

Deferred transitions

A particularly powerful feature of Svelte's transition engine is the ability to *defer* transitions, so that they can be coordinated between multiple elements.

Take this pair of todo lists, in which toggling a todo sends it to the opposite list. In the real world, objects don't behave like that — instead of disappearing and reappearing in another place, they move through a series of intermediate positions. Using motion can go a long way towards helping users understand what's happening in your app.

We can achieve this effect using the **crossfade** function, which creates a pair of transitions called **send** and **receive**. When an element is 'sent', it looks for a corresponding element being 'received', and generates a transition that transforms the element to its counterpart's position and fades it out. When an element is 'received', the reverse happens. If there is no counterpart, the **fallback** transition is used.

Find the `<label>` element on line 65, and add the **send** and **receive** transitions:

```
<label
  in:receive="{{key: todo.id}}"
  out:send="{{key: todo.id}}"
>
```

Do the same for the next `<label>` element:

```
<label
  class="done"
  in:receive="{{key: todo.id}}"
  out:send="{{key: todo.id}}"
>
```

Now, when you toggle items, they move smoothly to their new location. The non-transitioning items still jump around awkwardly — we can fix that in the next chapter.