# Storybook

### What are we going to cover

What is Storybook

Why use it

**Developing stories** 

**Extending Storybook** 

## What is Storybook?

#### Storybook is a **UI development environment** for your UI components

- Visualize different states of your UI components
- Develop them interactively

#### Runs separate from you application while developing

Only concerned with the UI components

## Why use Storybook

Develop components in a more isolated fashion

• Develop a single or a small tree of components without the complete application

Makes it easier to **test different states** of your component

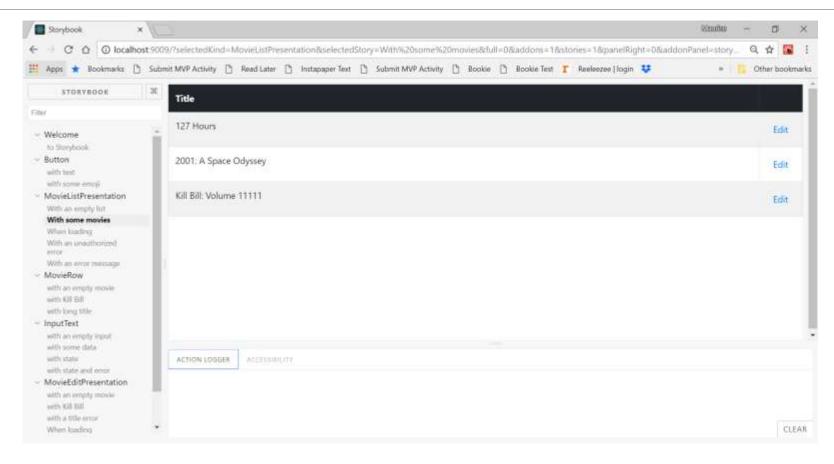
Specially error or loading states can be hard to see well in a running application

Create an interactive component style guide

Many addons to help with many features

- Accessibility
- Notes
- Viewport sizing
- etc

## Running Storybook



## Developing stories

Usually best to start with small leaf components

These are usually easy to test with few different states

Work your way up to bigger presentational components

Don't test components doing AJAX calls etc

Vary the input props to render all relevant states:

- Empty/ non empty collections
- AJAX loading/error states
- Valid/invalid input

#### Basic stories

```
storiesOf('Button', module)
  .add('with text', () => (
   <Button onClick={action('clicked')}>
     Hello Button
   </Button>
 ))
  .add('with some emoji', () => (
   <Button onClick={action('clicked')}>
     <span role="img" aria-label="so cool">
       </span>
   </Button>
 ));
```

### Decorators

#### Decorators can be used to wrap components around each story

Often things your component depends upon

#### Can also be **cross cutting concerns**

- Both visual and non visual
- Dynamic state management
- Addons
- Etc

#### Multiple decorators can be used

• They wrap each other to the other can be important

# Decorating a story

```
storiesOf('InputText', module)
  .addDecorator(story =>
    <StateDecorator>{story()}</StateDecorator>)
  .add('with state', ({
    value, prop, onChange
  }) => (
    <InputText</pre>
      value={value}
      prop={prop}
      onChange={onChange}>
      Label:
    </InputText>
  ));
```

## Snapshot testing

StoryShots adds automatic Jest Snapshot Testing for Storybook

Add the @storybook/addon-storyshots and react-test-renderer NPM packages

Calling initStoryshots() will automatically create and verify a snapshot for each story

## Running snapshot tests using Jest

```
- 0
  Press t to filter by a test name regex pattern.
  Press q to quit watch mode.
 > Press Enter to trigger a test run.
  ASS src\storybook.test.js (6.537s)
  Storyshots
   Welcome
      V to Storybook (21ms)
       with text (1ms)
      with some emoji (1ms)
   MovieListPresentation
      With an empty list (142ms)
       With some movies (112ms)
       When loading (123ms)
       With an unauthorized error (138ms)
       With an error message (137ms)
       with an empty movie (123ms)
      with Kill Bill (135ms)
      with long title (153ms)
   InputText
      with an empty input (2ms)
      with some data
      with state (153ms)
      with state and error (124ms)
   MovieEditPresentation
      with an empty movie (126ms)
      with Kill Bill (138ms)
      with a title error (153ms)
      When loading (132ms)
      With an unauthorized error (153ms)
      With an error message (152ms)
Test Suites: 1 passed, 1 total
        21 passed, 21 total
Snapshots: 21 passed, 21 total
            7.2445
 an all test suites.
Watch Usage: Press w to show more.
```

# Use all stories as snapshot tests

```
import initStoryshots
  from '@storybook/addon-storyshots';
initStoryshots();
```

## Extending Storybook

There are many Storybook addons to provide additional functionality

Some are from the core team, others from the community

- Actions
- Links
- State
- Knobs
- Storyshots
- Material UI
- etc

Addons are **registered** in ./.storybook/addons.js

### Conclusion

Storybook is a great way to help develop components

Use Storybook to do Component Driven Development

Many addons provide a lot of flexibility and power