

# Forms

- The different kinds of form components are 'input', 'option' and 'textarea'
- React form components are special in that their property values can be changed by the user as well as the code.
- We call these special props "Interactive Props".

# Forms - Interactive Props

- `value`: supported by `<input>` and `<textarea>` components.
- `checked`: supported by `<input>` components of type checkbox or radio.
- `selected`: supported by `<option>` components.

# Controlled Components

- form components that have the property "value" defined.
- if you're going to define the "value" property you must define the "onChange" handler so that you can be notified everytime the user modifies that form element.

# Example

```
class FormTest extends Component {
  constructor(props) {
    super(props);
    this.state = {
      name: 'David'
    };

    this.handleChange = this.handleChange.bind(this);
  }
  render() {
    return <div>
      <input type='text' value={this.state.name} onChange={this.handleChange}/>
    </div>
  }
  handleChange(event) {
    this.setState({
      name: event.target.value
    });
  }
}
```

# Uncontrolled Components

- Simply, form components that do not have a "value" property defined.
- You can define the "defaultValue" if you want the component to be initialized with some value.

# Example - Select Form Elements

```
<select value="CA" onChange={this.handleSelectChange}>  
  <option value="CA">California</option>  
  <option value="FL">Florida</option>  
  <option value="NY">New York</option>  
</select>
```

# Exercise - Create a Message

- Inside our react-messages app, display a form for creating a message.
- If they press 'send', the message should appear in the message list.

# Exercise - Form Edit

- Define a Component that displays a user's first and last name in two div tags on the screen along with an 'edit' button.
- When the user clicks on the 'edit' button, the user's first and last name are displayed in two input fields along with a 'save' and 'cancel' button. The 'edit' button, and two div tags should not be visible after the user presses 'edit'!
- The user is then allowed to make any changes they want and either press 'save' or 'cancel'
- If they press 'save' any changes they made are reflected into the two divs
- If they press 'cancel' any changes they made are discarded and the divs go back to what they were before pressing 'edit'