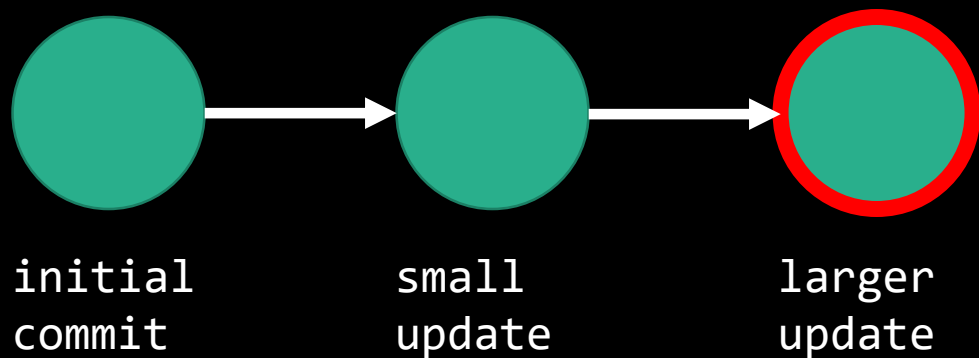
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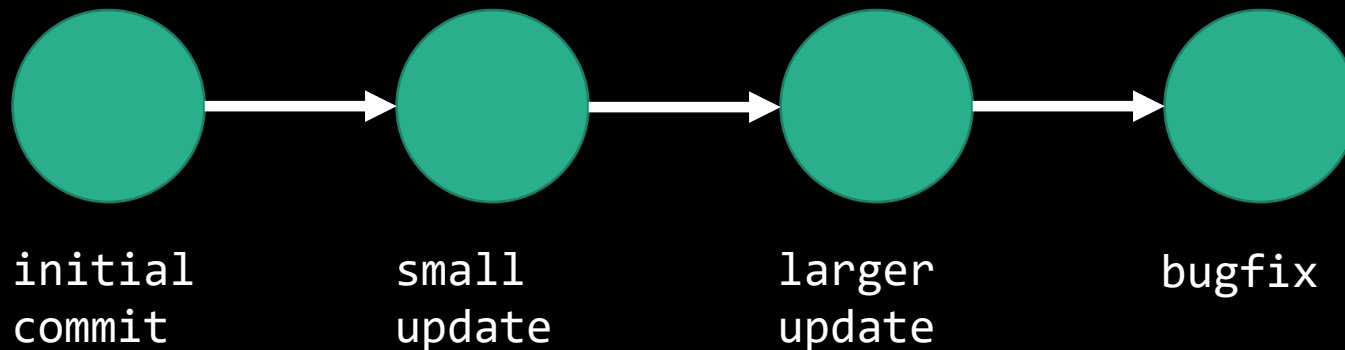
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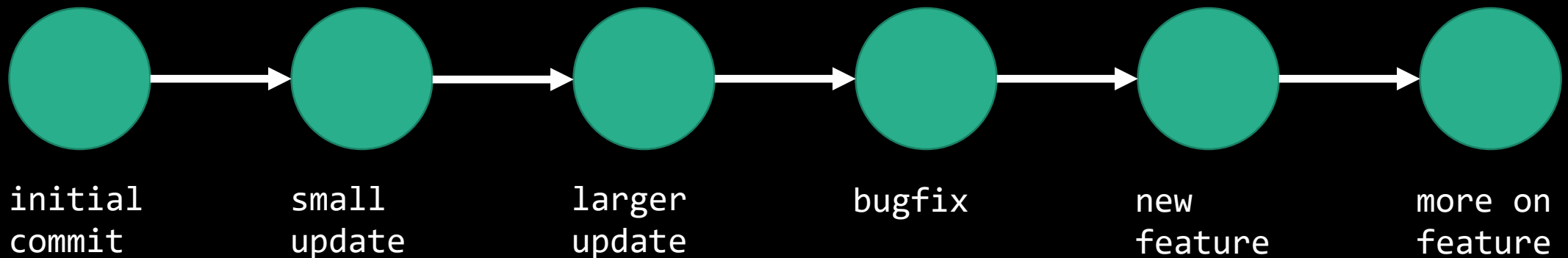
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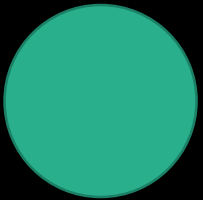
git branch

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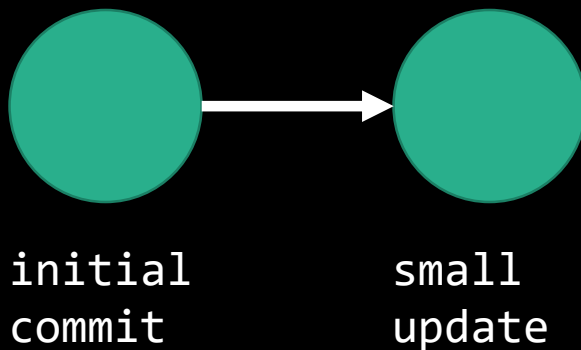
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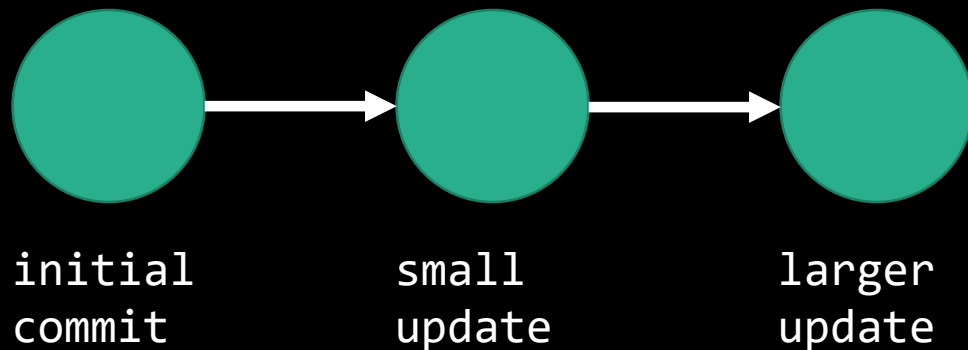
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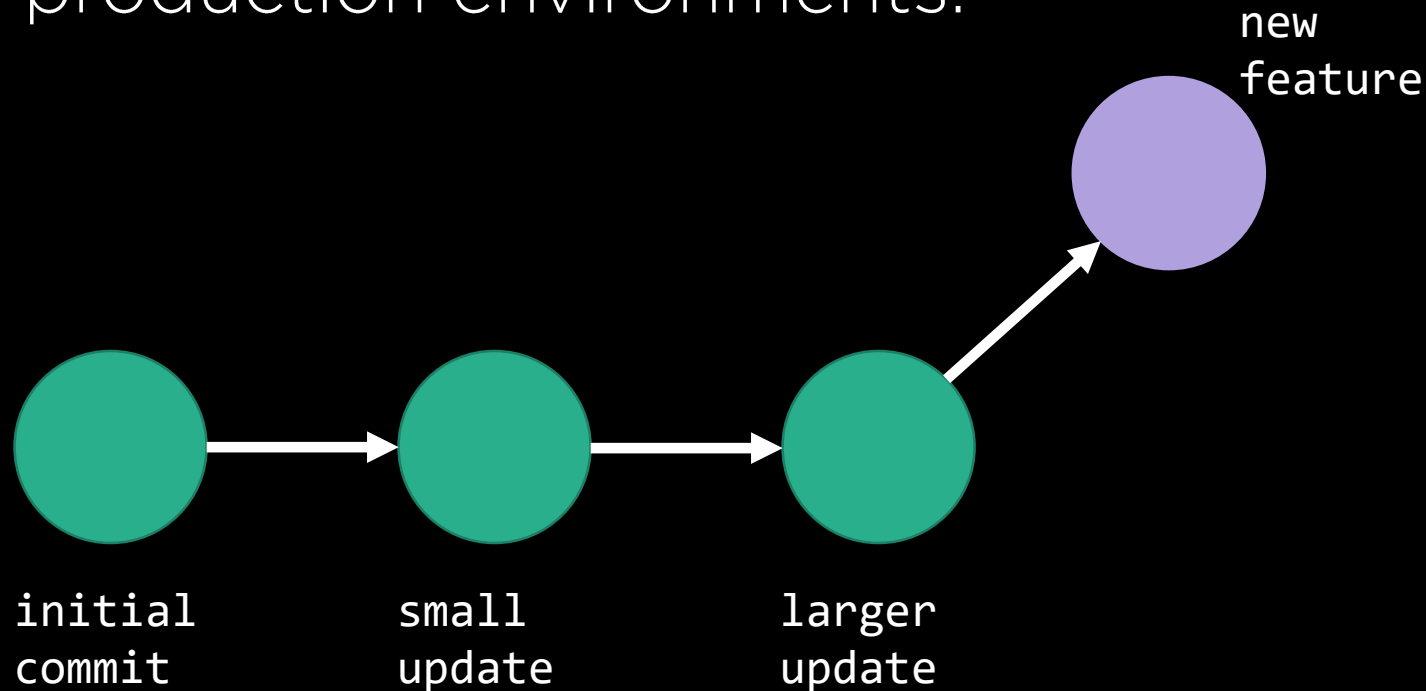
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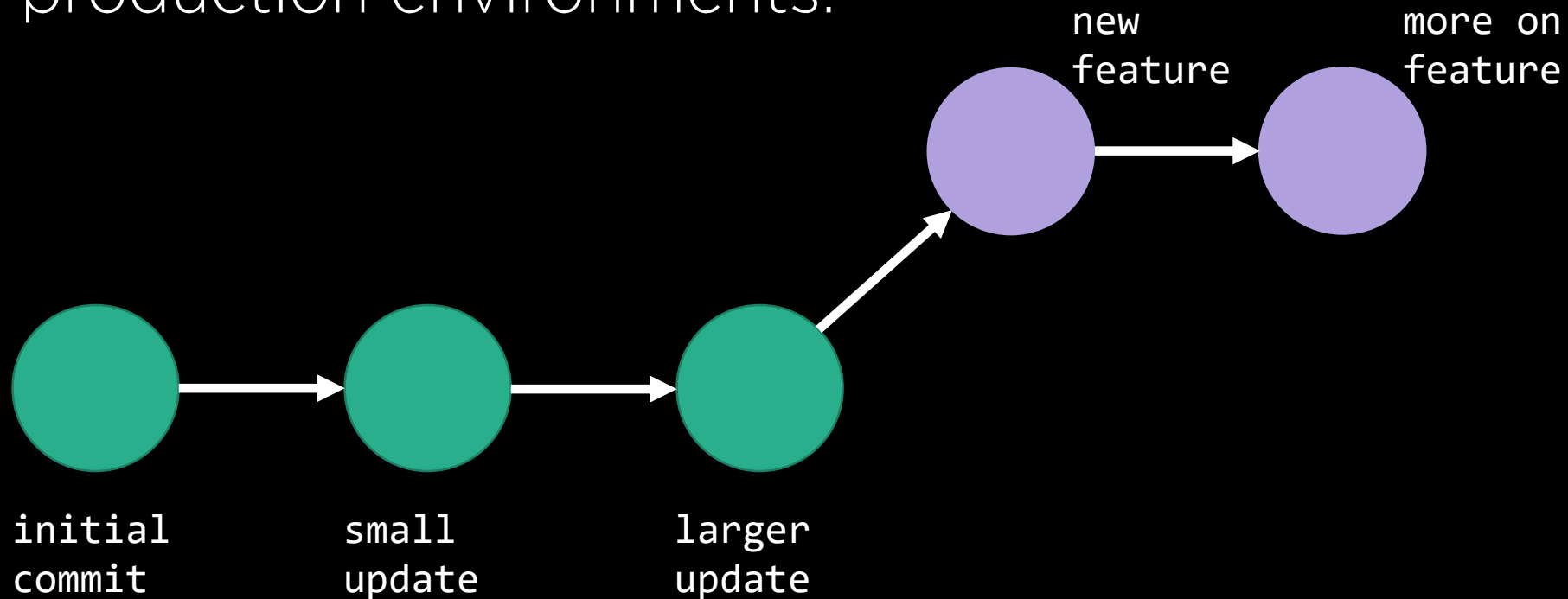
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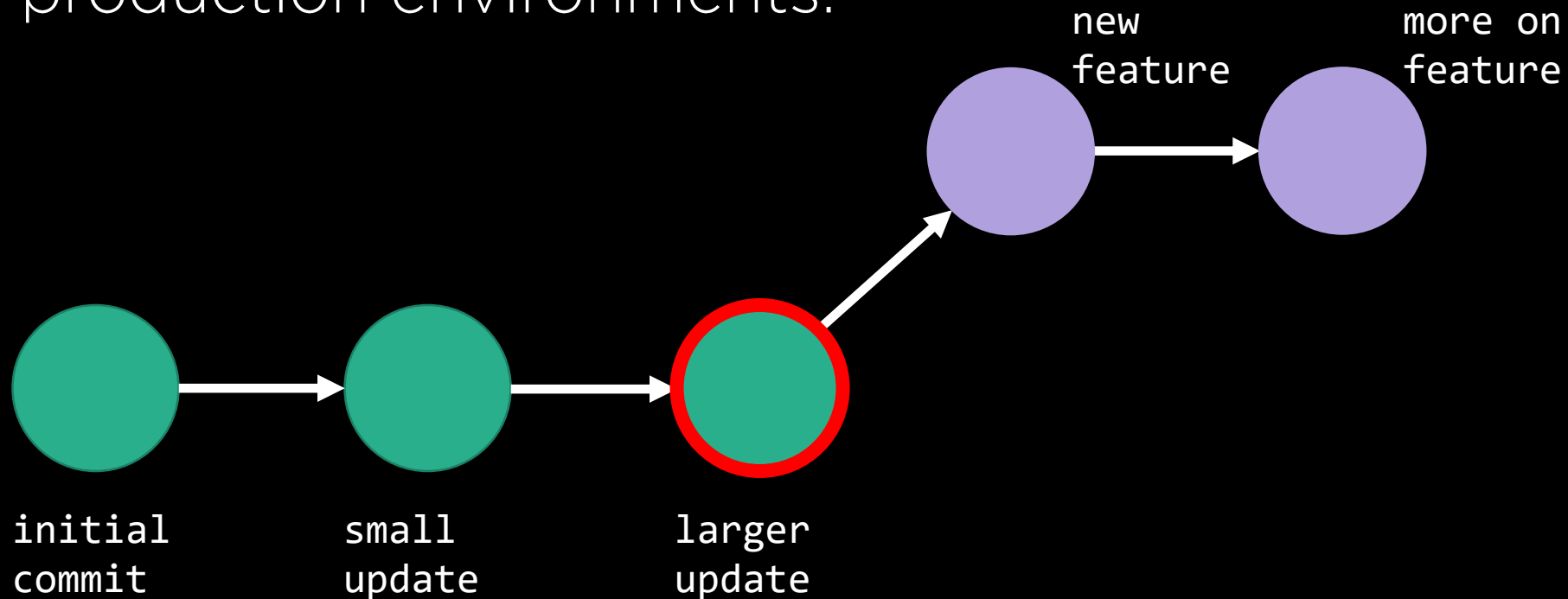
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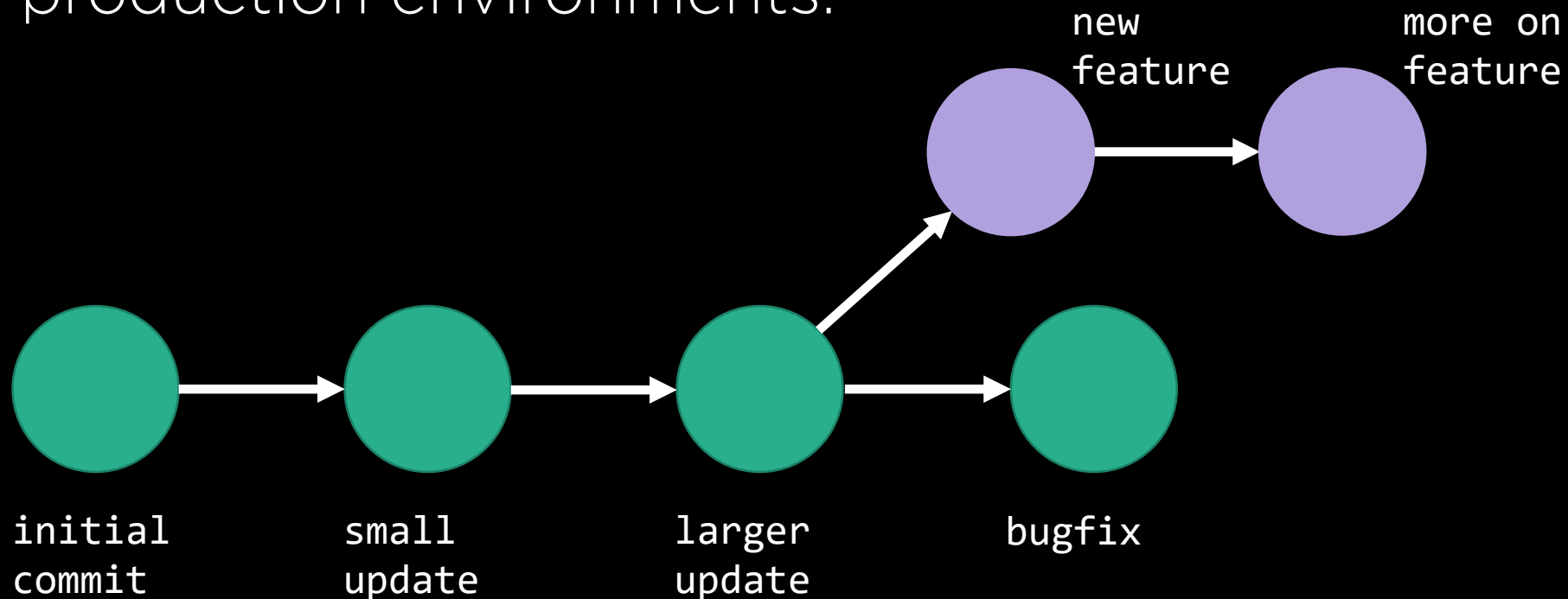
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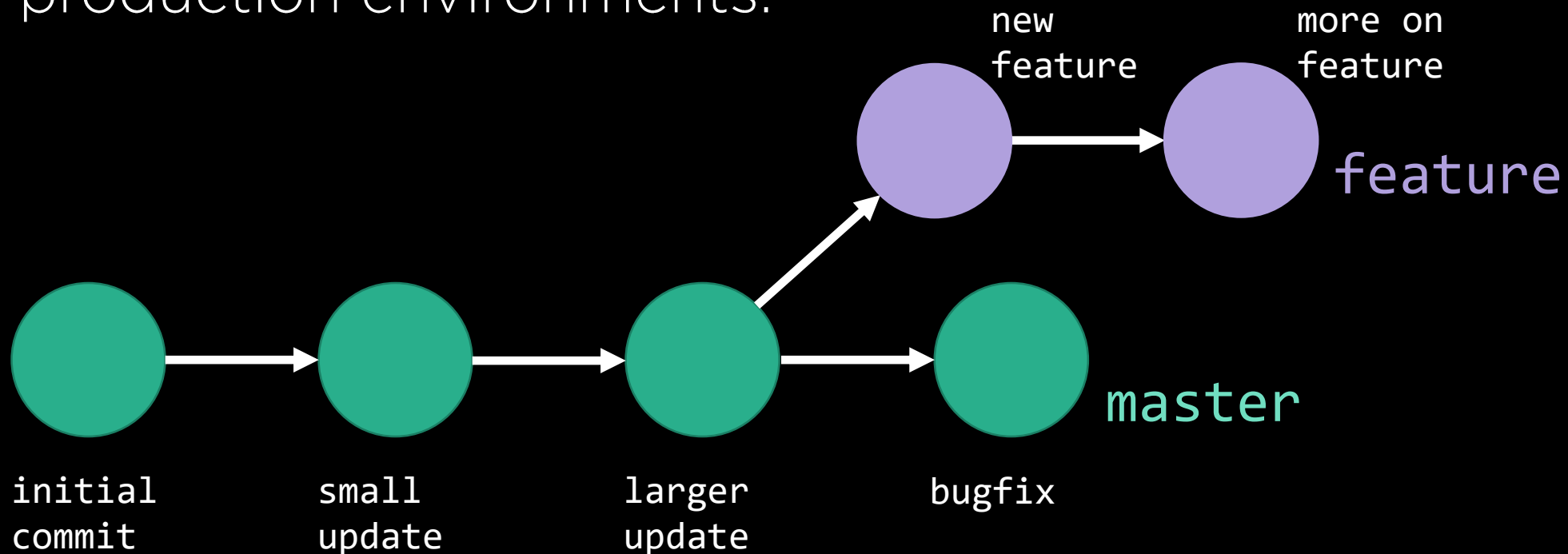
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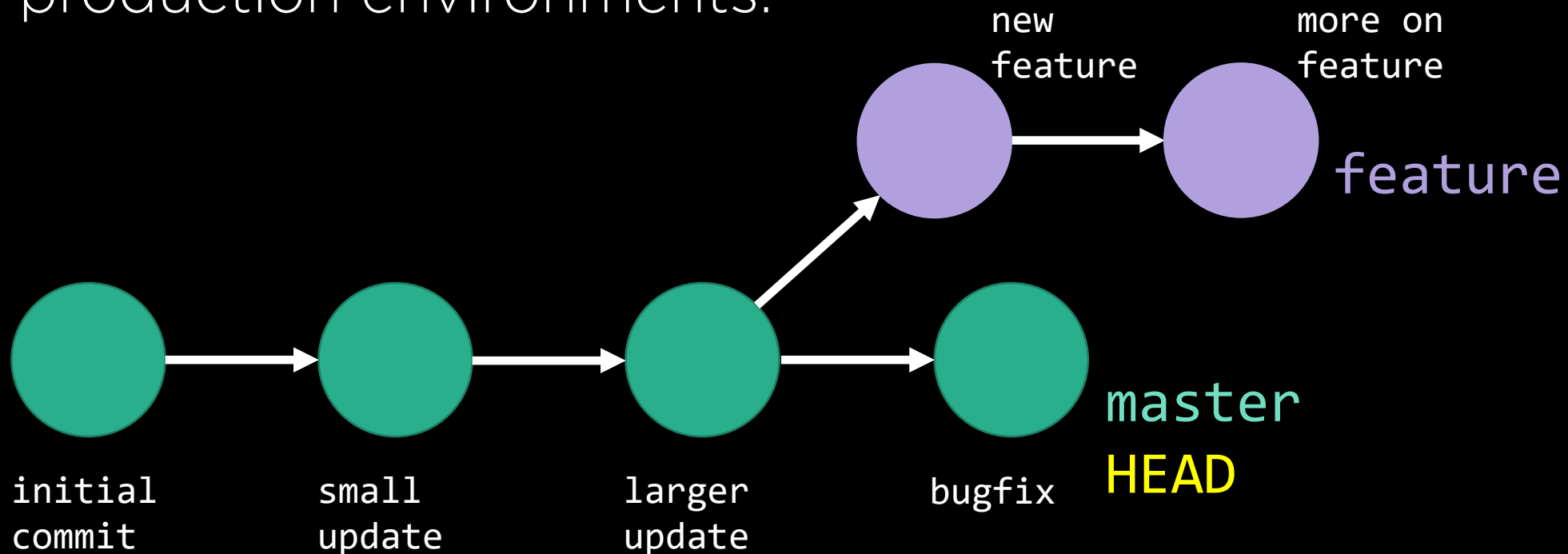
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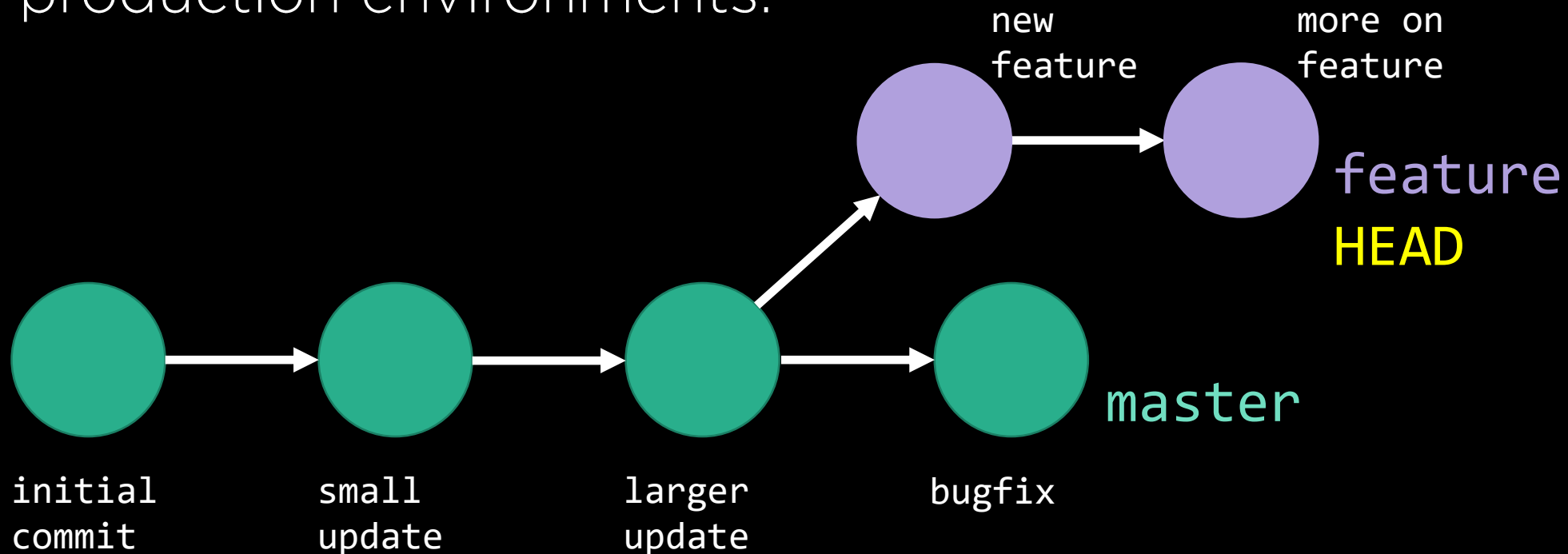
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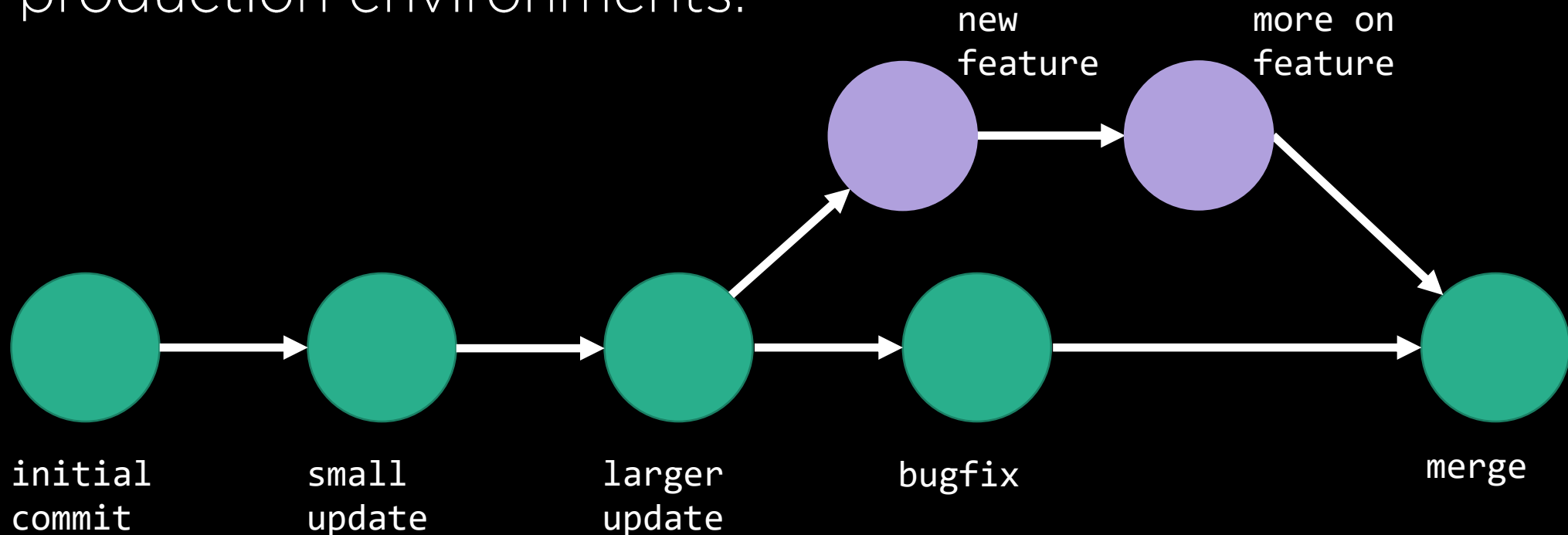
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```
git branch
```

```
git branch <name>
```

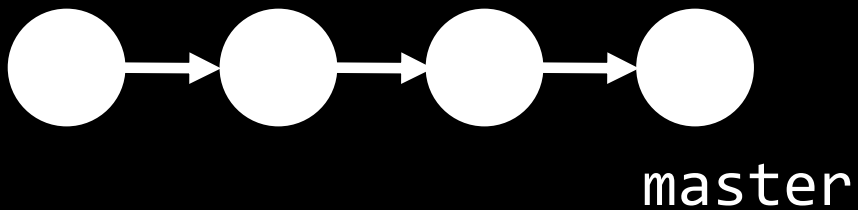
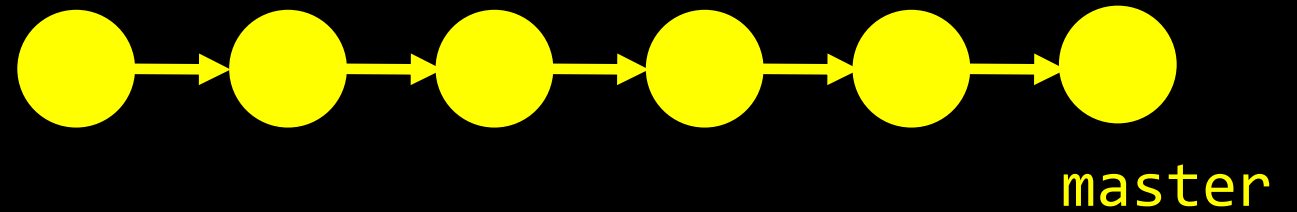
```
git checkout <name>
```

```
git merge <name>
```

Remotes

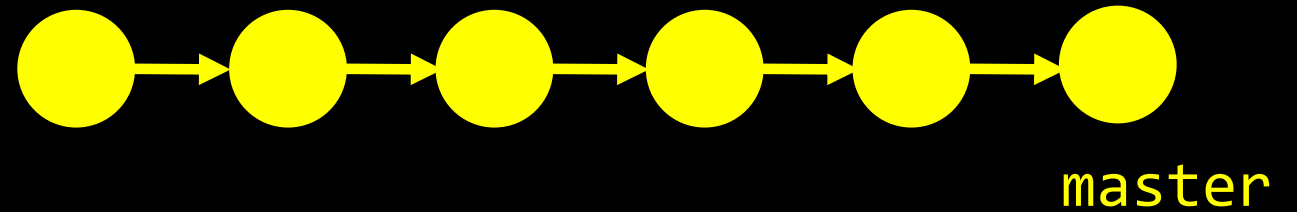
Remotes

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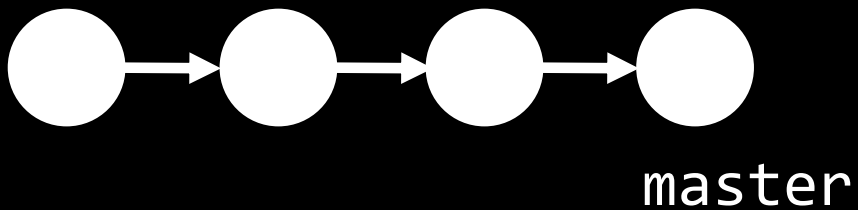


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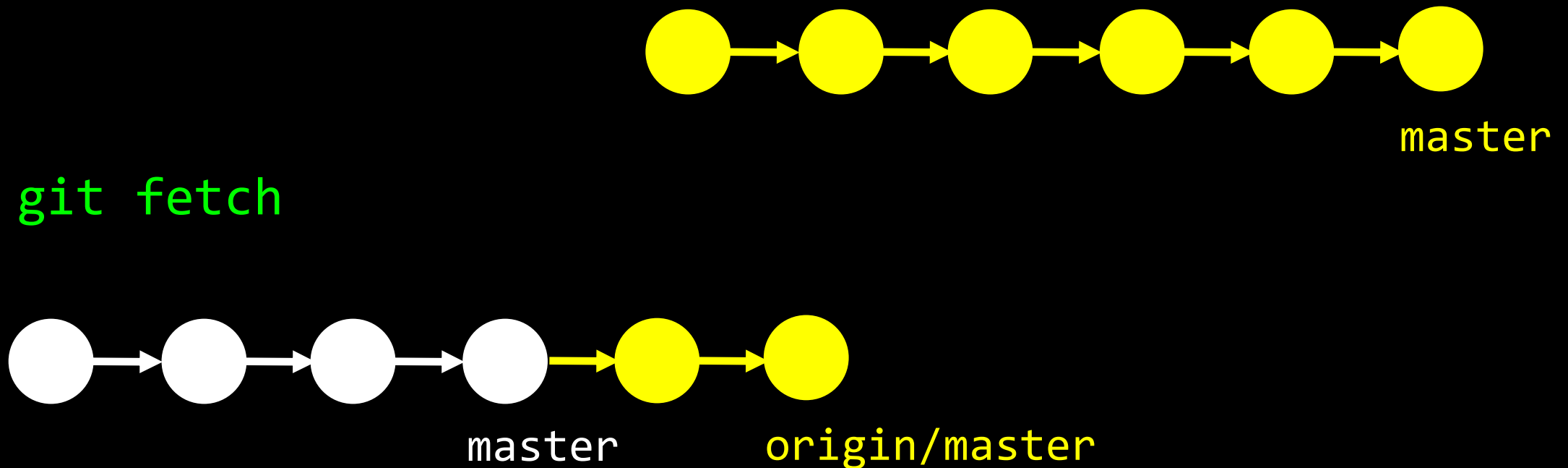


git fetch



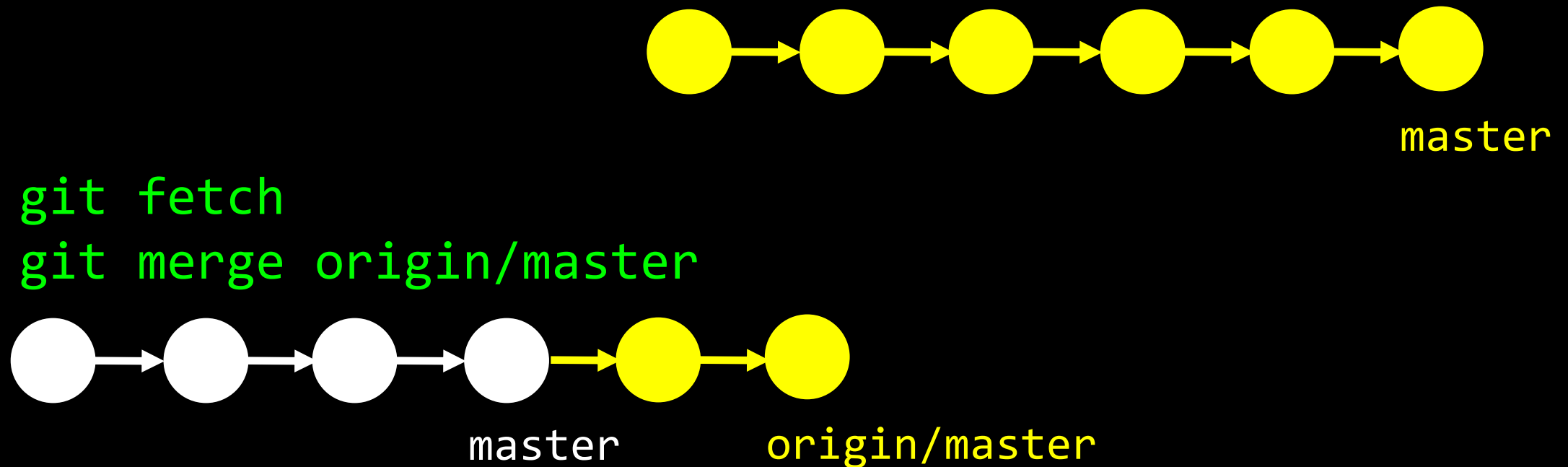
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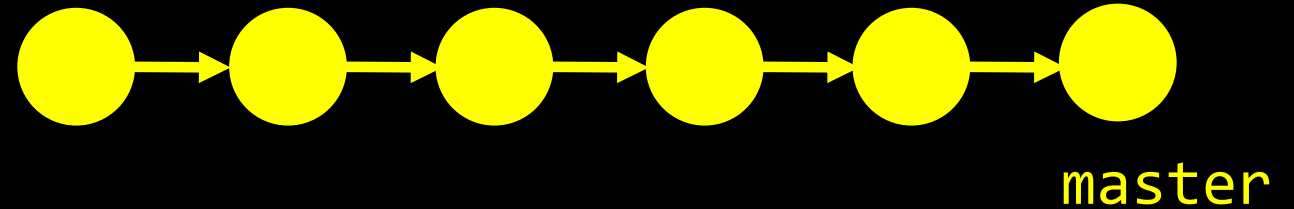
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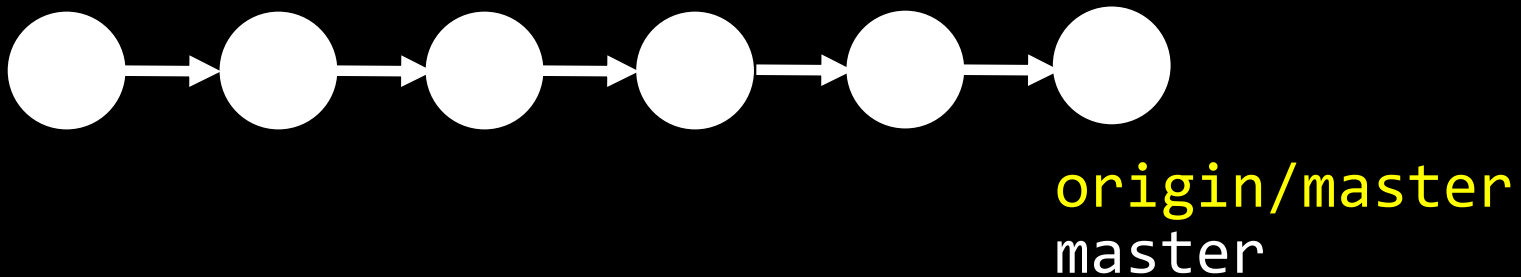


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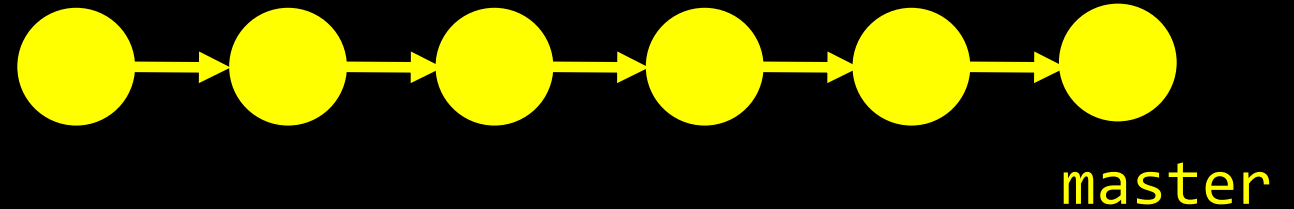


```
git fetch  
git merge origin/master
```

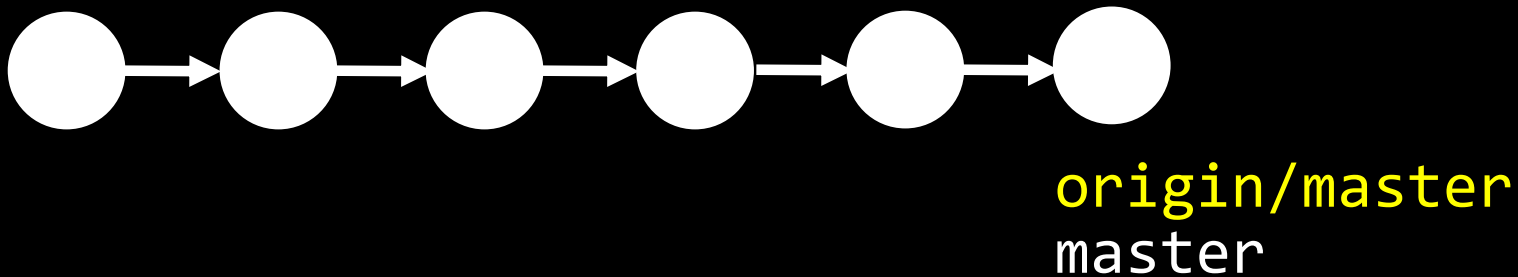


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`git pull`



Forks

No description, website, or topics provided.

Edit

[Add topics](#)

🔄 1 commit

🌿 1 branch

🏷 0 releases

👤 1 contributor

Branch: master ▾


New pull request

Create new file

Upload files


Find file

Clone or download ▾

 s33a-student

Create index.html

Latest commit 75b1836 3 minutes ago

 index.html

Create index.html

3 minutes ago

Help people interested in this repository understand your project by adding a README.

Add a README

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1 commit

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0 releases

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Branch: master

New pull request

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s33a-student Create index.html

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Pull Requests

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- It's also possible to use PRs to merge your own branches.

HTML, continued

Links

```
<a href="LOCATION">link text</a>
```

- Internal links
- External links
- Intra-page links

Links

```
<a href="hello.html">link text</a>
```

- Internal links
- External links
- Intra-page links

Links

```
<a href="http://google.com">link text</a>
```

- Internal links
- External links
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Links

```
<a href="#location1">link text</a>
```

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HTML5 vs. HTML4

HTML5	HTML4
<code><header></code>	<code><div class="header"></code>
<code><section></code>	<code><div class="section"></code>
<code><nav></code>	<code><div class="nav"></code>
<code><footer></code>	<code><div class="footer"></code>

New HTML5 Tags

- `<audio>`
- `<video>`
- `<datalist>`
- ...

CSS, continued

CSS Selector Options

Selector Form	Description
tag	Tag selector
#id	ID selector
.class	Class selector
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x > y	Child selector
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z[x=y]	Attribute selector
x:y	Pseudoclass selector
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Pseudoelements

- `::after`
 - `::before`
 - `::first-letter`
 - `::first-line`
 - `::selection`
-
- For a complete list of ***pseudoclasses***, check out W3Schools on CSS!

Break

Responsive Design

Responsive Design

- viewports
- Media queries
- flexboxes
- grids

Bootstrap

Bootstrap

<https://getbootstrap.com>

Bootstrap 4.1.1

<https://getbootstrap.com>

```
<link rel="stylesheet"  
href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.1/css/bootstrap.min.css"  
integrity="sha384-WskhaSGFgHYWDcbwN70/dfYBj47jz9qbsMId/iRN3ewGhXQFZCSftd1LZCfmhktB"  
crossorigin="anonymous">
```

Sass