

Intro to Web Dev and React

3DC

Bryce Goh



Basic React Introduction

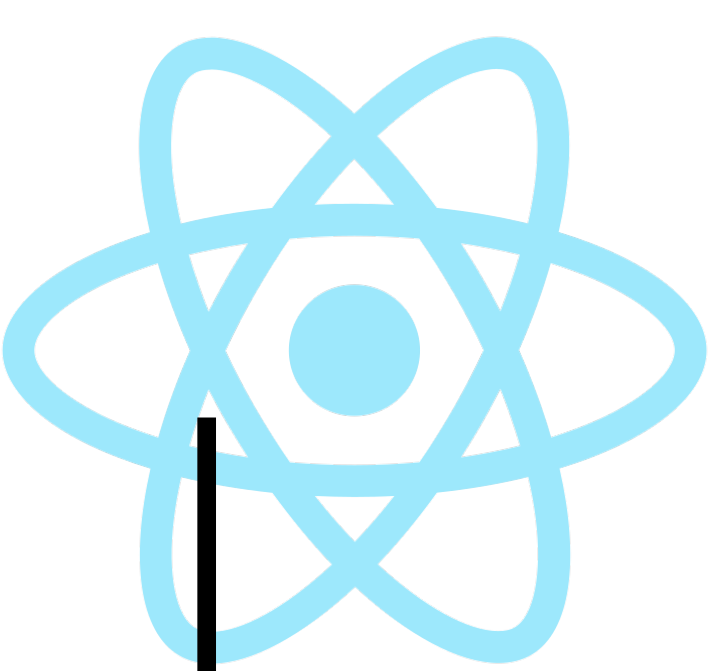
Basic overview of the web

Why react

Javascript Refreshers

Components and JSX

To-do App



Basic overview of the web



Browser

HTTP Request

GET

POST

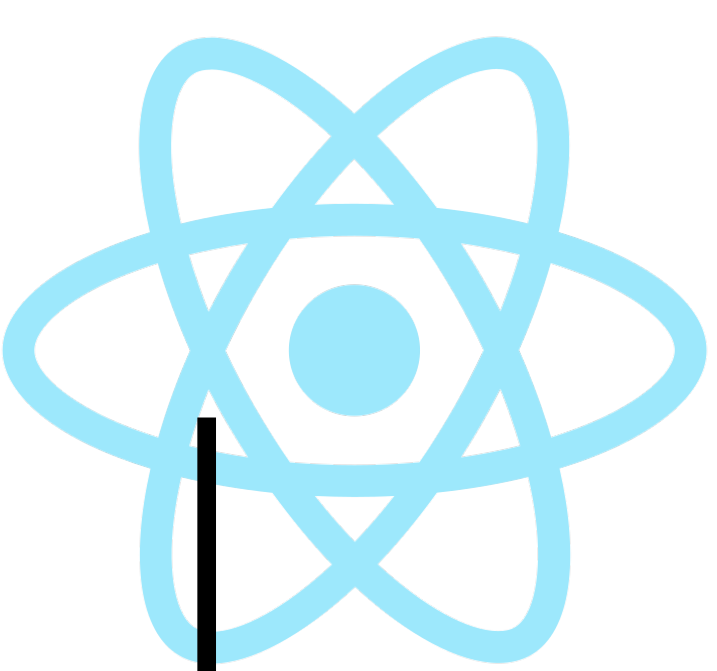
DELETE

PUT



Host Server

HTTP Response



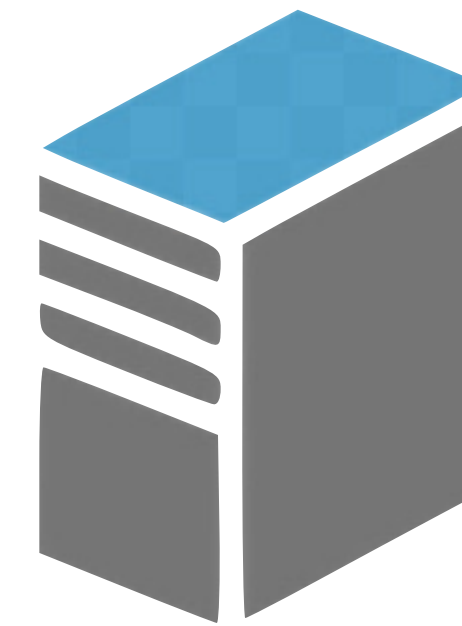
Basic overview of the web

www.sutd.edu.sg



Browser

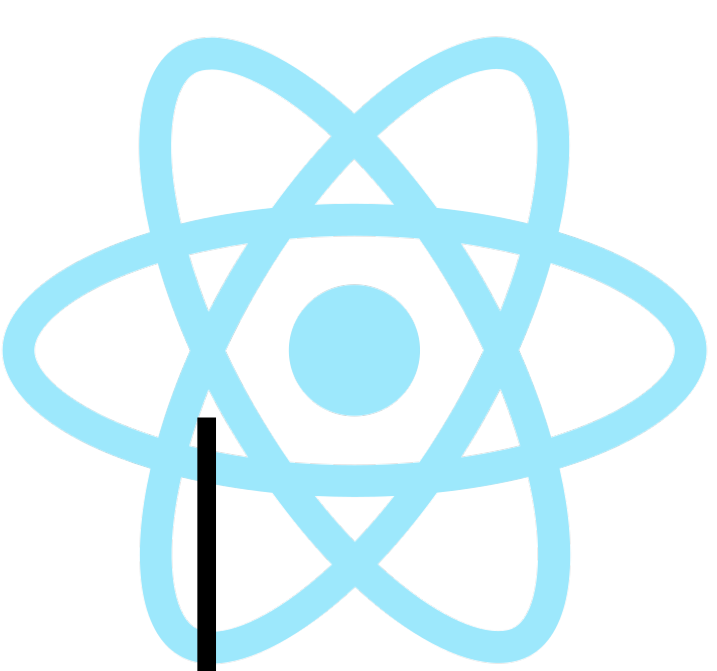
**HTTP Request
GET**



DNS Server

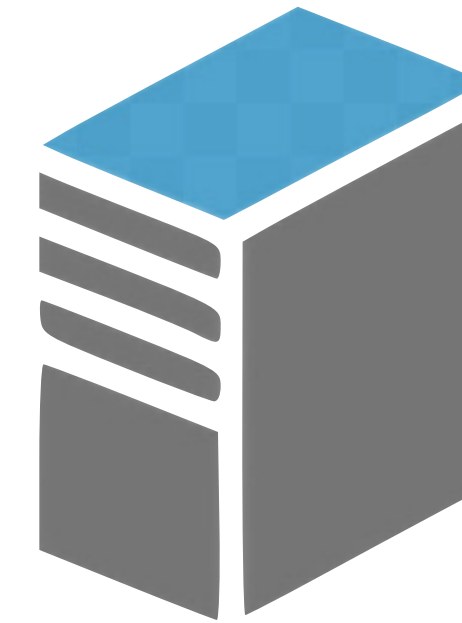


Host Server



Basic overview of the web

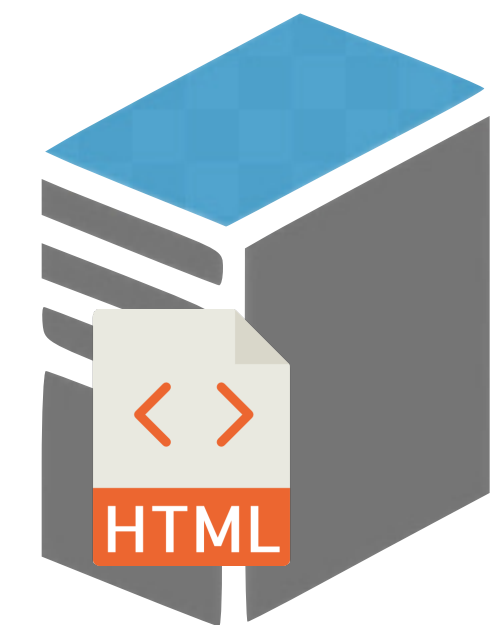
`www.sutd.edu.sg`



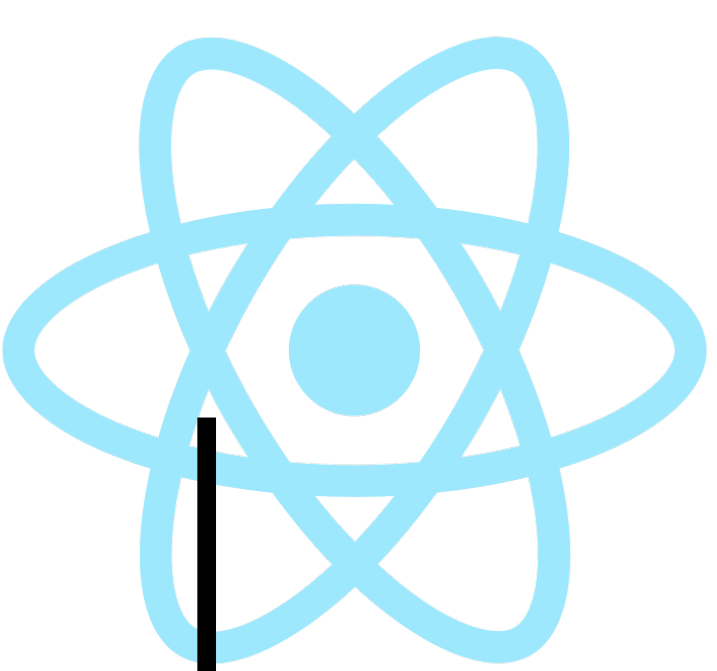
DNS Server



Browser



Host Server



Basic overview of the web



Browser

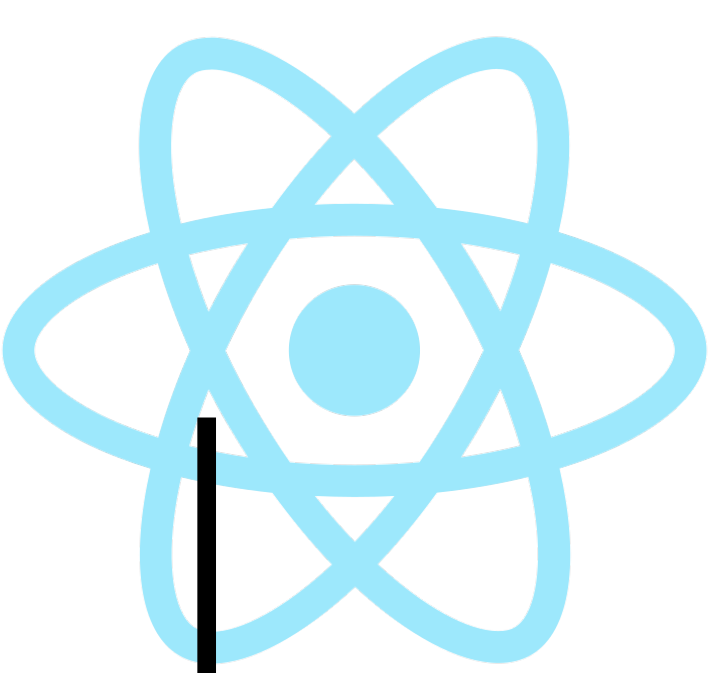


DNS Server

IP address



Host Server



Basic overview of the web



Browser

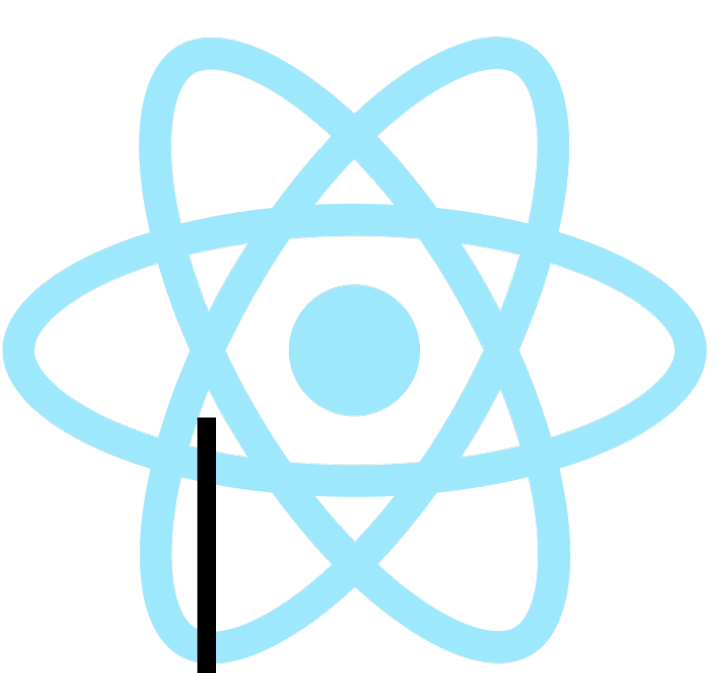


DNS Server

IP address



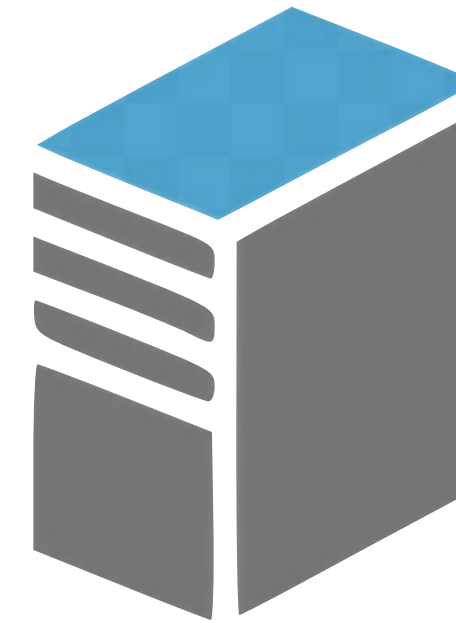
Host Server



Basic overview of the web

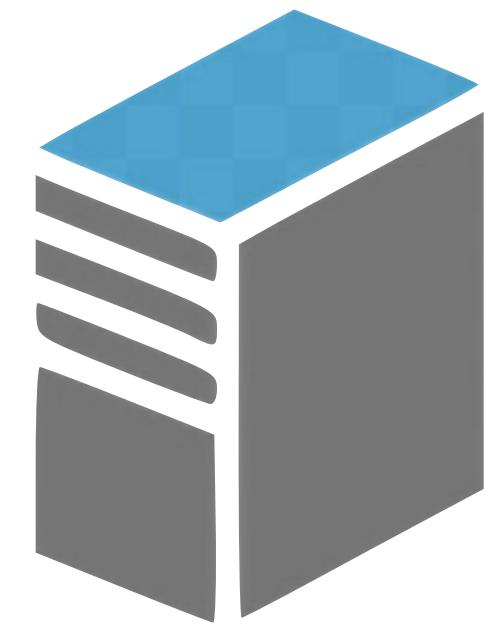


Browser

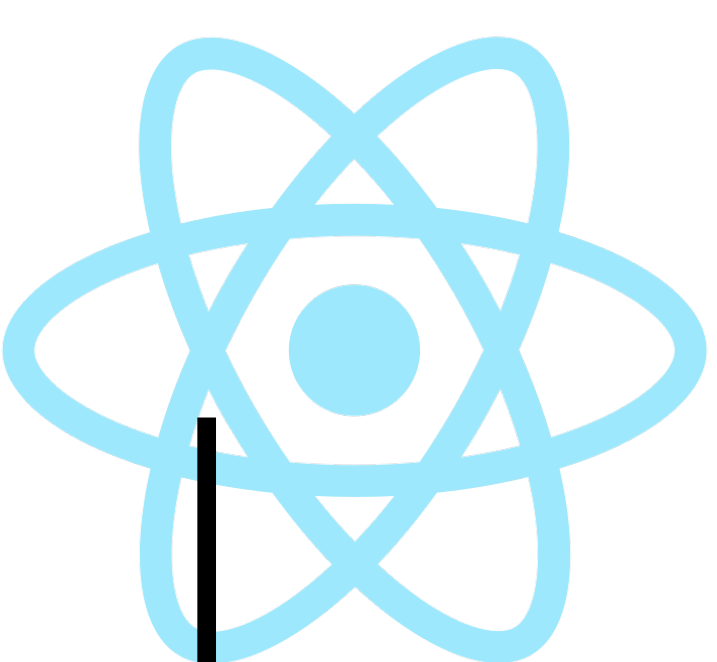


DNS Server

IP address



Host Server



Basic overview of the web



Browser

HTTP Request

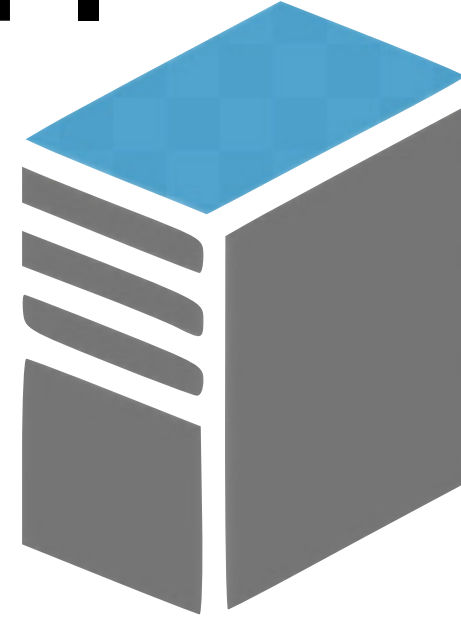
GET



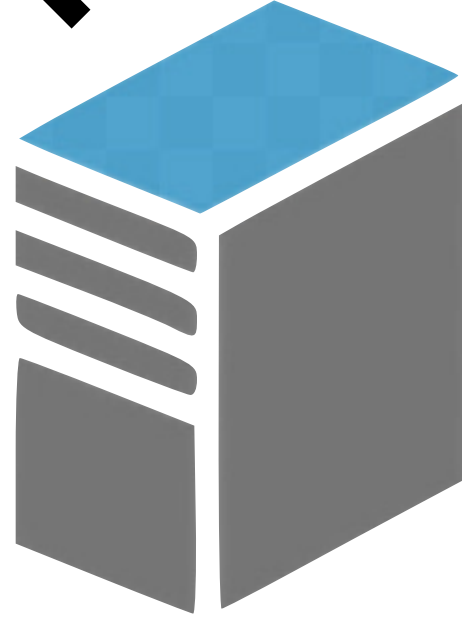
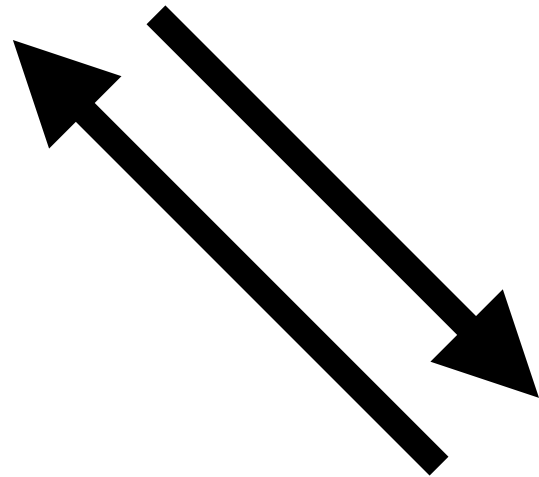
Response



API

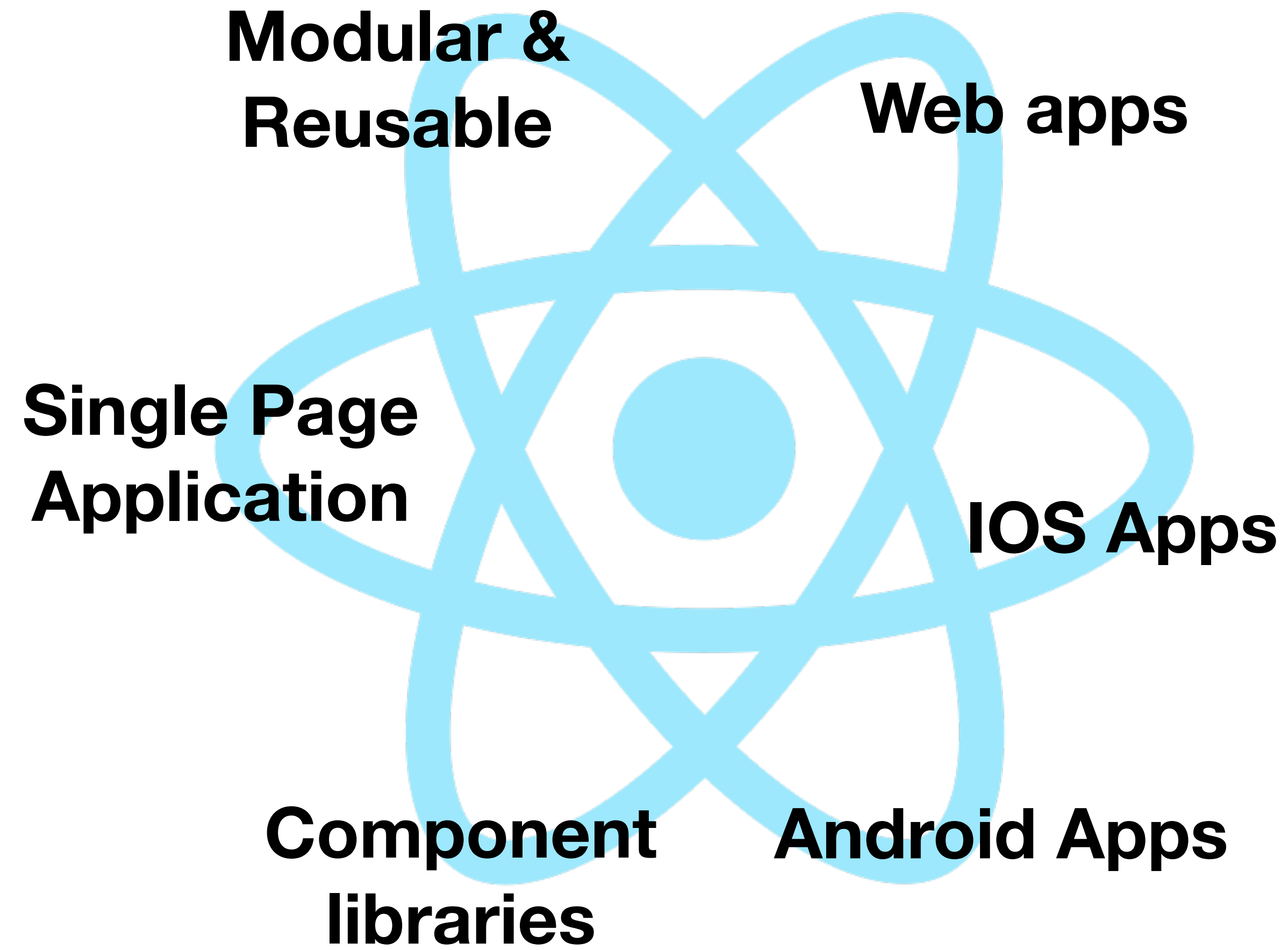


Server



Database

Why react



Javascript Refreshers

Defining Variables

variable_name = “hello world”

Const variableName = “hello world”
Let variableName = “hello world”

List/Array & Objects/ Dictionary

List = [....]

**Dictionary = {
Key: value
}**

Const list = [....]

**Const dictionary = {
Key: value
}**

Javascript Refreshers

Functions

Def function_name(argument):

...

...

return(...)

Const functionName = (argument) => {

...

...

return(...)

}

Loops

For x in list:
print(x)

list.map((x , index) => {
console.log(x)
}
)

HTML/CSS Refreshers

<div>

<div/>

HTML/CSS Refreshers

<div>

<input>

<input/>

<button

<button/

<div/>

HTML/CSS Refreshers

<div>

<input>

.className{

background-colour:red

}

<input/>

<button

<button/

<div/>

HTML/CSS Refreshers

<div>

<input>

```
.className{  
background-colour:red  
}
```

</input>

<button

```
.className{  
align: center  
}
```

</button>

<div/>

REACT

Browser

Components

Components

REACT

Function

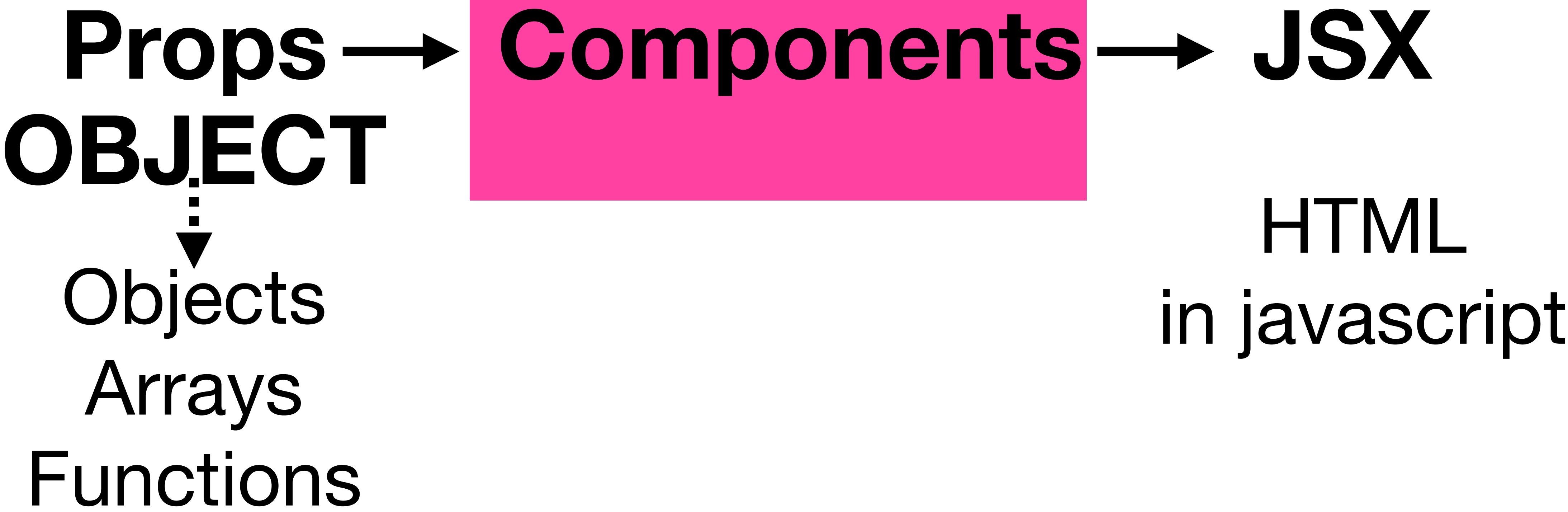
Props → Components → JSX



```
graph LR; Props --> Components; Components --> JSX;
```

REACT

Function



REACT

Function

Props
OBJECT

Components

JSX

HTML

in javascript

Objects

Arrays

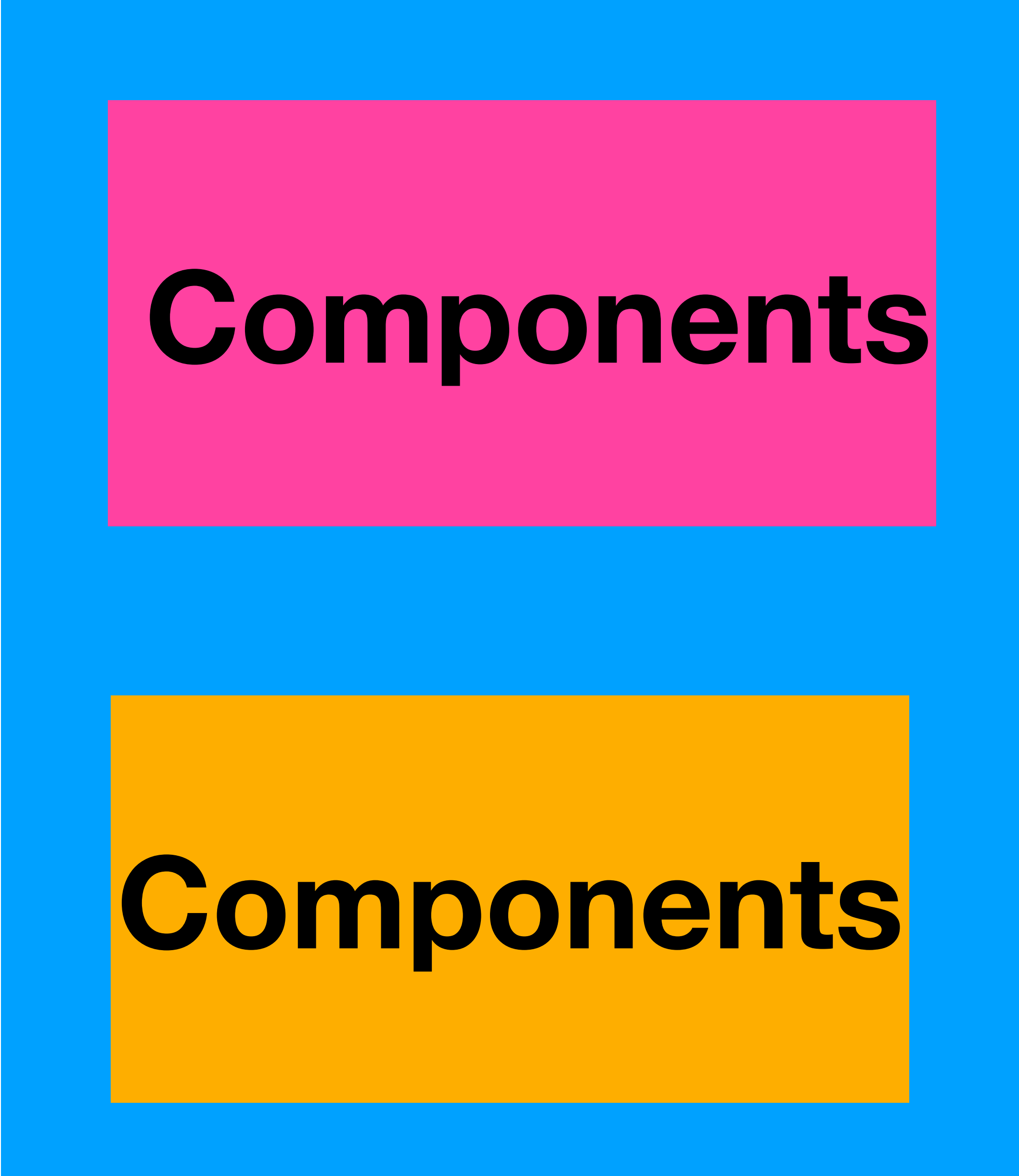
Functions

Props → Components → JSX

```
<div>
{
  array.forEach( x =>
    <MySecondComponent
      firstProp = {x}
    />
  )
}
</div>
```

```
Const MySecondComponent = (props) => {
  return(
    <div>
      props.firstProp
    </div>
  )
}
```

REACT



State



DEMO For today

INPUT FIELD

SAVE BUTTON

REMINDER ROW COMPONENT

DEL

REMINDER ROW COMPONENT

DEL

REMINDER ROW COMPONENT

DEL

State



DEMO For today

INPUT FIELD

DATA

SAVE BUTTON

REMINDER ROW COMPONENT

DEL

REMINDER ROW COMPONENT

DEL

REMINDER ROW COMPONENT

DEL

State



DEMO For today

INPUT FIELD

SAVE BUTTON

REMINDER ROW COMPONENT

DEL

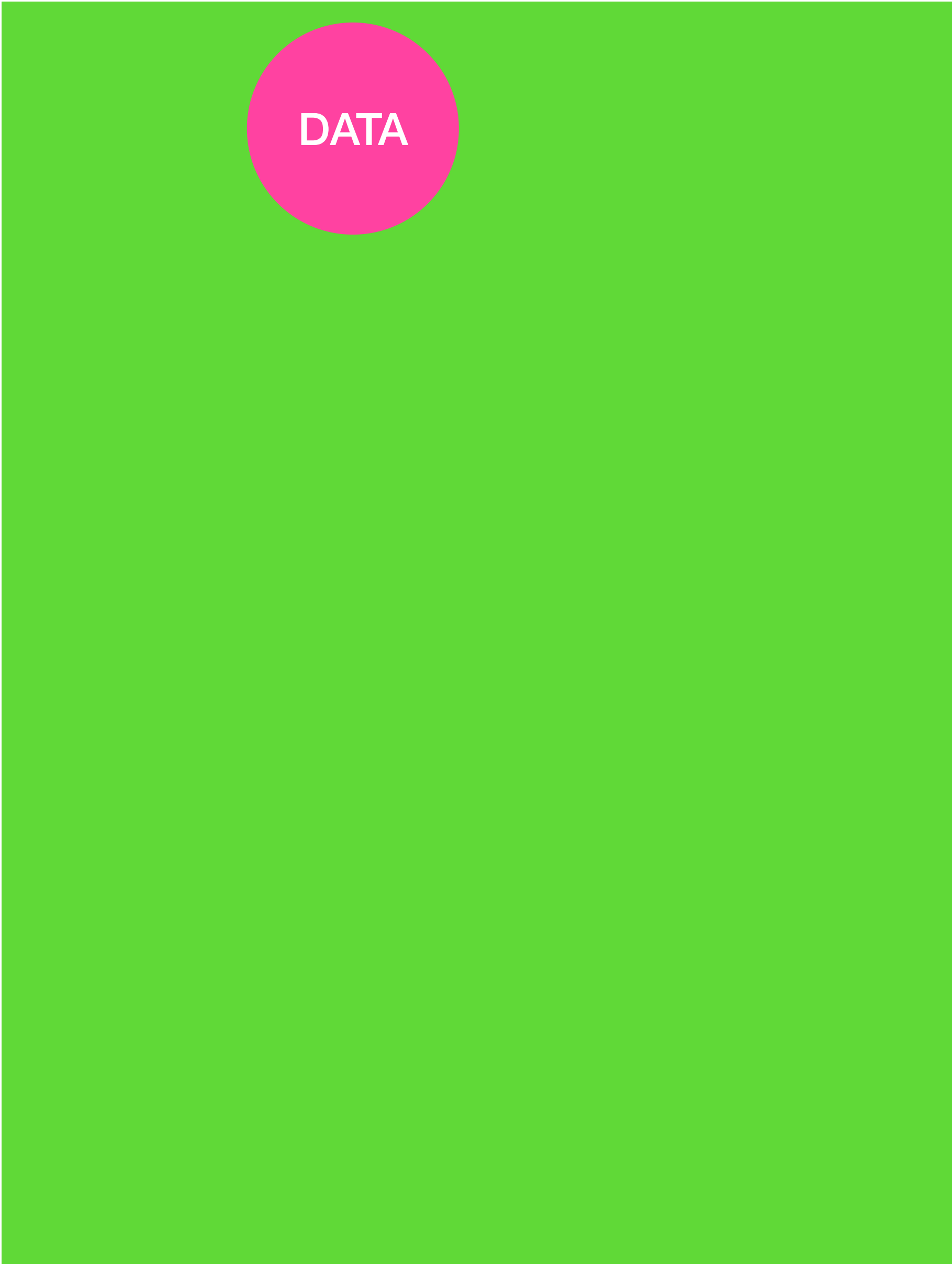
REMINDER ROW COMPONENT

DEL

REMINDER ROW COMPONENT

DEL

State



DEMO For today

INPUT FIELD

SAVE BUTTON

REMINDER ROW COMPONENT

DEL

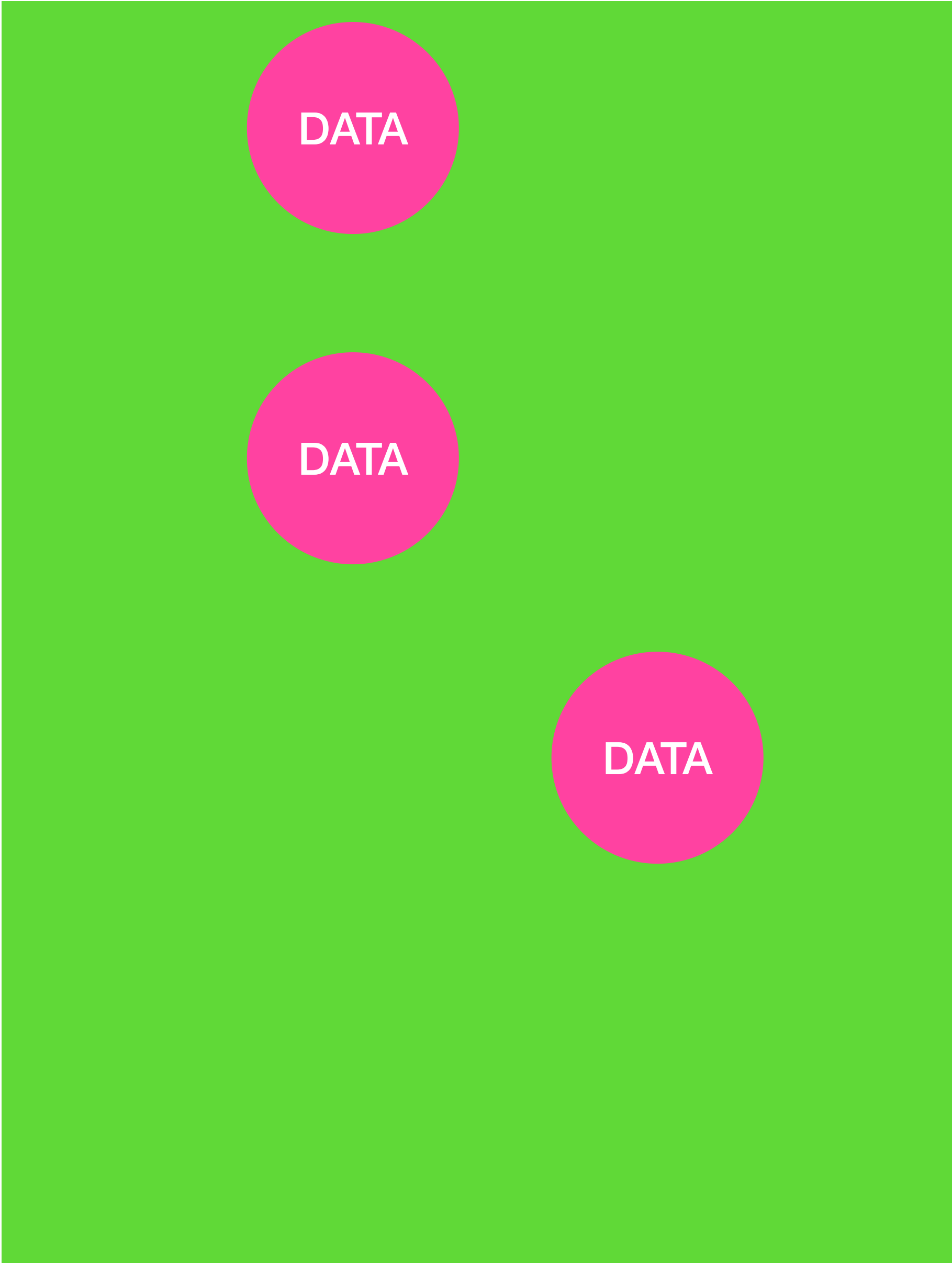
REMINDER ROW COMPONENT

DEL

REMINDER ROW COMPONENT

DEL

State



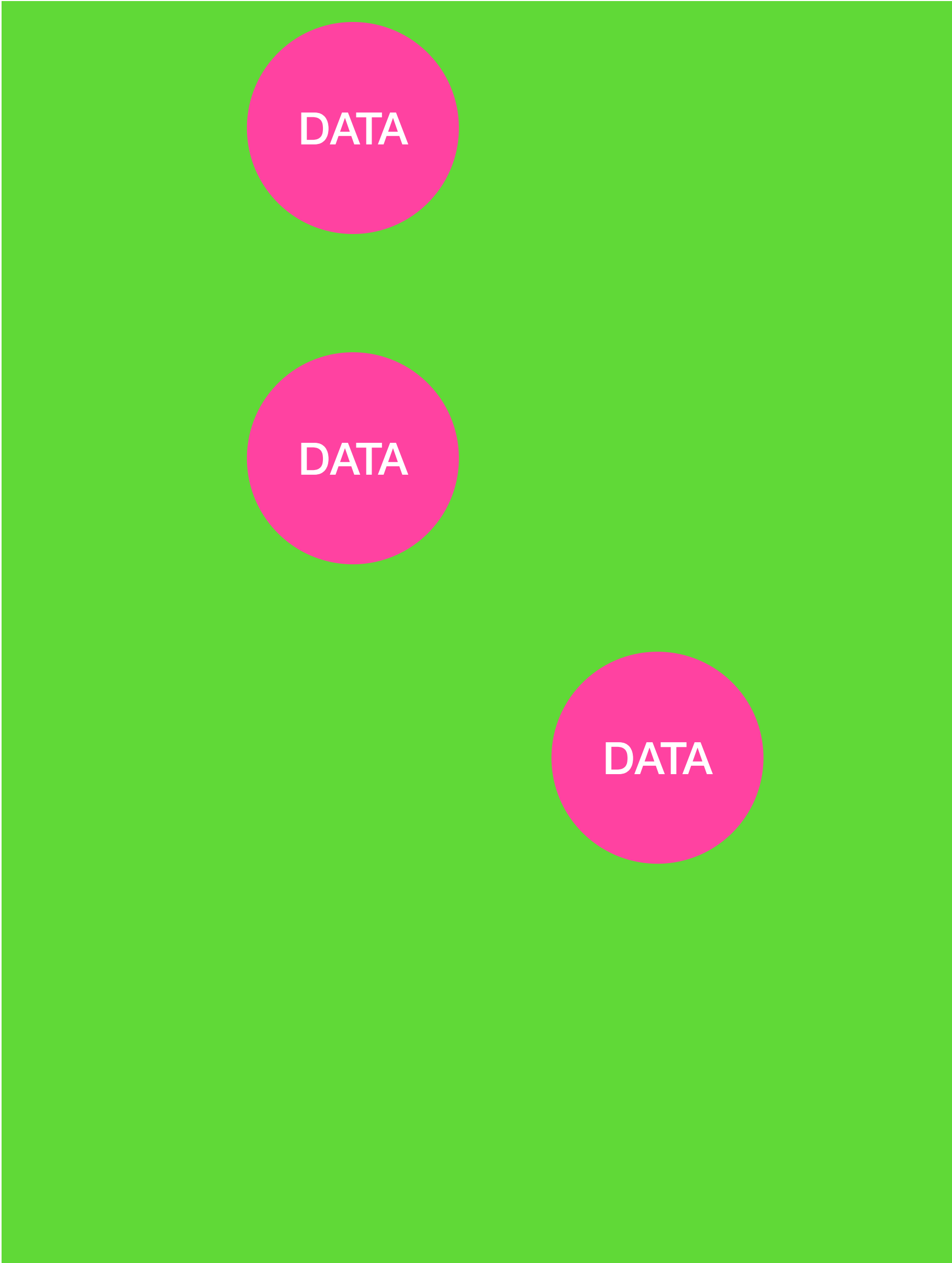
DEMO For today

INPUT FIELD

SAVE BUTTON

REMINDER ROW COMPONENT	DATA	DEL
REMINDER ROW COMPONENT	DATA	DEL
REMINDER ROW COMPONENT	DATA	DEL

State



DEMO For today

INPUT FIELD

SAVE BUTTON

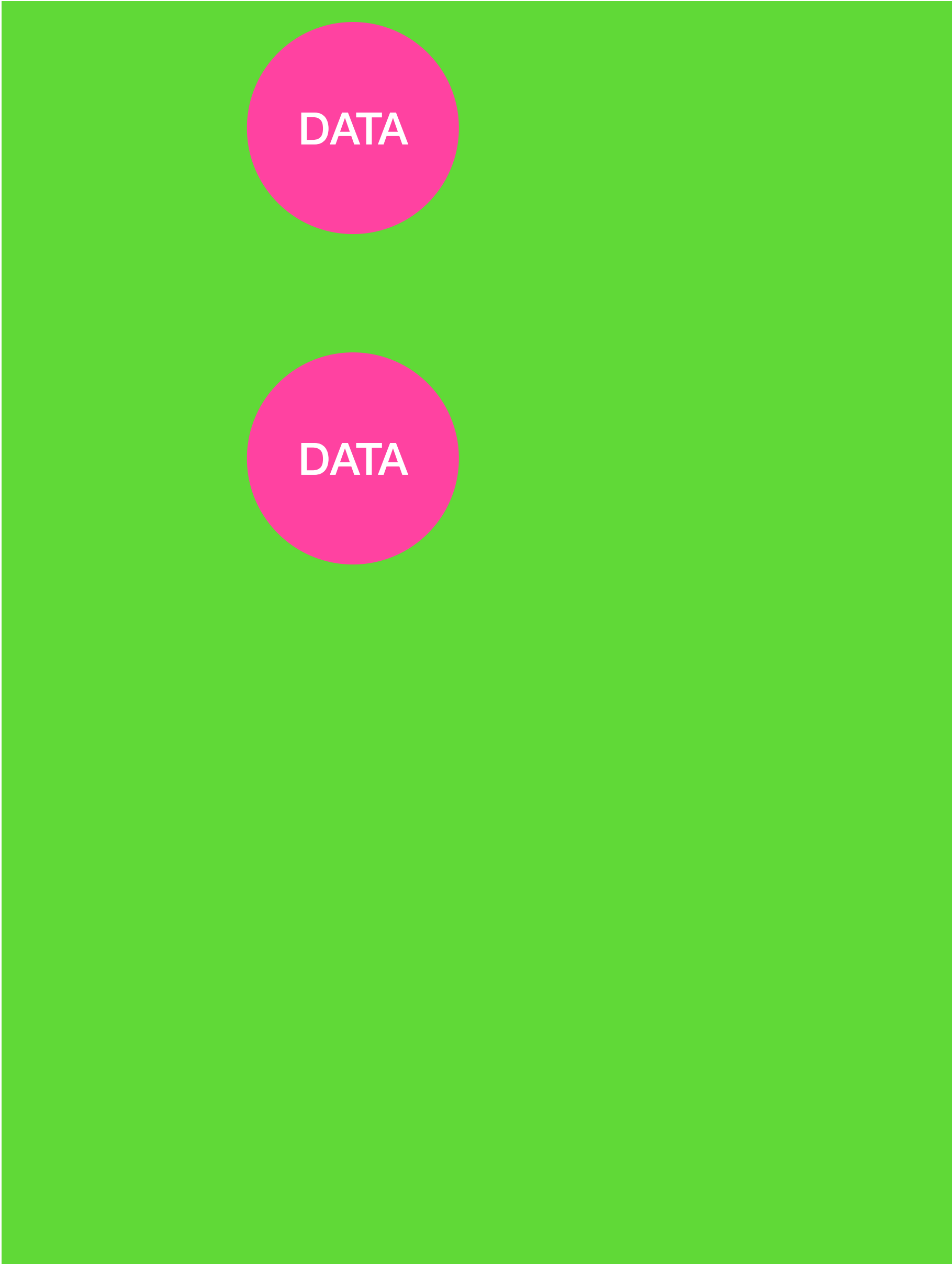
REMINDER ROW COMPONENT

DEL

REMINDER ROW COMPONENT

DEL

State



DEMO For today

State

INPUT FIELD

SAVE BUTTON

REMINDER ROW COMPONENT

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DEMO For today

INPUT FIELD

SAVE BUTTON

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DEMO For today

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REMINDER ROW COMPONENT

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REMINDER ROW COMPONENT

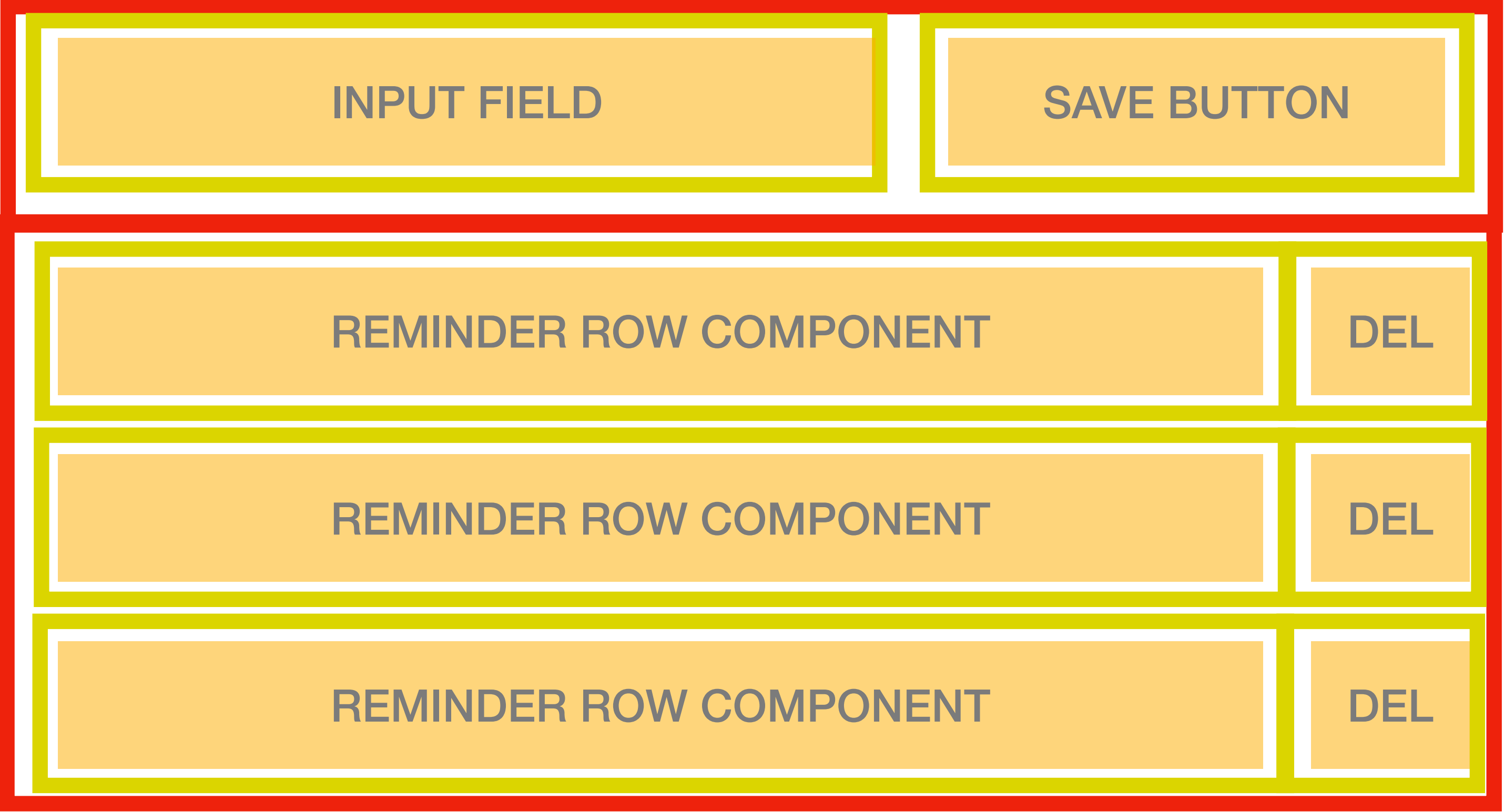
DEL

State



DEMO For today

Flexbox



<div>

<input>

.className{

background-colour:red

}

<input/>

<button

.className{

.align: center

}

<button/

<div/>

**className =
“mainContainer”**

DIV

DIV

DIV

```
.mainContainer{  
  display: flex;  
}
```

DIV

DIV

DIV

```
.className{  
  
  display: flex;  
  flex-direction: row;  
  
}
```

DIV

DIV

DIV

```
.className{
```

```
  display: flex;  
  flex-direction: row;
```

```
  Justify-content:  
  space-around;
```

```
}
```

DIV

DIV

DIV

```
.className{
```

```
display: flex;  
flex-direction: row;
```

```
Justify-content:  
space-around;
```

```
Align-content:  
Centre  
}
```

Things to explore

REACT

React lifecycles

React Browser Router

Class based components

Redux / React context

Component libraries

- antd

MOBILE

React Native with expo

BACKEND

NodeJS Express

- API

- Middleware

- Managing sessions

- Account system

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