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**ARCHITECTS**  
INSIDE KNOWLEDGE

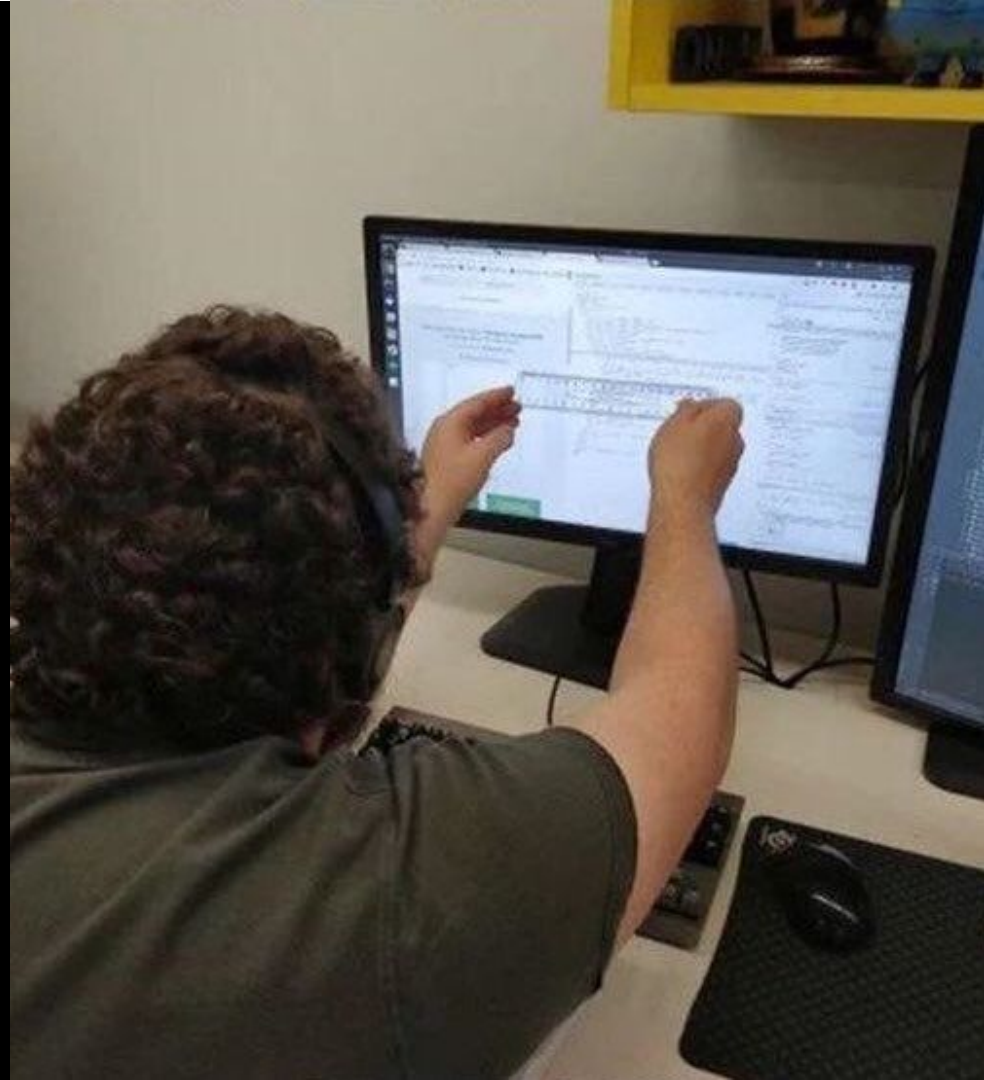
# Angular Testing

## 7 - Visual Regression and Storybook











Test Specs



Application Code



JSDom

@angular/testing



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1

Test Specs



3



4



Headless Browser



2

Frontend Application



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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

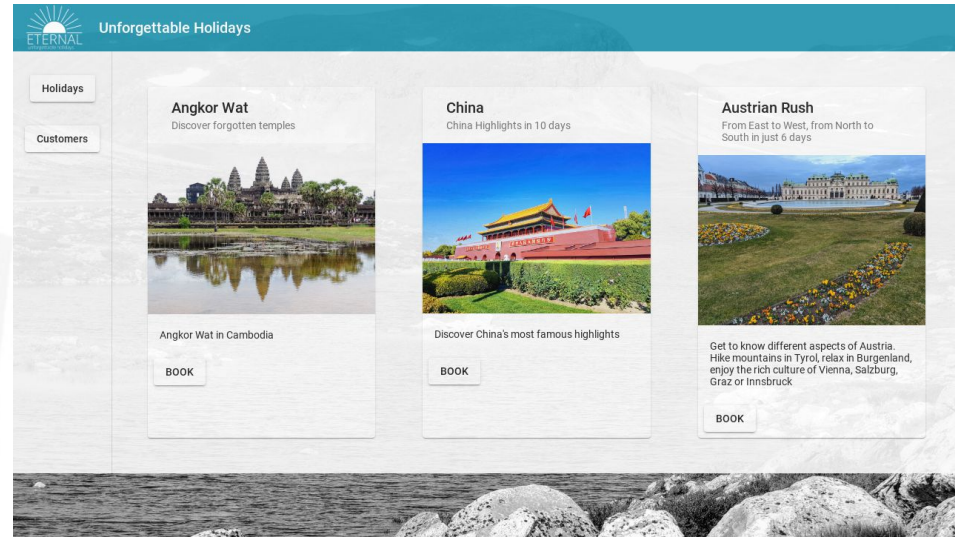
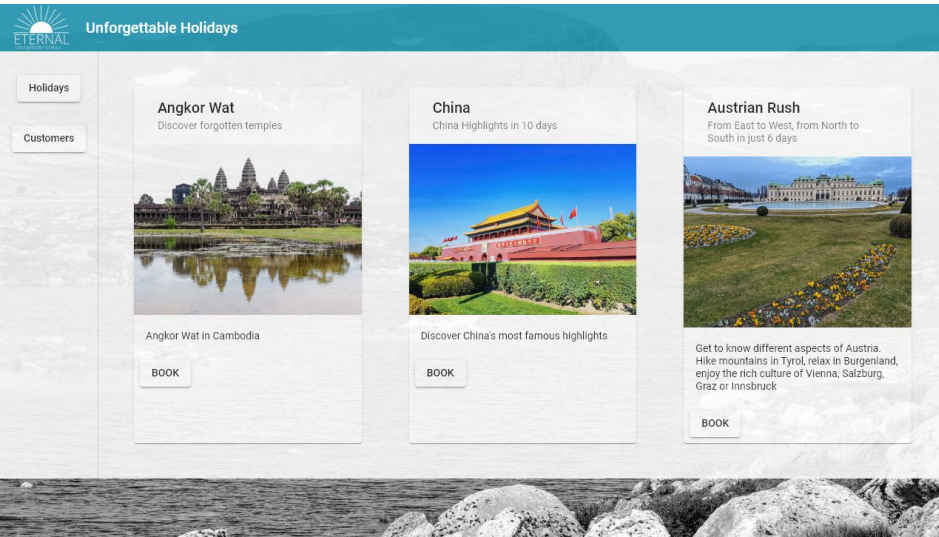


What about  
Pixel Matching???



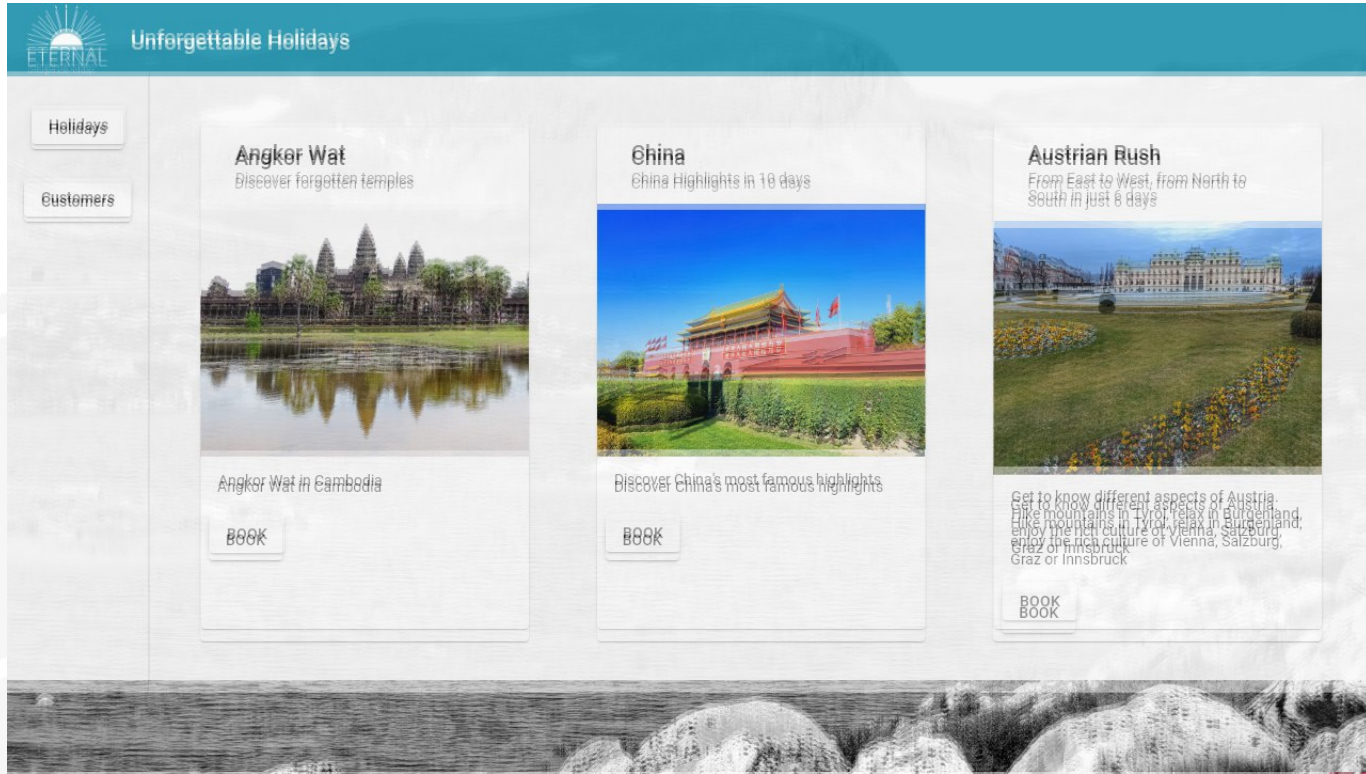
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# Spot the difference



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# Spot the difference



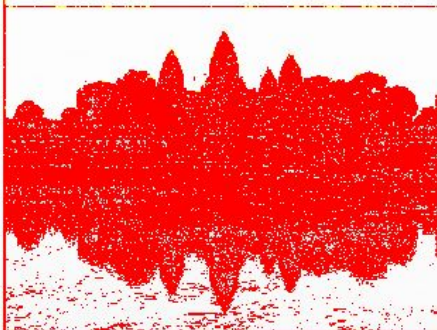


Holidays

Customers

## Angkor Wat

Discover forgotten temples

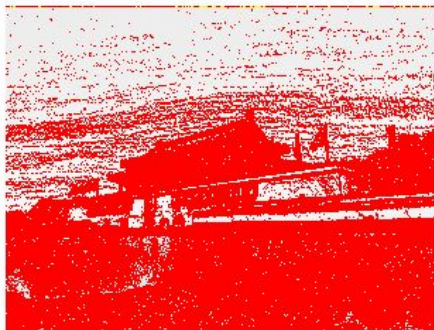


Angkor Wat in Cambodia

BOOK

## China

China Highlights in 10 days

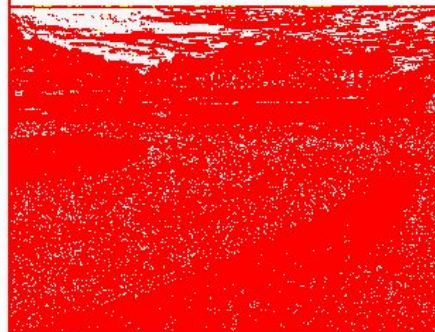


Discover China's most famous highlights

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## 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

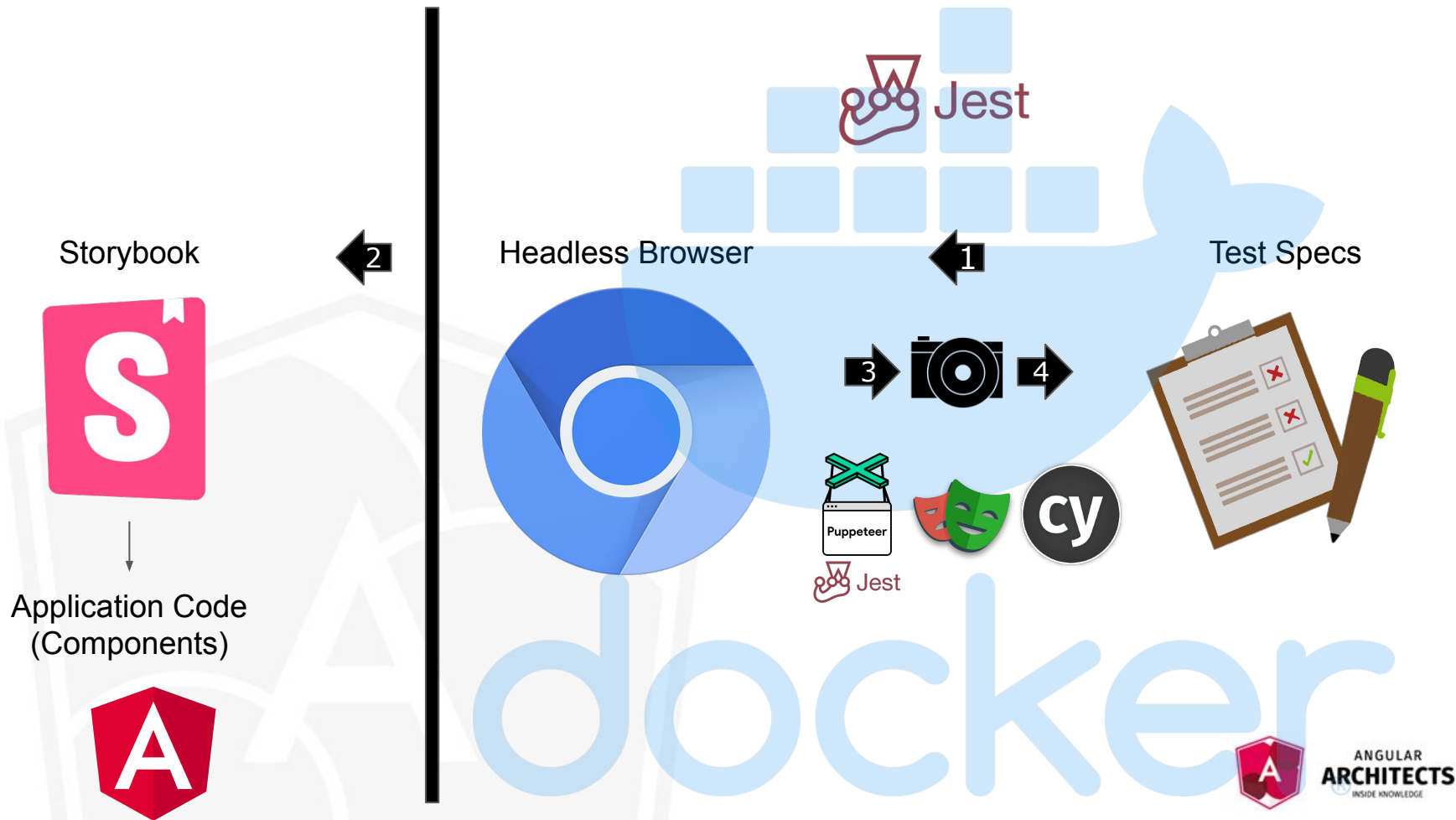
3



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

