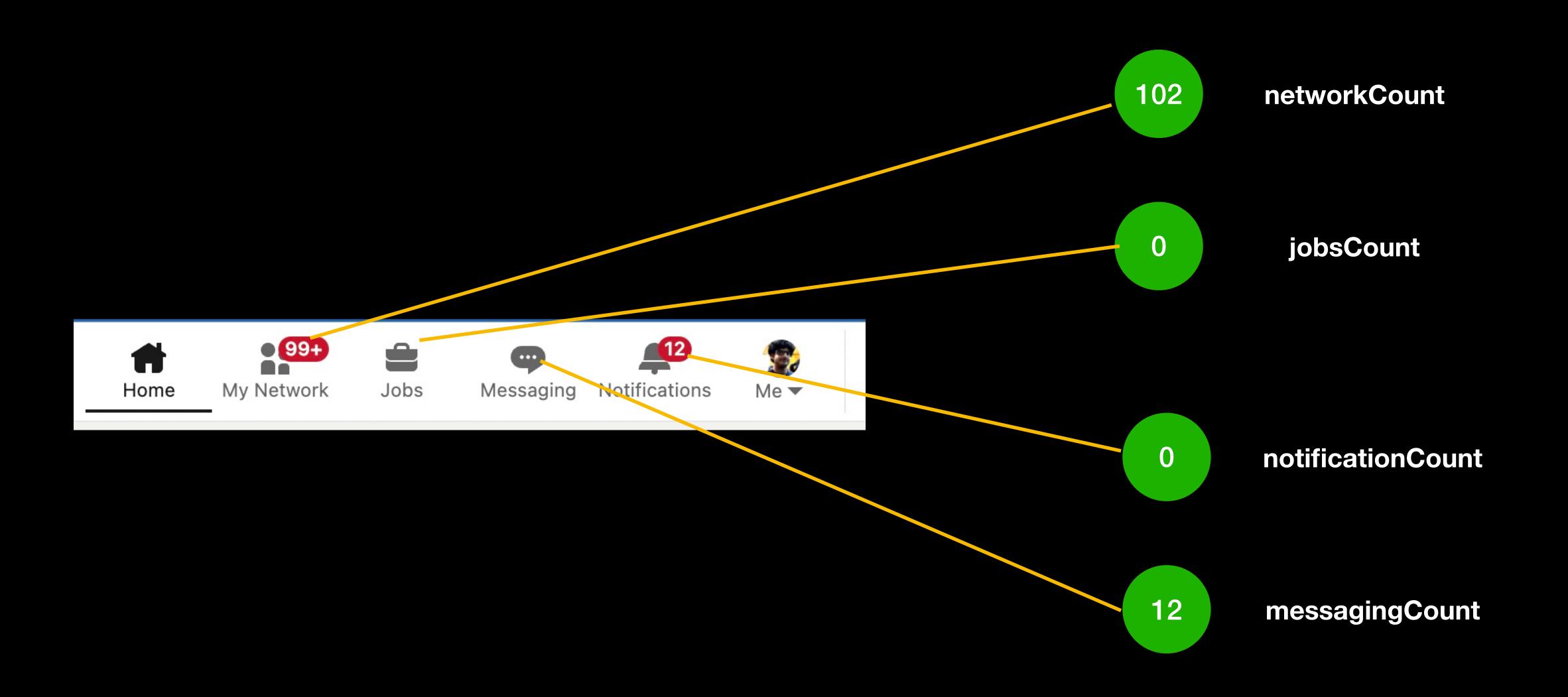
#### Basic

Atoms, selectors, Asynchronous data queries useRecoilState, useRecoilValue, useSetRecoilState

Advance atomFamily, selectorFamily useRecoilStateLoadable, useRecoilValueLoadable

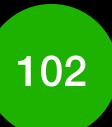
Code - https://github.com/100xdevs-cohort-2/7.4

# Atom

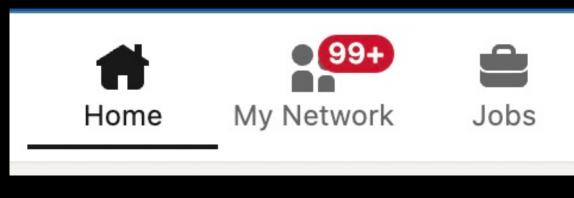


### Selectors

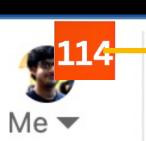
Lets say you want to show all notification counts above your avatar

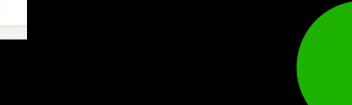










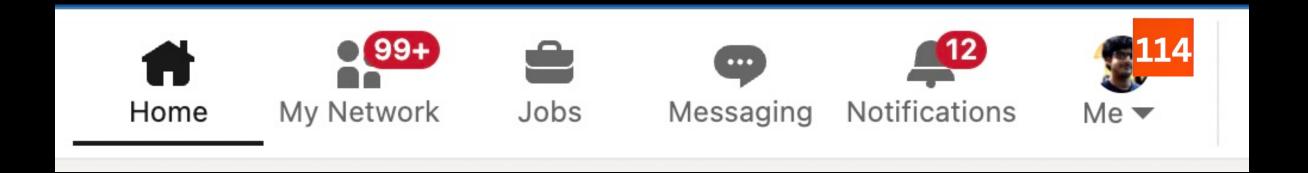


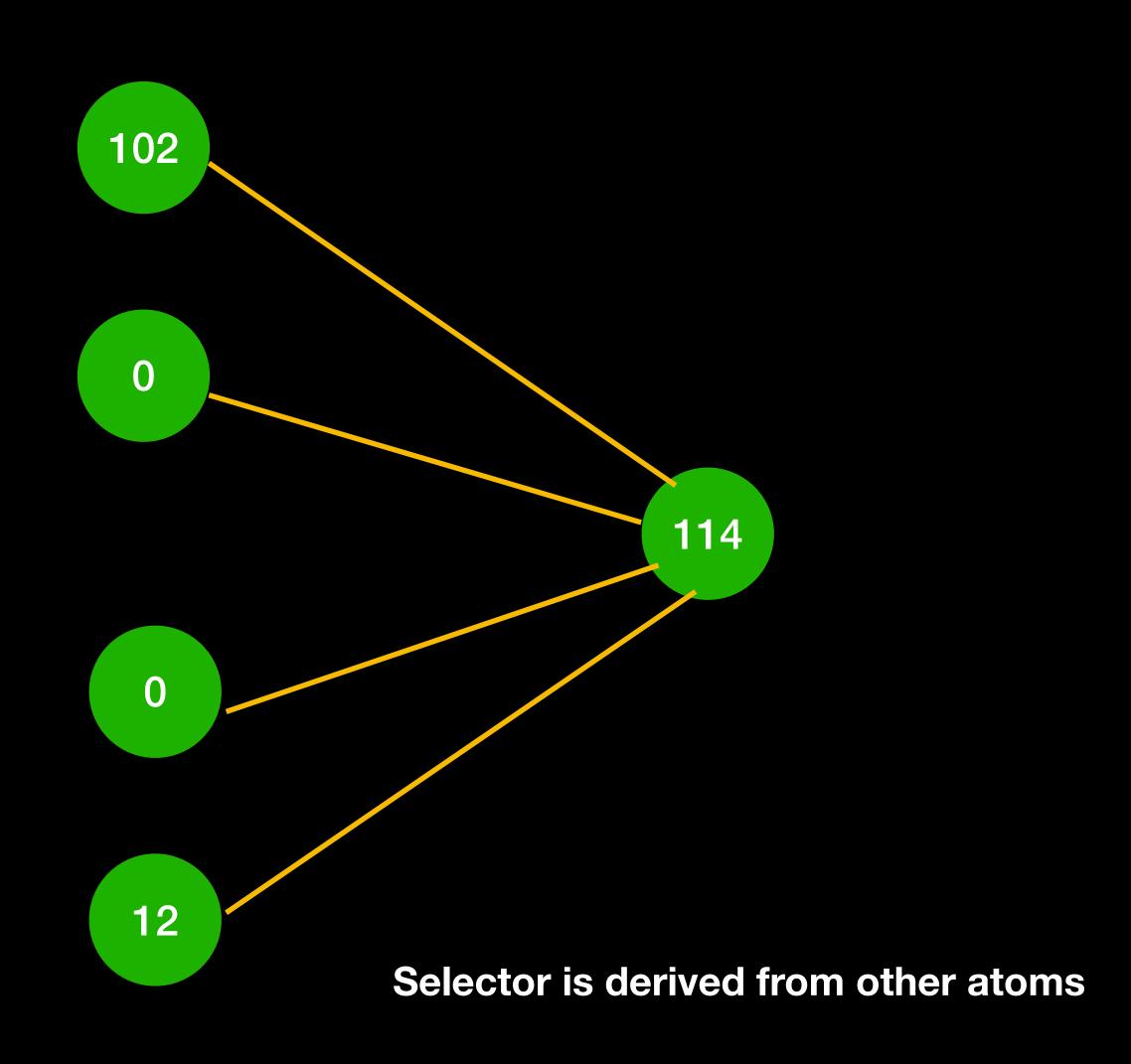
114



#### Selectors

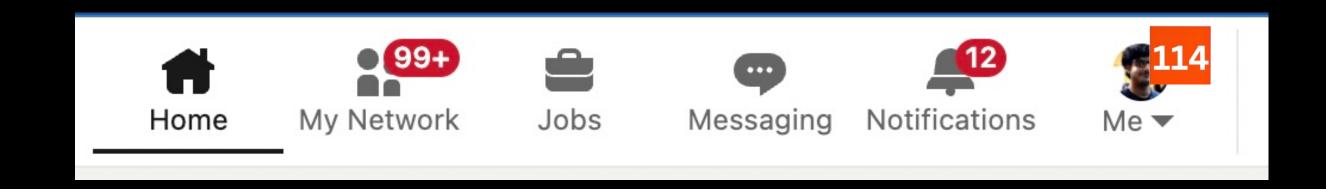
Lets say you want to show all notification counts above your avatar





#### Atoms and Selectors

Lets build this Appbar component (hardcode values)



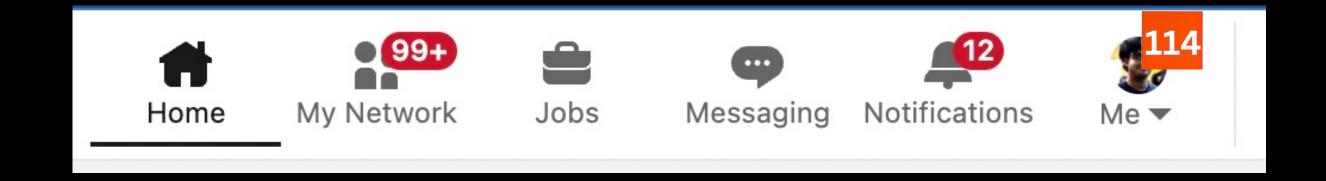
Basic

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Advance atomFamily, selectorFamily useRecoilStateLoadable, useRecoilStateLoadable

# Asynchronous data queries

Lets build this Appbar component (values coming from backend)



https://sum-server.100xdevs.com/notifications

#### Basic

Atoms, selectors, Asynchronous data queries useRecoilState, useRecoilValue, useSetRecoilState

Advance atomFamily, selectorFamily useRecoilStateLoadable, useRecoilStateLoadable

Problem - Sometimes you need more than one atom for your use case

For example - Creating a todo application

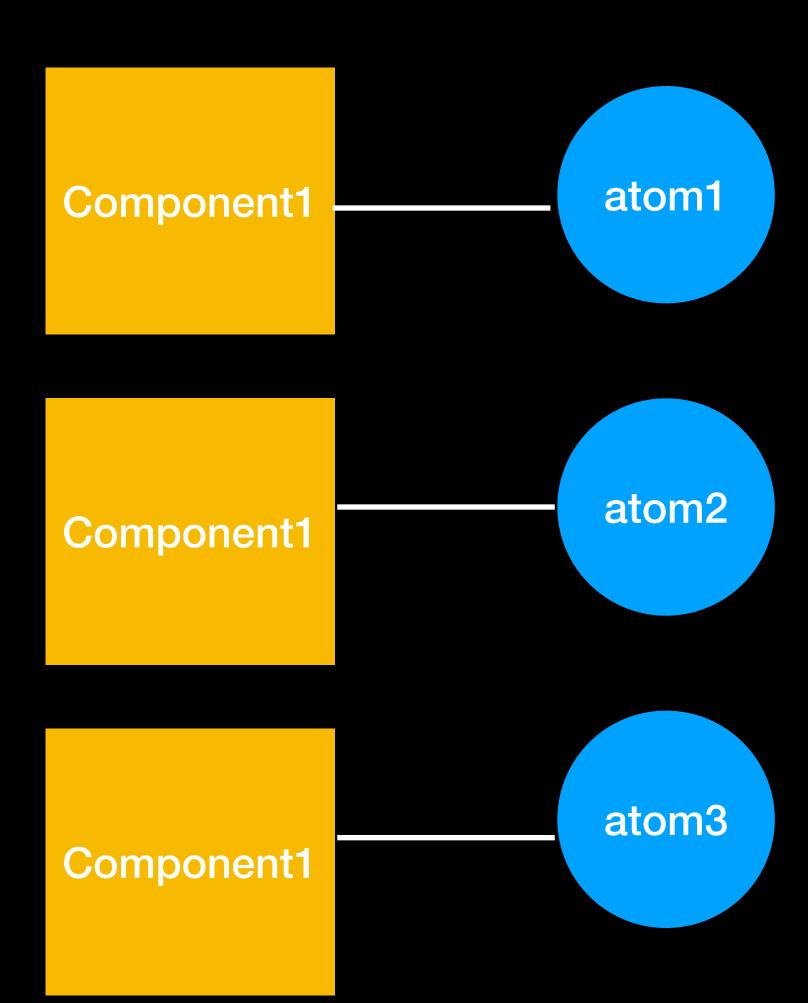
Question - Create a component that takes a todo id as input, and renders the TODO

You need to store the Todo in an atom (can't use useState)

All the TODOs can be hardcoded as a variable

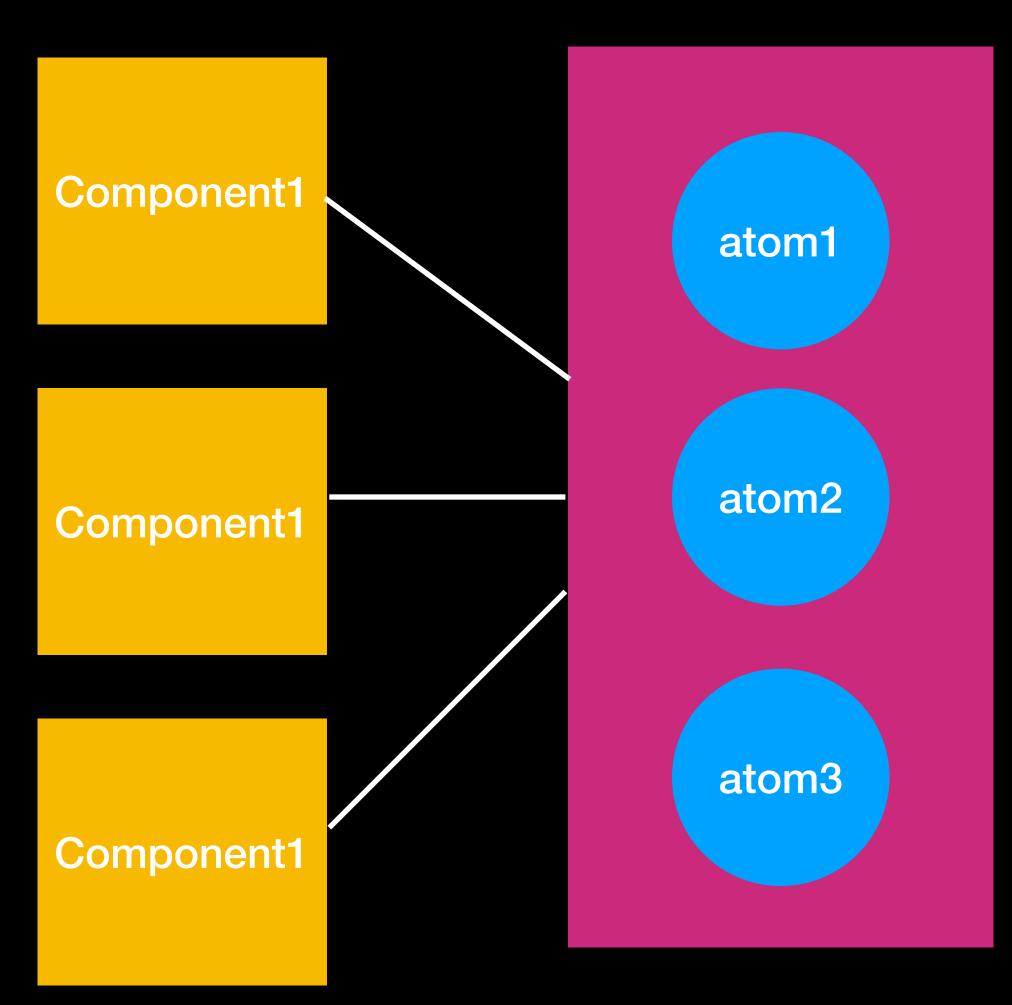
```
"todo": {
    "id":2,
    "title":"Todo 2",
    "descripton":"This is todo 2",
    "completed":false
    }
}
```

Would you have a single atom?
Would you have one atom per todo?
How would you create (and delete) todos dynamically?



atomFamily

Would you have a single atom ?
Would you have one atom per todo?
How would you create (and delete) todos dynamically?



Let's code the todo app using an atom family

```
src > Js atoms.js > ...
       import { atomFamily } from "recoil";
       const TODOS = [{
           id: 1,
           title: "Go to Gym",
           description: "Hit the gym from 7-9"
  6
       }, {
  8
           id: 2,
           title: "Go to eat food",
  9
           description: "Eat food from from 9-11"
 10
 11
       },]
 12
 13
       export const todosAtomFamily = atomFamily({
         key: 'todosAtomFamily',
 14
         default: id => {
           return TODOS.find(x => x.id === id)
 18
```

#### Basic

Atoms, selectors, Asynchronous data queries useRecoilState, useRecoilValue, useSetRecoilState

Advance atomFamily, selectorFamily useRecoilStateLoadable, useRecoilValueLoadable

# selectorFamily

In the TODO application, lets say you are supposed to get TODOs from a server

https://sum-server.100xdevs.com/todo?id=1

### selectorFamily

In the TODO application, lets say you are supposed to get TODOs from a server

https://sum-server.100xdevs.com/todo?id=1

#### Basic

Atoms, selectors, Asynchronous data queries useRecoilState, useRecoilValue, useSetRecoilState

Advance atomFamily, selectorFamily

useRecoilStateLoadable, useRecoilValueLoadable

Code - https://github.com/100xdevs-cohort-2/7.4

# useRecoilStateLoadable, useRecoilValueLoadable

What happens when the values aren't loaded immedietely?

For example, the TODOs that are coming back from the server?

How can we show loader on screen when that happens rather than an empty state?