



Apostrophe + Docker Workshop

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CMS Philly



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- > Docker
- > Building & Running a Docker Image
- > Apostrophe
- > Dockerizing Apostrophe



Minimum Requirements

> git

> Node 8+

> MongoDB 2.6+

> Docker 1.13.0+

> github.com/gregvanbrug/apos-docker-workshop

What is Docker




Docker is an open platform for developing, shipping, and running applications.



Docker Server

The screenshot shows the Docker Desktop application window. The title bar is blue and contains the Docker logo and the word "docker" on the left, and three utility icons (gear, wrench, and user profile) on the right. The user profile is labeled "gregvanbrug". Below the title bar is a search bar with a magnifying glass icon and the text "Search...". To the right of the search bar is a "Sort by" dropdown menu. The main content area displays a single container entry:

	compassionate_robinson docker/getting-started
	RUNNING PORT: 80

Docker Client

```
> docker
```



Docker Registry

The screenshot shows a web browser window with the URL `https://hub.docker.com/_/registry`. The page header includes the Docker Hub logo, a search bar, and navigation links for 'Explore', 'Pricing', 'Sign In', and 'Sign Up'. A dark blue banner at the top right says 'Try the two-factor authentication beta. [Learn more >](#)'. The main content area features the Docker logo, the title 'registry' with a star icon, and the subtitle 'Docker Official Images'. Below this is the description: 'The Docker Registry 2.0 implementation for storing and distributing Docker images'. A download icon and '1B+' are shown. A horizontal menu contains tags: 'Container', 'Linux', 'x86-64', 'ARM', 'ARM 64', 'Featured Images', 'Storage', 'Application Services', and 'Official Image'. On the right, a dropdown menu is set to 'Linux - ARM 64 (latest)'. Below it, the text 'Copy and paste to pull this image' is followed by a dark button with the command `docker pull registry` and a copy icon. A link for 'View Available Tags' is also present. At the bottom, tabs for 'Description', 'Reviews', and 'Tags' are visible, with 'Description' being the active tab.

Supported tags and respective `Dockerfile` links

Docker Objects

Images

Containers

Volumes

Networks

Services



```
/* TODO:
```

```
Install Docker (if you haven't  
already) and start the server
```

```
Verify Docker is running
```

```
github.com/gregvanbrug/apos-docker-workshop/tree/master/01.Docker
```

```
*/
```



Building & Running a Docker Image



Dockerfile

```
FROM node:12
```

```
COPY . /usr/src
```

```
CMD [ "node", "/usr/src/app.js" ]
```



Dockerfile Commands

FROM

MAINTAINER

ENV

WORKDIR

COPY

ADD

RUN

VOLUME

ENTRYPOINT

USER

LABEL

EXPOSE

CMD



Dockerfile Commands

FROM

MAINTAINER

ENV

WORKDIR

COPY

ADD

RUN

VOLUME

ENTRYPOINT

USER

LABEL

EXPOSE

CMD



Building and Running an Image

```
> docker image build . --tag myimage:1.0
```



Building and Running an Image

```
> docker image build . --tag myimage:1.0  
> docker container run \  
  --publish 8000:8080 --detach \  
  --name img myimage:1.0
```



Common Docker CLI Commands

build

run

cp

exec

ps

start

restart

stop

rm

rmi



Common Docker CLI Commands

build

run

cp

exec

ps

start

restart

stop

rm

rmi



```
/* TODO :
```

Create a Docker Image that runs
an Express server

```
github.com/gregvanbrug/apos-docker-workshop/tree/master/02.BuildingAndRunningADockerImage
```

```
*/
```





Apostrophe

Apostrophe is an open source enterprise level CMS

apostrophecms.com/features/feature-list



Apostrophe Objects

Pieces

Pages

Widgets

docs.apostrophecms.org/apostrophe



Apostrophe Modules

📁 my-module
index.js



Apostrophe Modules

```
module.exports = {  
  extend: 'apostrophe-module',  
  ...  
  construct: (self, options) => {  
    ...  
  }  
}
```



Apostrophe Modules

```
const path = require('path');

const apos = require('apostrophe')({
  baseUrl: 'http://localhost:3000',
  shortName: 'mysite',

  modules: {
    'apostrophe-templates': {
      viewsFolderFallback: path.join(__dirname, 'views')
    },
    'my-module': {}
  }
});
```



Apostrophe Modules

📁 my-module
index.js



Apostrophe Modules

```
└─ my-module
  └─ lib
  └─ public
  └─ views
  index.js
```



Apostrophe Modules

```
└─ my-module
  └─ lib
      api.js
  └─ public
  └─ views
      index.js
```



Apostrophe Modules

```
└─ my-module
  └─ lib
  └─ public
    └─ css
    └─ js
      always.js
      anon.js
      user.js
  └─ views
    index.js
```



Apostrophe Modules

```
└─ my-module
  └─ lib
  └─ public
  └─ views
    index.html
    show.html
    widget.html
  index.js
```



Apostrophe Schemas

```
[  
  {  
    name: 'excerpt',  
    label: 'Excerpt',  
    type: 'string',  
    help: 'A short excerpt about this thing'  
  }  
]
```

docs.apostrophecms.org/apostrophe/advanced-topics/schema-guide



Apostrophe Schemas

Home x +

localhost:3000

Page Settings

Change the settings of a page.

Cancel Save

Page Settings

- Basics
- Permissions
- Info

Excerpt

A short excerpt about this thing

Apostrophe Schemas

```
<div>  
  <h1>{{ data.page.title }}</h1>  
  <p>{{ data.page.excerpt }}</p>  
</div>
```



Widgets, Singletons, and Areas

The screenshot shows a web browser window displaying the 'Standard widgets' page on the ApostropheCMS documentation site. The browser's address bar shows the URL: docs.apostrophecms.org/apostrophe/core-concepts/editable-content-on-pages/standard-widgets. The page features a navigation menu with links for Home, Enterprise Support, Try the Demo, and GitHub. A search bar is located in the top right corner. The main content area is titled 'Standard widgets' and includes an introductory paragraph and a section for 'Widget Types'. A sidebar on the left provides a navigation menu for the documentation, with 'Standard widgets' highlighted. A right sidebar contains a table of contents and a link to 'Edit on GitHub'.

Standard widgets - ApostropheCMS

docs.apostrophecms.org/apostrophe/core-concepts/editable-content-on-pages/standard-widgets

ApostropheCMS

Home Enterprise Support Try the Demo GitHub

Search...

ApostropheCMS Documentation

GETTING STARTED

Setting up your environment

Creating your first project

CORE CONCEPTS

Technical overview: 30,000 feet

Pages & Navigation >

Editable Content on the Page: Widgets

Standard widgets

Custom widgets

Layout / Nested widgets

Reusable content with pieces >

Standard widgets

Apostrophe comes with a number of widgets built in to help you build out content for your site. Below is a quick reference for some of the most commonly used widgets.

Widget Types

Apostrophe offers a range of widgets, and you can easily create your own. Here are some of the most popular widgets. Later on you'll also talk about "pieces" and how they allow you to create and reuse the same content around the site via pages and widgets.

'apostrophe-rich-text'

Edit on GitHub

CONTENTS

Widget Types

- 'apostrophe-rich-text'
- apostrophe-images
- apostrophe-files
- apostrophe-html

Take control of your controls

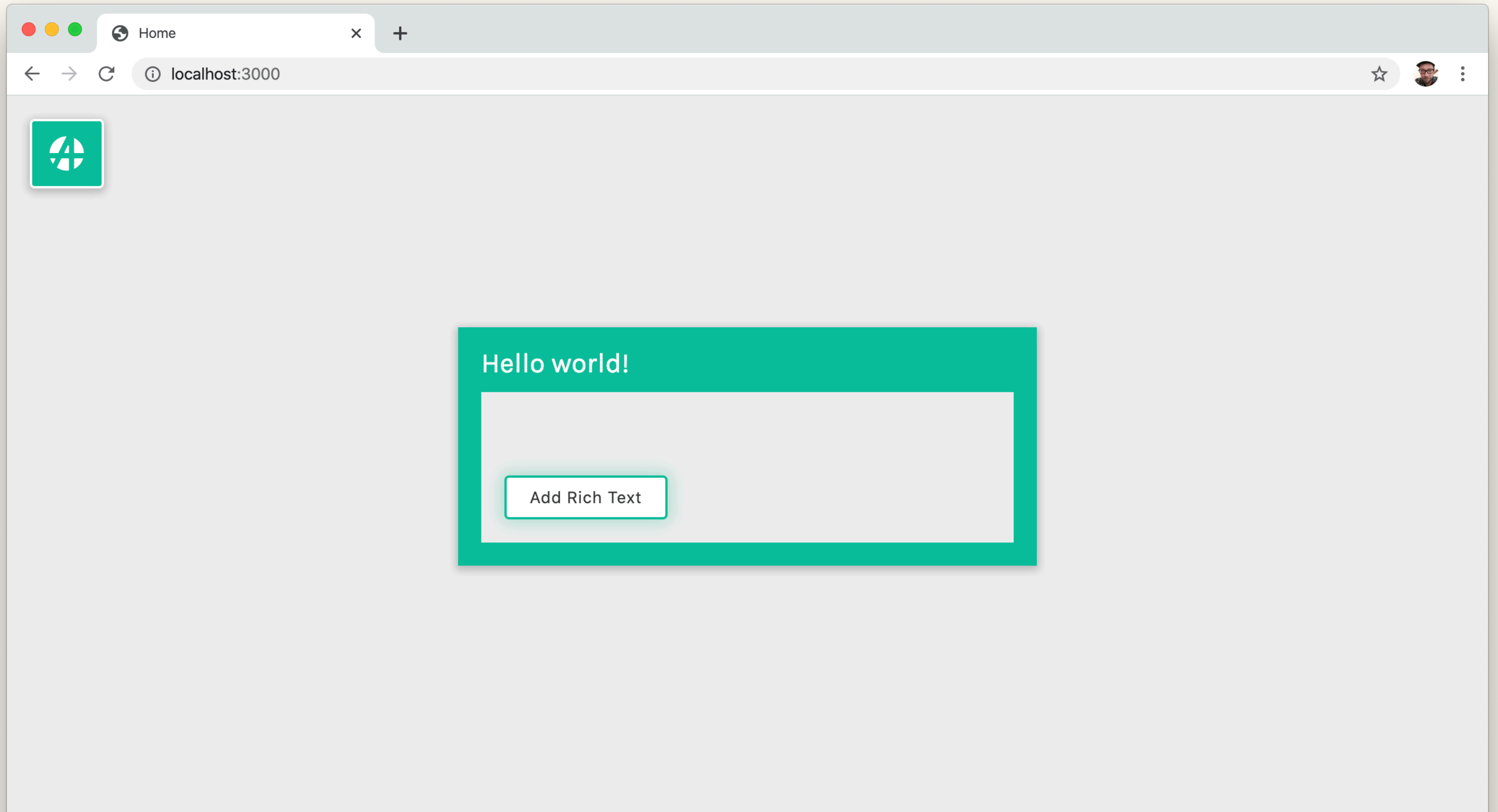
Custom Widgets

Widgets, Singletons, and Areas

```
{{ apos.singleton(data.page, 'content',  
  'apostrophe-rich-text', {  
    toolbar: [ 'Bold', 'Italic' ]  
  })  
}}
```



Widgets, Singletons, and Areas

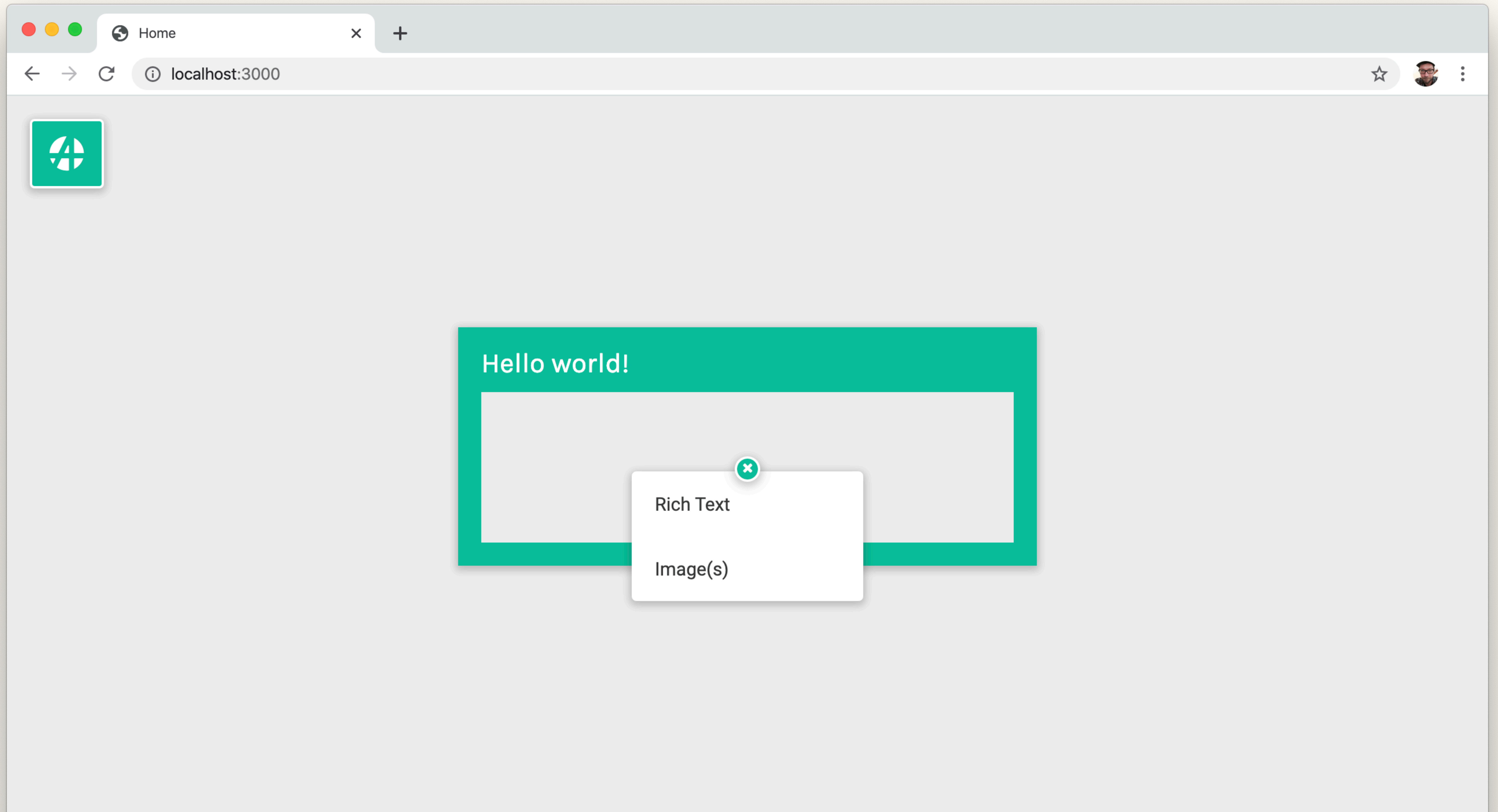


Widgets, Singletons, and Areas

```
{{ apos.area(data.page, 'content', {  
  widgets: {  
    'apostrophe-rich-text': {  
      toolbar: [ 'Bold', 'Italic' ]  
    },  
    'apostrophe-images': {  
      size: 'full'  
    }  
  }  
})  
}}
```



Widgets, Singletons, and Areas



Apostrophe CLI

```
> npm i -g apostrophe-cli
```



Apostrophe CLI

```
> npx apostrophe-cli
```



Apostrophe CLI

```
> apostrophe create-project mysite
```



Apostrophe CLI

- > apostrophe create-project mysite
- > cd mysite && npm install



Apostrophe CLI

- > `apostrophe create-project mysite`
- > `cd mysite && npm install`
- > `node app.js apostrophe-users:add \`
`admin admin`

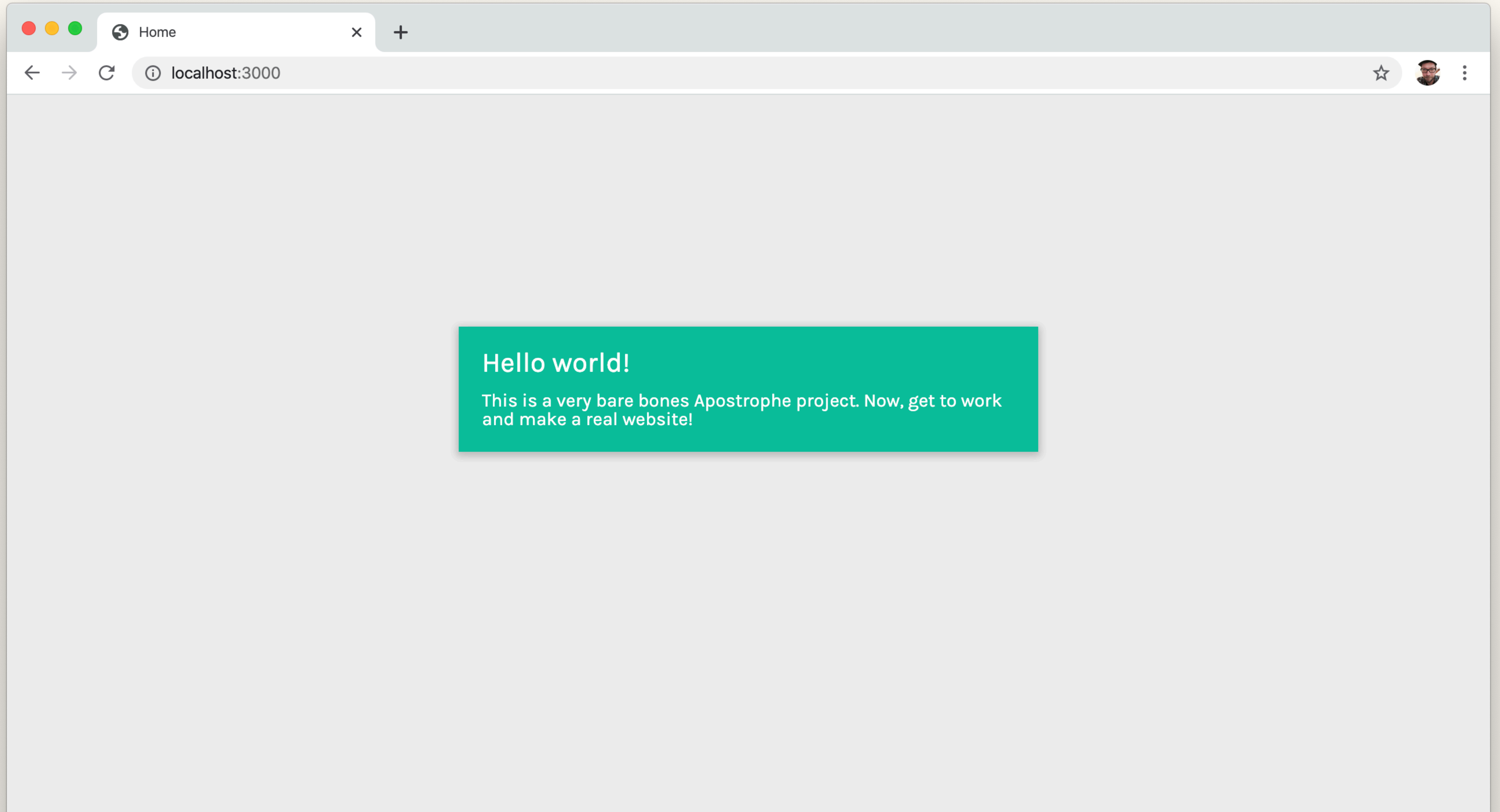


Apostrophe CLI

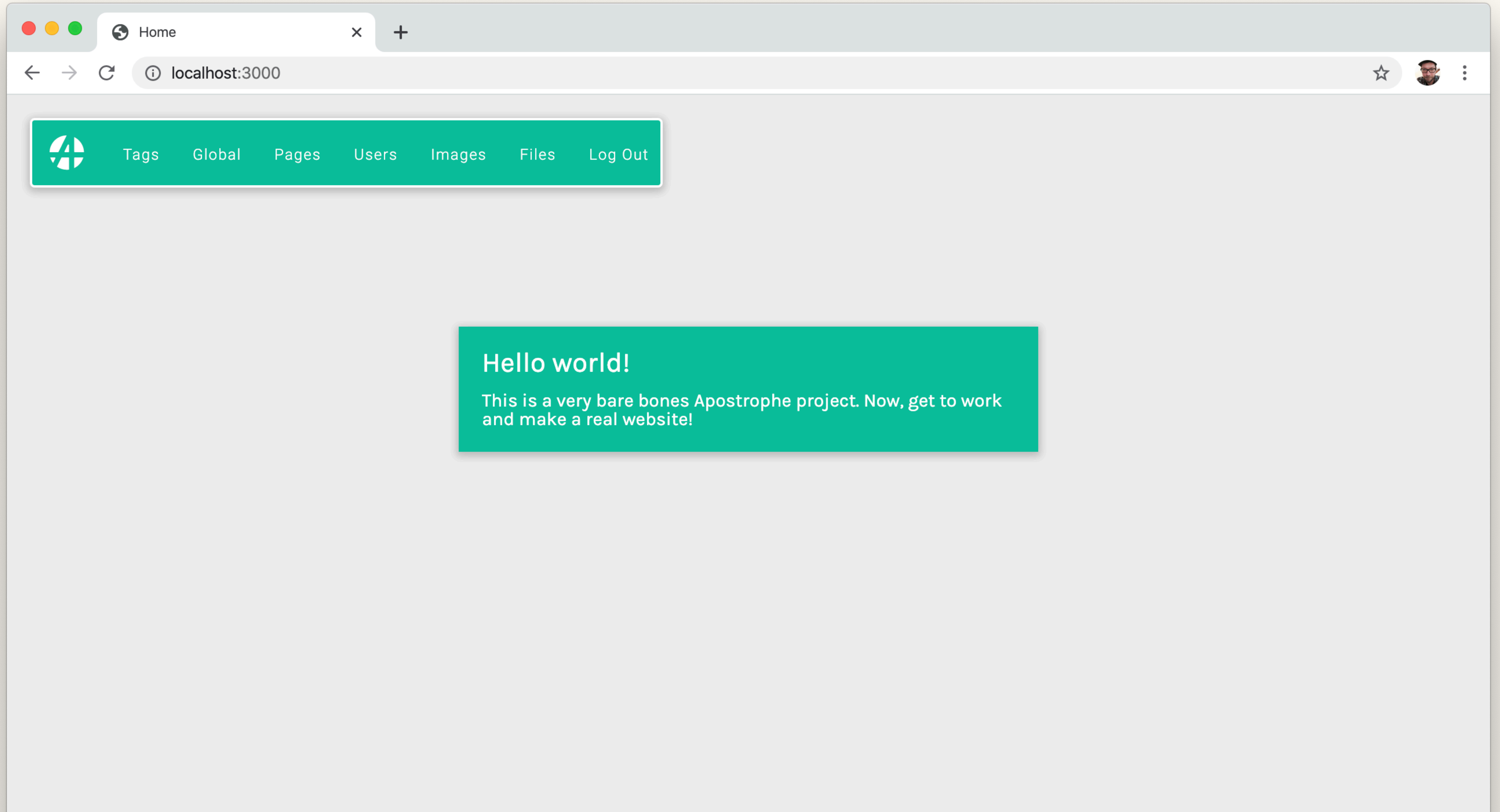
- > apostrophe create-project mysite
- > cd mysite && npm install
- > node app.js apostrophe-users:add \
admin admin
- > npm start



Apostrophe CLI



Apostrophe CLI



Extending Apostrophe

The screenshot shows a web browser window with the URL `apostrophecms.com/extend`. The page features a navigation bar with the ApostropheCMS logo and links for Features, Documentation, Community, Support, Extend (highlighted), and Solutions. A 'Star 3088' badge is visible in the top right. The main content area has a blue-to-green gradient background with the word 'Extend' in large white text. Below it is a sub-header: 'Add new features to your ApostropheCMS project with these powerful modules.' Four white cards are arranged in a 2x2 grid, each representing a featured module with a red star icon and a 'FEATURED' label. Each card includes a brief description and a green arrow pointing right.

apostrophe-headless ★ FEATURED
Need a headless CMS? Apostrophe can do that. Get full access to your apostrophe-pieces content types from native apps, React apps and other settings outside Apostrophe. →

apostrophe-blog ★ FEATURED
Everything you need to put a blog on your website. →

apostrophe-events ★ FEATURED
Everything you need to manage upcoming events on your website. →

apostrophe-workflow ★ FEATURED
Add powerful workflow and localization capabilities to your project. →


```
/* TODO:
```

```
Create an Apostrophe site using the  
CLI, add a widget to the homepage,  
and create a Talks Piece
```

```
github.com/gregvanbrug/apos-docker-workshop/tree/master/03.Apostrophe
```

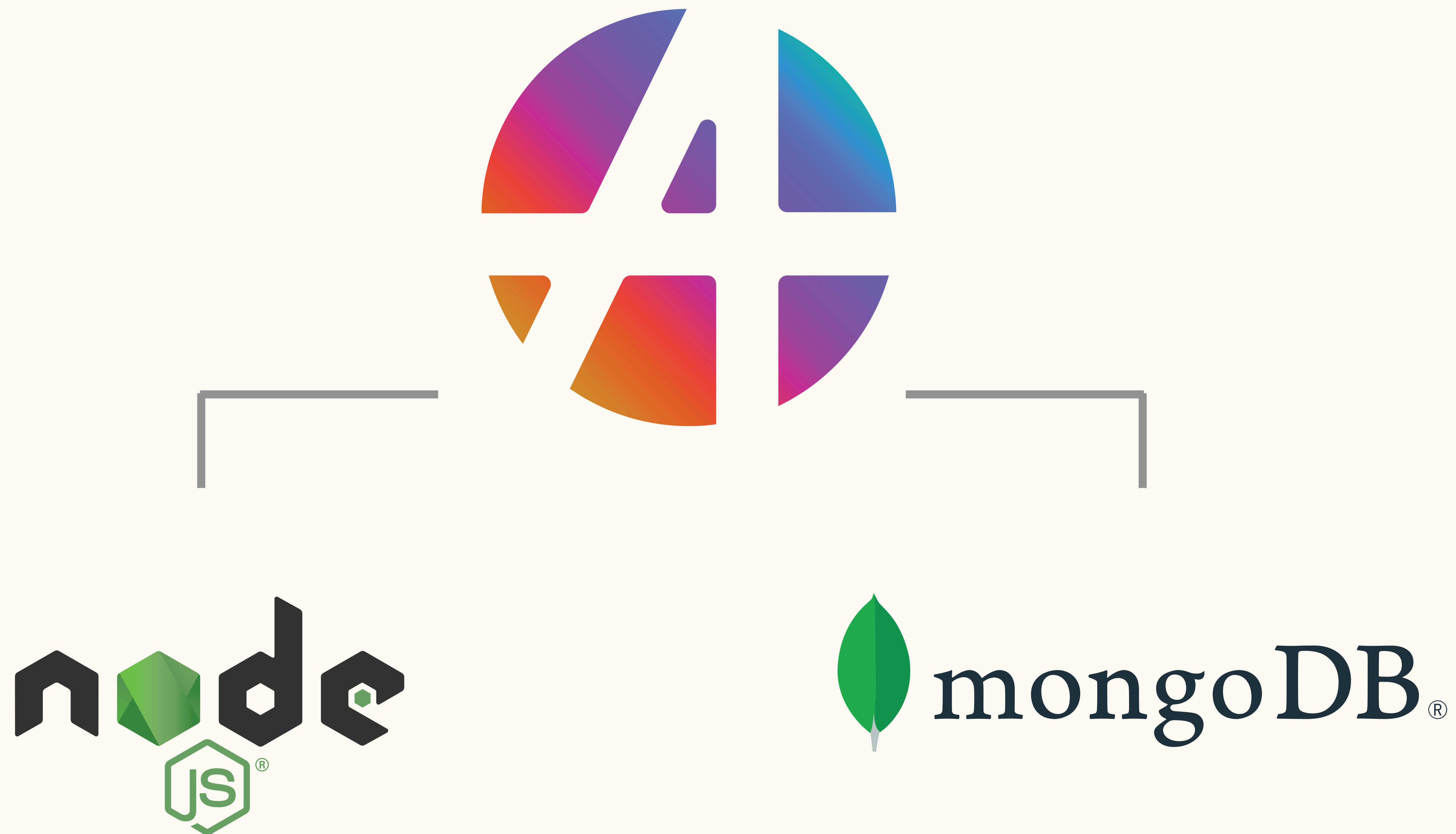
```
*/
```



Dockerizing Apostrophe



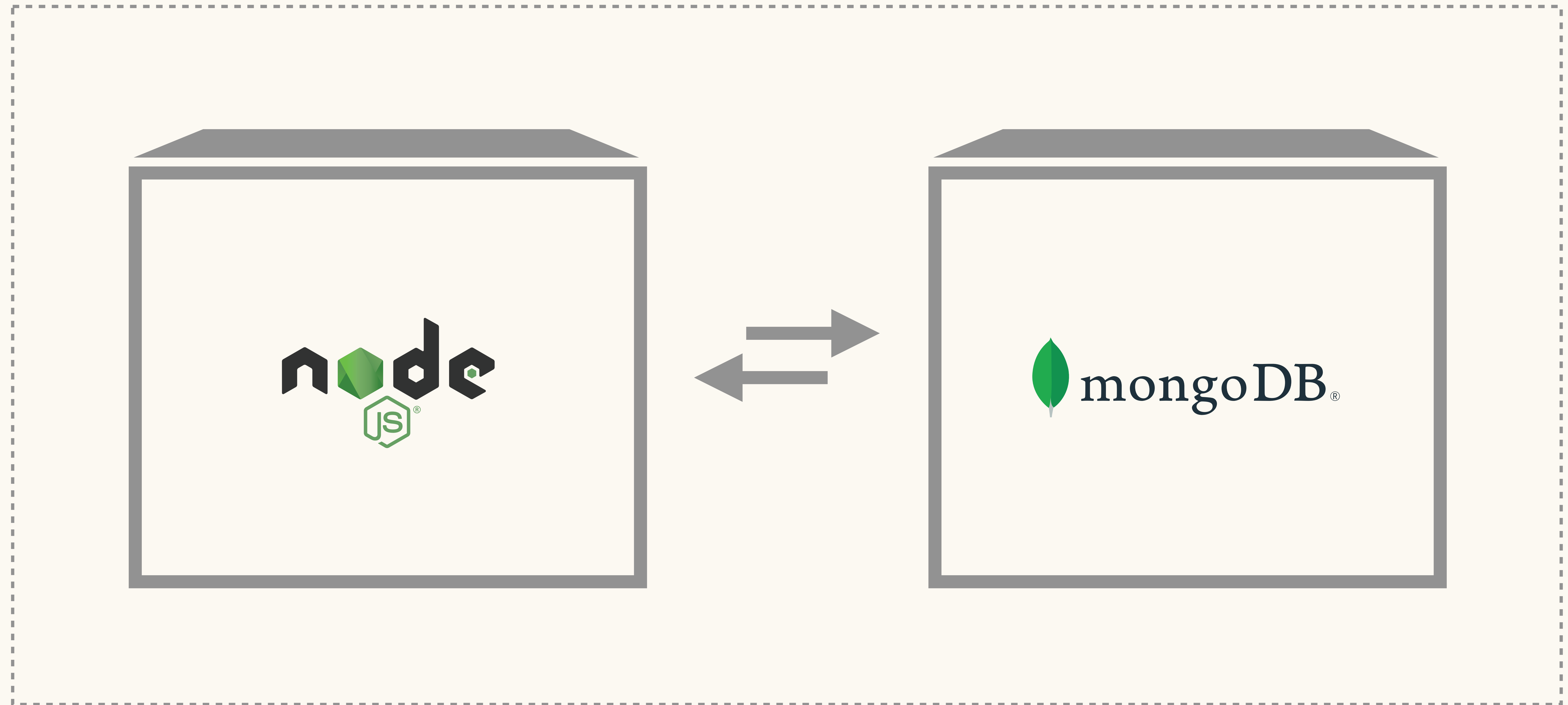
Requirements



Architecture



Architecture



Networking

- > `docker network create my-net`
- > `docker network connect my-net app`
- > `docker network connect my-net database`



Networking

> docker-compose



Networking

```
version: '3.7'
```

```
services:
```

```
  app:
```

```
    build: .
```

```
    depends_on:
```

```
      - database
```

```
  database:
```

```
    image: mongodb:3.6
```

```
    restart: always
```



Networking

```
> docker-compose up
```



Networking

```
> docker-compose down
```



Compose Configuration Reference

services

build

image

ports

volumes

depends_on

restart

env_file

environment

expose

networks



Compose Configuration Reference

services

build

image

ports

volumes

depends_on

restart

env_file

environment

expose

networks



```
/* TODO :
```

Dockerize your Apostrophe project

github.com/gregvanbrug/apos-docker-workshop/tree/master/04.DockerizingApostrophe

```
*/
```





Questions?



chat.apostrophecms.org



Thanks!



apostrophecms.com



github.com/apostrophecms