Angular gives developers the ability to set up observables in their programs. A way to request information whenever it becomes available. It is not unlike subscribing to a newsletter or an RSS feed. When what you have subscribed to occurs, you will receive a notice of its availability.

The definition of an observable is, “It defines a one to many dependency relationships between objects so that one object changes state, all of its dependents are notified and updated automatically. (Badawy, 2019)”

When you create an observable, you automatically have access to three types of notifications: next, error, and complete. The next will continue to wait for the next notification. Error will stop waiting if an error is thrown. Complete will halt the subscription once called. Keep in mind that if the subscription is not dealt with before loading another section of the application, it could lead to a memory leak.

Angular uses RXJS library for its observables and observable streams. RxJS stands for Reactive Extensions for JavaScript. According to the RxJS website home page, RxJS is a library for reactive programming using Observables, to make it easier to compose asynchronous or callback-based code. RxJS introduces Observables, a new Push system for JavaScript. An Observable is a Producer of multiple values, "pushing" them to Observers (Consumers). A Function is a lazily evaluated computation that synchronously returns a single value on invocation.

With more and more reliance on asynchronous function calls being needed in our applications, RxJS has provided us with a very useful set of tools to use in conjunction with Angular applications.

References:

Badawy, A. M. (2019, November 12). *Understanding Observables (the right way) Part I*. Retrieved January 23, 2020, from https://dev.to/pevolutionahmed/understanding-observables-the-right-way-part-i-3f0l