COMP6080: Web Front-End Programming
Tutorial 4

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Exercise: A Simple Form

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Important facts about form state:

- The submit button remains disabled until both a valid first
  name and valid email are entered. The state change occurs on
  keyup of either input fields.
- On blur of either input fields, if their value is invalid, the
  background of the input is turned a light red.
- On focus of either input fields, we remove any error
  backgrounds.

Part 1: In Vanilla JS

Let's first do it using Vanilla JS.

Part 2: In React

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Controlled Components

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Part 3: Formik

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Exercise: Basic React State

Use a basic HTML table to build a very simple 'Tic-Tac-Toe' game. Users can take turns clicking on cells, filling them with X or O depending on whose turn it is. Do this using React.

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As bonus exercises you may want to explore:

- Using loops as part of rendering.
- Accounting for the 'finish' (goal) state.

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Let's have a look at the course's solution, and see if we can code review it.

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Things I can spot are:

1. The `defaultBoard` is being recreated on every single render.
2. `firstUser` shouldn't be named `firstUser`.
3. The board goes from being an array of arrays to being a dictionary of arrays.
4. `newBoard[x][y]` still updates the existing array in-place.
5. `border="1"` is deprecated.
6. It might be easier to create the table in a loop.