

从零搭建一个 React & npm 组件库

为什么需要组件库？



Material design

The logo for amazeUI, featuring a stylized 'i' icon composed of two vertical bars of different heights, followed by the text 'amazeUI' in a sans-serif font.

amazeUI



ANT DESIGN

npm 生态圈



Package.json



```
{
  "name": "@tencent/now-display-bubble",
  "version": "5.3.39",
  "description": "NOW直播组件 点赞气泡",
  "main": "lib/index.js",
  "keywords": [
    "now",
    "展示组件"
  ],
  "scripts": {
    "test": "mocha --compilers js:babel-core/register --require ./test/setup.js",
    "prepublish": "babel --presets es2015-loose,stage-0,react src -d lib",
    "build": "babel --presets es2015-loose,stage-0,react src -d lib && tnpm publish",
    "dev": "babel --presets es2015-loose,stage-0,react src -d lib -w"
  },
  "author": "adamhe",
  "dependencies": {
    "react": "15.1.0",
    "react-dom": "15.0.2",
    "@tencent/eventname": "^5.3.39",
    "@tencent/device": "^5.3.39"
  }
}
```

发布

npm publish

那组件库发布呢？

Babel

 babel-cli babel-code-frame babel-core babel-generator babel-helper-bindify-decorators babel-helper-builder-binary-assign... babel-helper-builder-conditional-as... babel-helper-builder-react-jsx babel-helper-call-delegate babel-helper-define-map babel-helper-explode-assignable-ex... babel-helper-define-map babel-helper-explode-assignable-ex... babel-helper-explode-class babel-helper-fixtures babel-helper-function-name babel-helper-get-function-arity babel-helper-hoist-variables babel-helper-optimise-call-expressi... babel-helper-plugin-test-runner babel-helper-regex babel-helper-remap-async-to-gene...

可能会遇到的问题

- 组件间的依赖
- 被依赖组件的更新，引起的连锁反映
- 组件粒度化的发布
- 与版本管理工具的联动
- 开发调试

Lerna

<https://lernajs.io/>

What's Lerna



Lerna

A tool for managing JavaScript projects with multiple packages.

 Star 2,533  Slack 6/120

[Follow Lerna on Twitter](#)

Lerna 项目长什么样子

```
$ lerna init
```

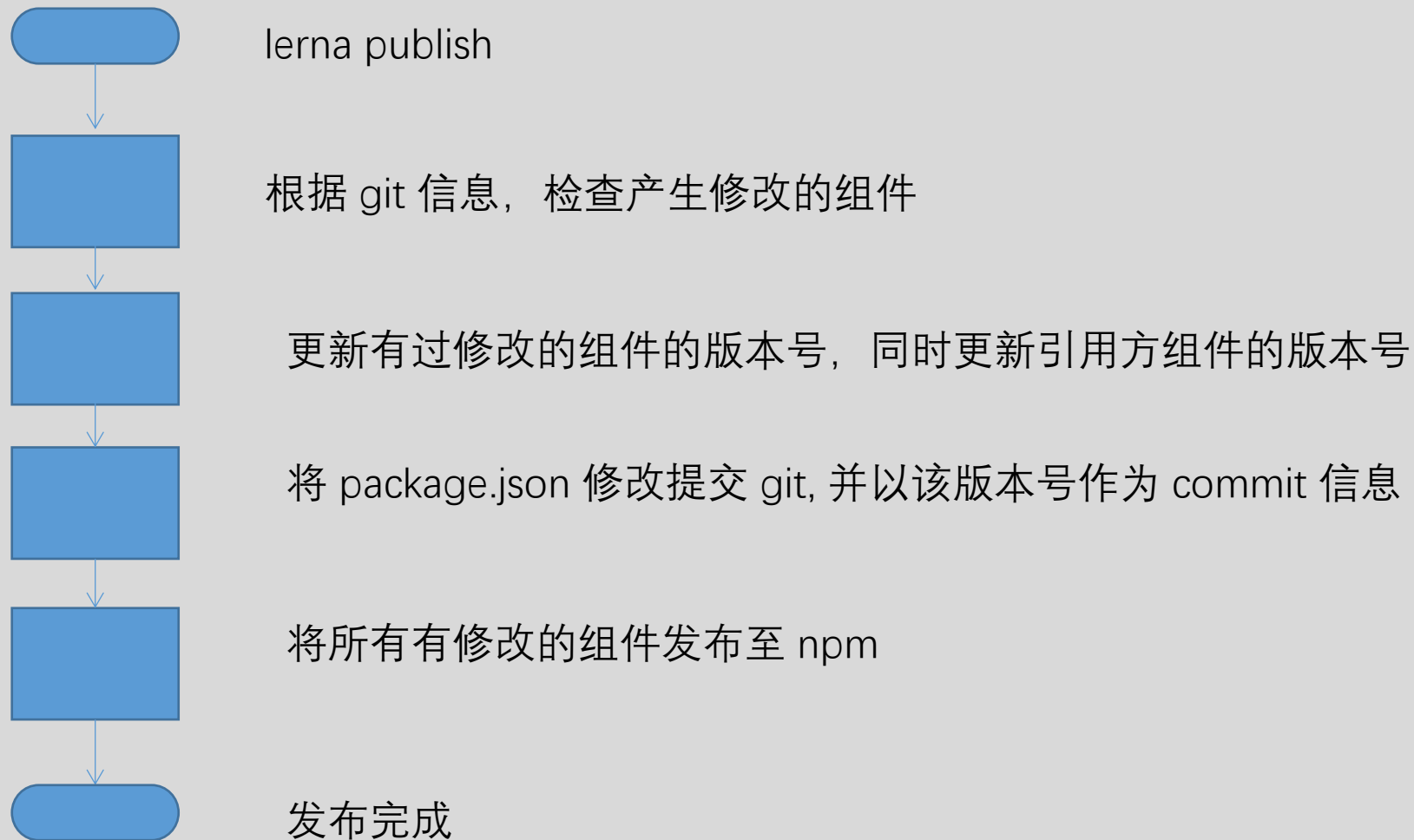
名称	修改日期	类型
 .git	2016/11/30 11:46	文件夹
 packages	2016/11/30 11:46	文件夹
 lerna.json	2016/11/30 11:46	JSON 文件
 package.json	2016/11/30 11:46	JSON 文件

组件库的发布

\$ lerna publish

```
PS E:\FE\lerna-demo> lerna publish
Lerna v2.0.0-beta.30
Current version: 0.0.0
Checking for updated packages...
lr-button
lr-dialog
? Select a new version (currently 0.0.0) (Use arrow keys)
> Patch (0.0.1)
  Minor (0.1.0)
  Major (1.0.0)
  Custom
```

组件库的发布

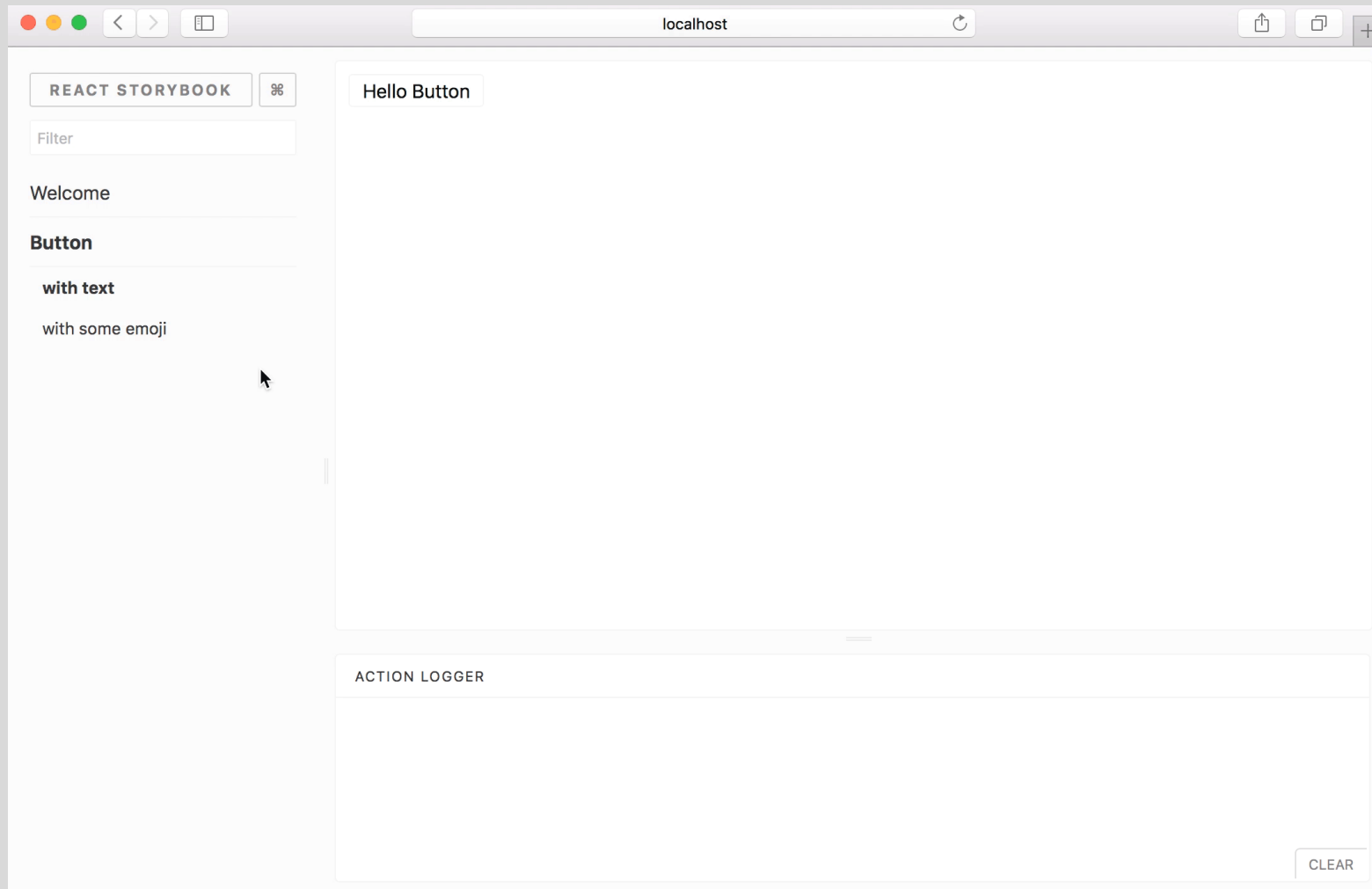


如何开发一个像 Ant-Design 这样 React
组件库呢？

Storybook

<https://github.com/storybooks/react-storybook>

Storybook



Storybook

1. 与 React 一致的开发体验
2. 独立的开发环境
3. 热重载
4. UI 测试环境
5. 文档生成

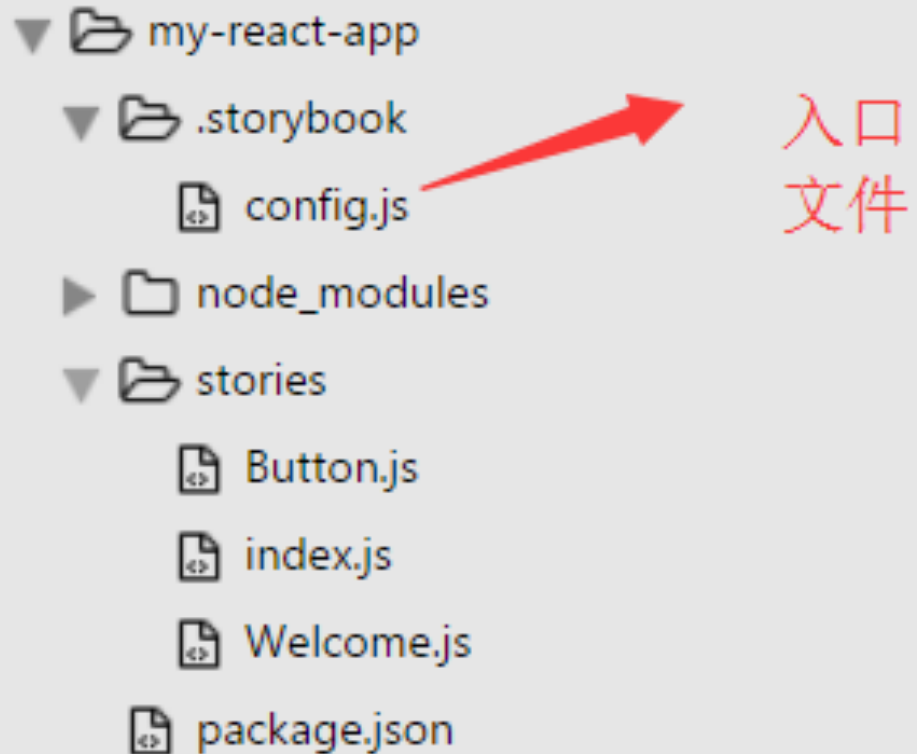
Storybook – 安装

```
npm i -g getstorybook
```

```
cd my-react-component
```

```
getstorybook
```

Storybook – 基础目录



config.js

```
import { configure } from '@kadira/storybook';

function loadStories() {
  require('../stories');
}

configure(loadStories, module);
```

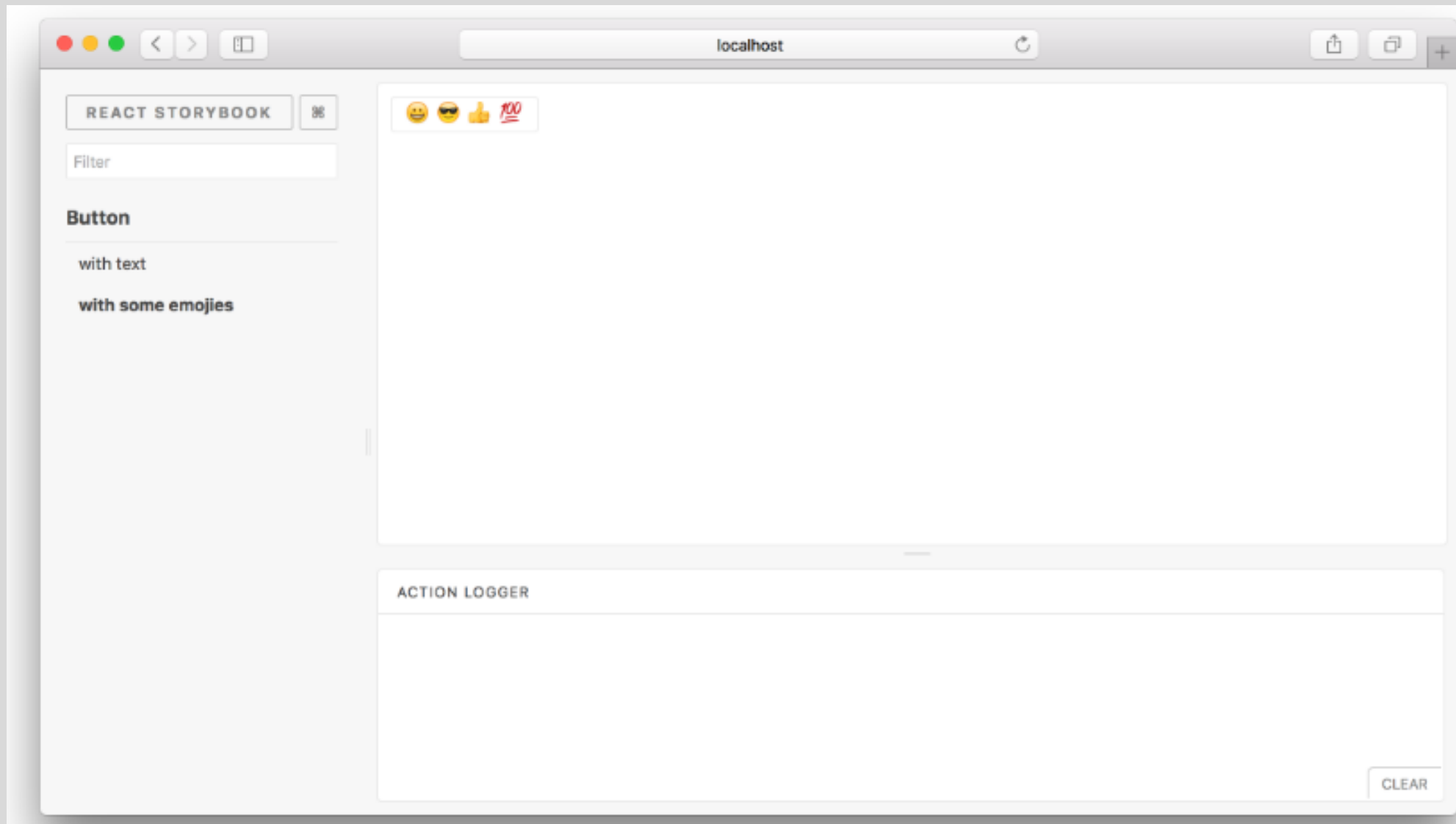
Storybook – 开始构建你的环境

```
import React from 'react';
import { storiesOf, action, linkTo } from '@kadira/storybook';
import Button from './Button';
import Welcome from './Welcome';

storiesOf('Welcome', module)
  .add('to Storybook', () => (
    <Welcome showApp={linkTo('Button')}/>
  ));

storiesOf('Button', module)
  .add('with text', () => (
    <Button onClick={action('clicked')}>Hello Button</Button>
  ))
  .add('with some emoji', () => (
    <Button onClick={action('clicked')}>😊 🤓 👍 100</Button>
  ));
```

Storybook – 开始构建你的环境



Lerna + StoryBook ?

组件库目录结构

```
|---.storybook
|   |---config.js
|   |---webpack.config.js
|---lerna.json
|---package.json
|---packages
|   |---component
|   |   |---.npmignore
|   |   |---assets
|   |   |   |---index.scss
|   |   |---lib
|   |   |   |---index.js
|   |   |---make
|   |   |   |---button.stories.js
|   |   |---package.json
|   |   |---README.md
|   |   |---src
|   |   |   |---index.js
|---README.md
```


组件库 - 多入口引用

config.js

```
import { configure } from '@kadira/storybook';

const req = require.context('../packages', true, /\.stories.js$/);

function loadStories() {
  req.keys().forEach(filename => req(filename))
}

configure(loadStories, module);
```

组件库 - 构建修改

.storybook/webpack.config.js

```
storybookBaseConfig.resolve.alias = {  
  'react': path.join(__dirname, '../node_modules/react/dist/react-with-addons.js',  
  'react-dom': path.join(__dirname, '../node_modules/react-dom/dist/react-dom  
}
```

组件库 - 构建修改

.storybook/webpack.config.js

```
storybookBaseConfig.module.loaders.splice(-1, 0, {  
  test: /\.scss$/,  
  loaders: ["style", "css", "sass"]  
}, {  
  test: /\.(png\?.*|jpg\?.*|jpg|png)$/,  
  loader: 'url-loader'  
}, {  
  test: /\.(blob)/,  
  loader: 'file-loader'  
})
```

组件库 - 修改package.json

Package.json 配置

```
"scripts": {  
  "test": "mocha --compilers js:babel-core/register --require ./test/setup.js",  
  "prepublish": "babel --presets es2015-loose,stage-0,react src -d lib",  
  "build": "babel --presets es2015-loose,stage-0,react src -d lib && tnpm publish",  
  "dev": "babel --presets es2015-loose,stage-0,react src -d lib -w"  
},
```

组件库 - 发布

```
PS E:\FE\lerna-demo> lerna publish
```

```
Lerna v2.0.0-beta.30
```

```
Current version: 0.0.0
```

```
Checking for updated packages...
```

```
lr-button
```

```
lr-dialog
```

```
? Select a new version (currently 0.0.0) (Use arrow keys)
```

```
> Patch (0.0.1)
```

```
Minor (0.1.0)
```

```
Major (1.0.0)
```

```
Custom
```



组件库 - demo

The screenshot shows the GitHub interface for a repository named 'lerna-demo'. At the top, it displays '2 commits', '1 branch', '0 releases', and '0 contributors'. Below this, there are buttons for 'Branch: master', 'New pull request', 'Create new file', 'Upload files', 'Find file', and a green 'Clone or download' button. The main content area shows a commit titled 'unknown fix bug' with the latest commit hash '1cf05b4' and a timestamp of '9 hours ago'. Below the commit header is a table listing the files changed in this commit.

File	Commit	Time
.storybook	fix bug	9 hours ago
packages	fix bug	9 hours ago
.gitignore	init	16 hours ago
README.md	fix bug	9 hours ago
lerna.json	init	16 hours ago
package.json	fix bug	9 hours ago

<https://github.com/adamchuan/lerna-demo>

组件库

1. 集中管理
2. 独立的测试环境
3. 一致的开发体验
4. 版本管理
5. 增量发布
6. 文档生成



Thx !

何方舟 Adamhe