According to our book, Angular Development with Typescript, an Observable is a “Data stream that pushes data over time.” (Fain & Moiseev, 2019) And that there are two types of Observables, Hot and Cold. A Cold Observable will make a “data producer for each subscriber” and the Hot Observable will make the data producer at the beginning while the subscribers will obtain the data from a single producer at the beginning of the subscription. (Fain & Moiseev, 2019) Angular also has some built in observables that can do event handling, subscribing to the parameters of the route, checking form statuses, and it will handle HTTP requests among many other uses. (Fain & Moiseev, 2019) Although according to the book we are also able to do event handling with or without the use of Observables with the use of DOM events. (Fain & Moiseev, 2019)

In order to use DOM events with observables we will need to do a few things. First we need to reference the object of the DOM. Then we will create the observable with Observable.fromEvent() with the DOM reference and the event. (Fain & Moiseev, 2019) Lastly, we will “subscribe to this observable and handle the events.” (Fain & Moiseev, 2019)

We are also able to do observables with forms API. Angular already has this built in, we can use valueChange which sends out the data when values on the form control change. (Fain & Moiseev, 2019) Also we can use statusChange which is also an observable that sends out the status of validation and is able to change the status “from valid to invalid” or invalid to valid, it works both ways. (Fain & Moiseev, 2019)

Reference:

Fain, Y., & Moiseev, A. (2019). *Angular Development with TypeScript* (2nd ed.). Manning.