

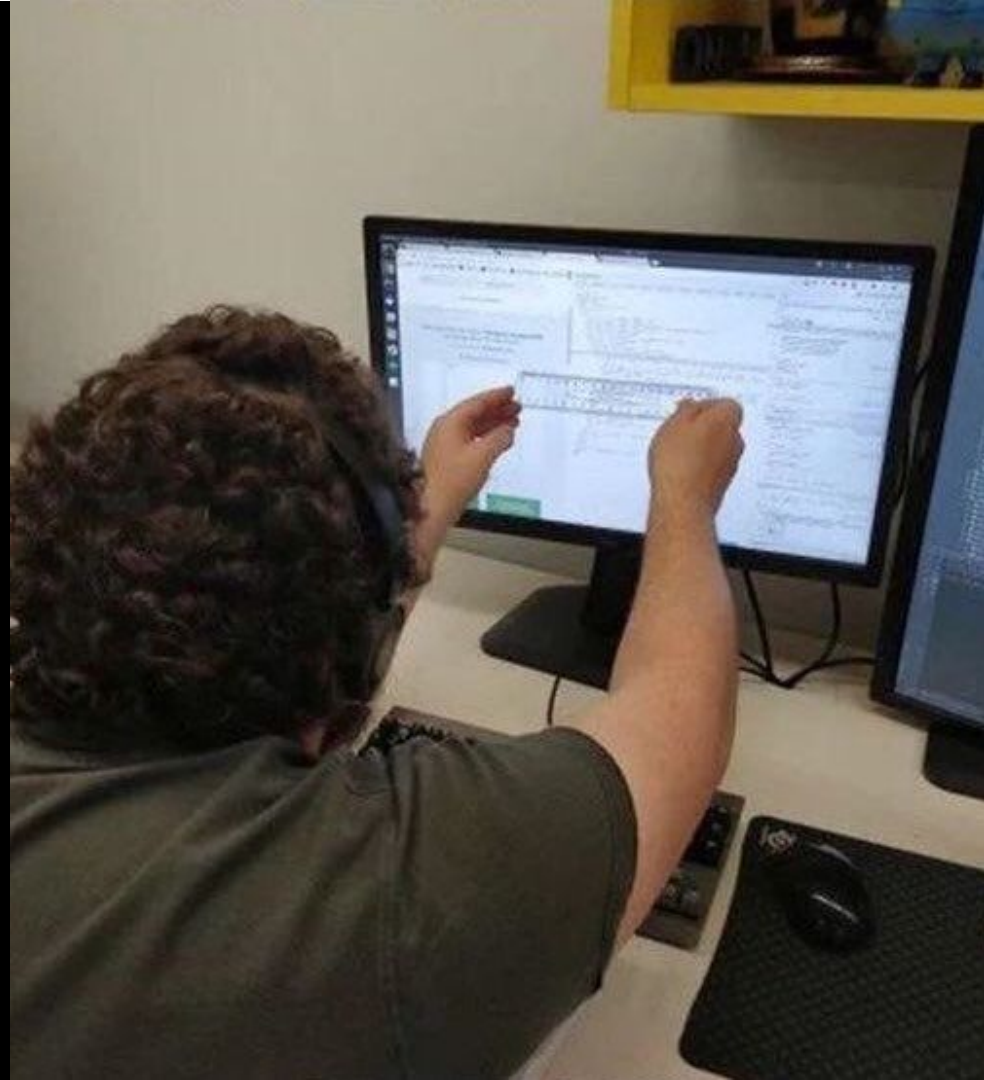


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Angular Testing

8 - Visual Regression and Storybook







Test Specs



Application Code



JSDom

@angular/testing



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Frontend Application



Headless Browser



Test Specs



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Main Challenges

1. Pixel Matching
2. Component Isolation

We want **isolated**
Component Tests



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Introducing Storybook



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Frontend Application



2

Headless Browser



1

Tests



3



4



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Storybook



↓

Code
(Components)



2

Headless Browser



1

Tests

3



4



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Storybook

- Allows to isolate Components
- Not Angular Specific
- Configure a Component for various states
- Can also used for visual widget library (not just testing)



Storybook Setup - "Module" Configuration - 1/3

```
export default {  
  
  title: 'Eternal/HolidayCard',  
  
  component: HolidayCardComponent,  
  
  decorators: [moduleMetadata({ imports: [MatButtonModule, MatCardModule] })],  
  
  argTypes: { holiday: { name: 'Holiday', description: 'JSON object for the Holiday' } }  
  
} as Meta;
```



Storybook Setup - Template - 2/3

```
const Template: Story<HolidayCardComponent> = (args: HolidayCardComponent) => ({  
  
  component: HolidayCardComponent,  
  
  props: args  
  
});
```



Storybook Setup - Variation - 3/3

```
export const Default = Template.bind({});
```

```
Default.args = {
```

```
  holiday: {
```

```
    id: 1,
```

```
    title: 'Holiday',
```

```
    description: 'A holiday',
```

```
    imageUrl: 'https://eternal-app.s3.eu-central-1.amazonaws.com/assets/AngkorWatSmall.jpg'
```

```
  }
```

```
};
```



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ETERNAL



Customisable HolidayCard

Holiday

HolidayCard

Default

RequestInfo

Normal

Holiday



A holiday

More Information

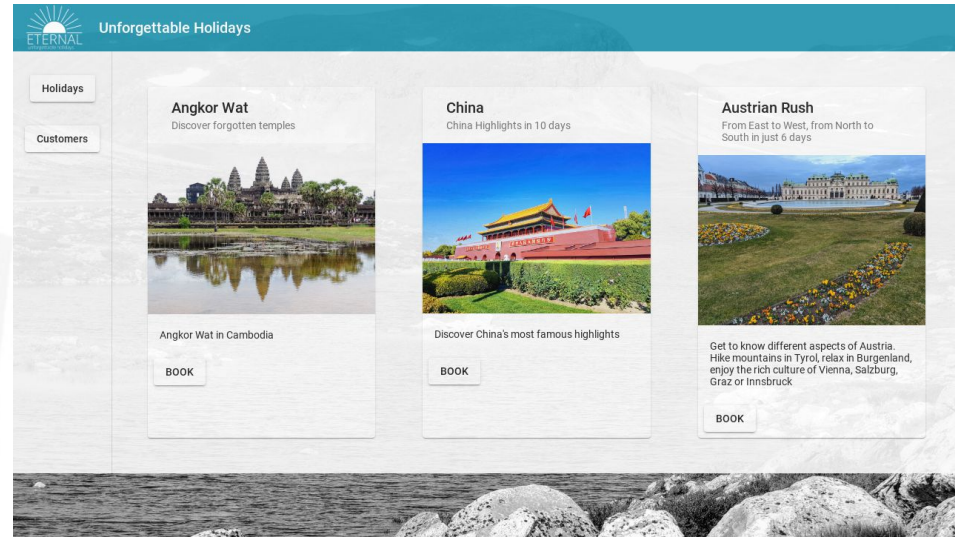
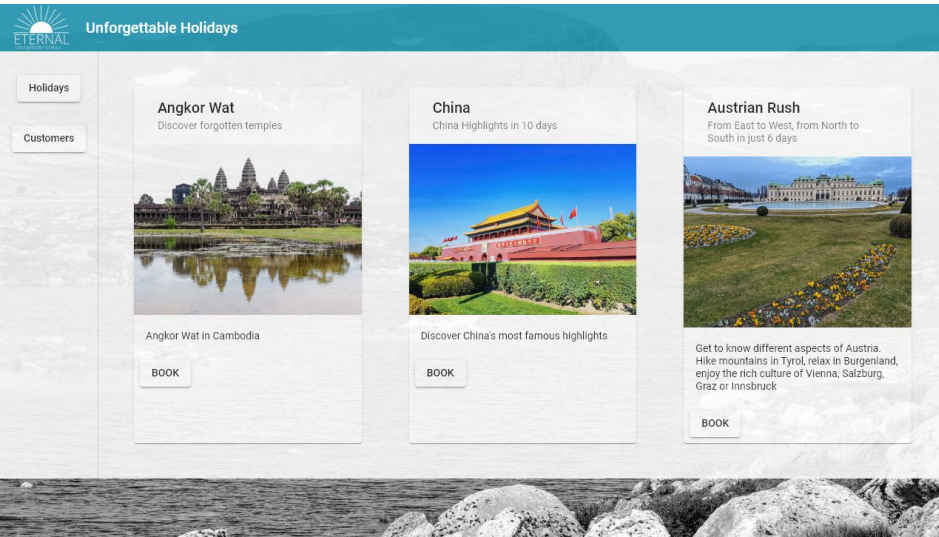


What about
Pixel Matching???

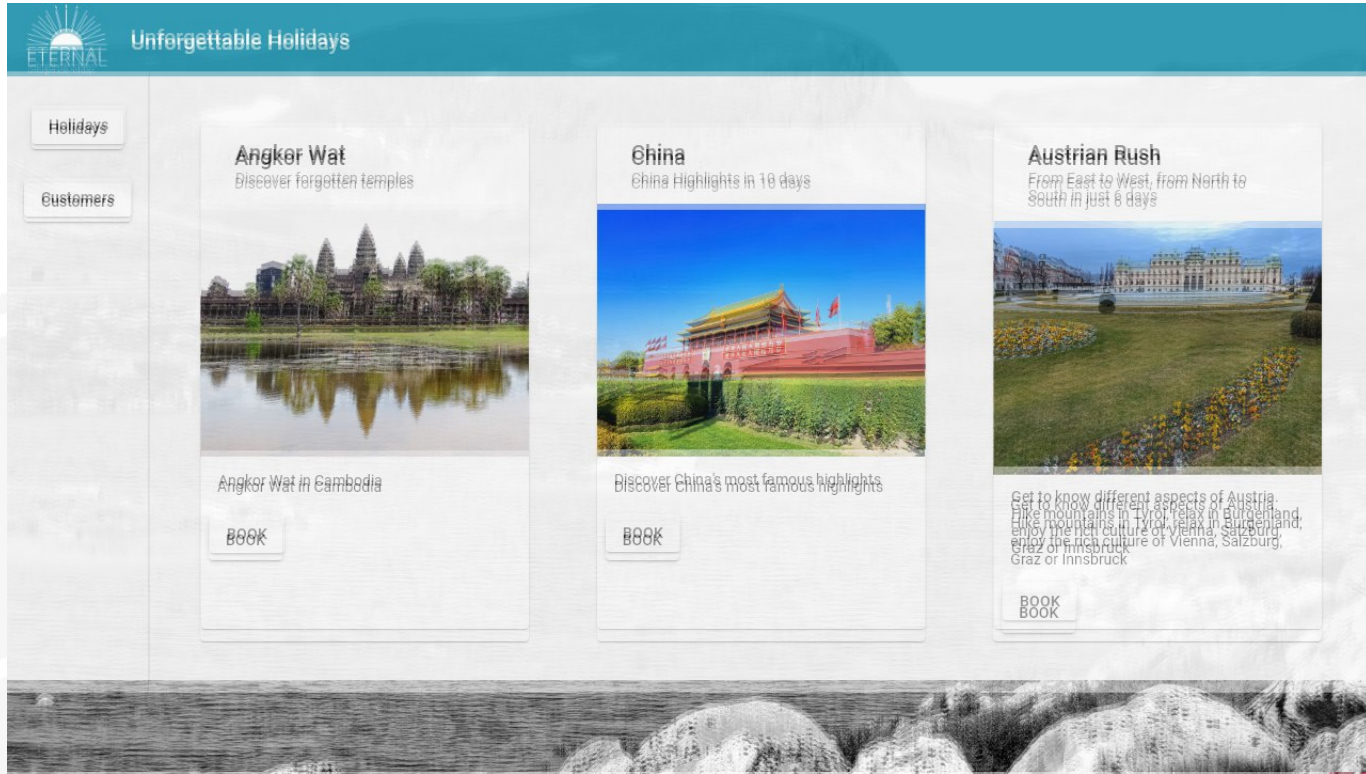


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Spot the difference



Spot the difference

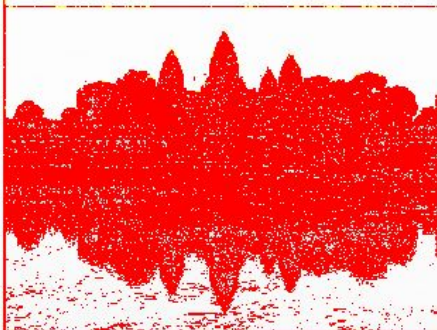


Holidays

Customers

Angkor Wat

Discover forgotten temples

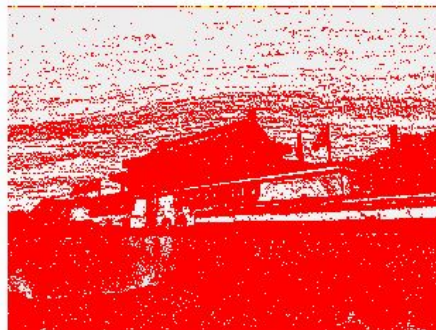


Angkor Wat in Cambodia

BOOK

China

China Highlights in 10 days

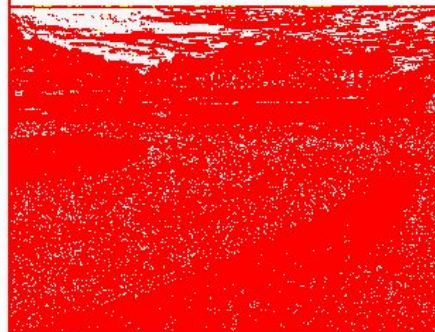


Discover China's most famous highlights

BOOK

Austrian Rush

From East to West, from North to South in just 6 days



Get to know different aspects of Austria. Hike mountains in Tyrol, relax in Burgenland, enjoy the rich culture of Vienna, Salzburg, Graz or Innsbruck

BOOK

Storybook



↓

Code
(Components)



2 ←

Headless Browser



1 ←

Tests

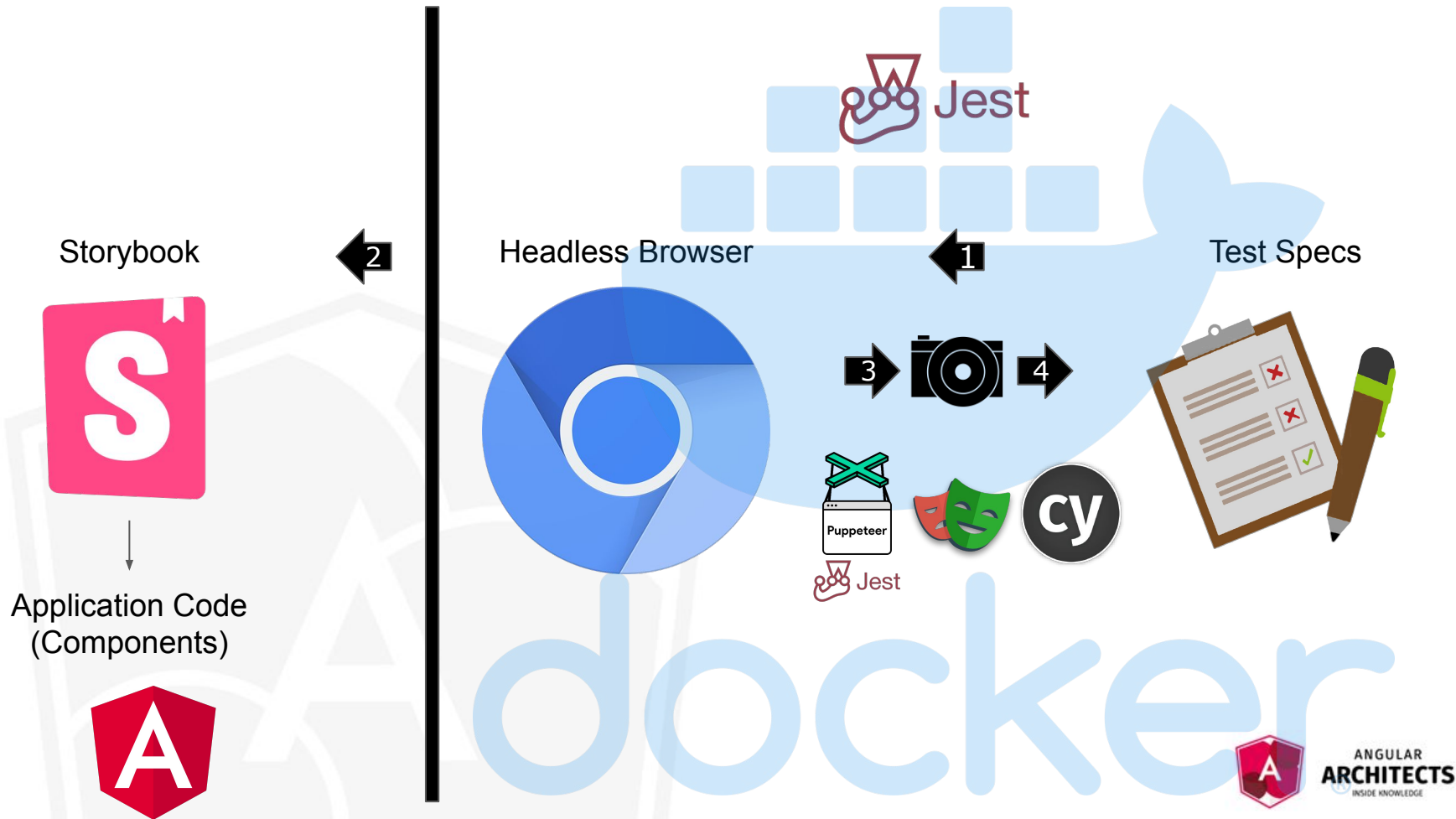
3 →



4 →



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Cloudanbieter



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Summary

- Visuelle Regression is an important Testing Technique
- Special Requirements for Infrastructure
 - Docker
 - Cloudprovider
- Storybook for Componenttests and Widget Gallery
- Testingtools:
 - Jest & Puppeteer
 - Playwright
 - Cypress



Lab Time

