# Angular Best Friends

## Module 4 Demo 3 – Creating and using an observable service

## Goal

Goal of this demo is to show an an observable service can be implemented to let components communicate no matter where they are in the hierarchy. This approach uses the observer pattern.

## Steps

1. The demo app is in the **module4demo3** folder.
2. Run **npm install** (if for the first time) and then **ng serve –open**.
3. Go to “**core > services > data.service.ts**”
4. Show that it has a BehaviorSubject. Briefly explain once again what BehavirSubjects do. Also note that the subject is private, but we expose an Observable that is public.
5. Go to the **addCustomer()** function. What this does is that when a new customer is added, it calls the next() function on the subject and provides the customers array as argument.
6. So the main point here is that components that want to subscribe also know exactly tow hat they subscribe. So who is raising the events.
7. Go back to **app.component.ts**. Show how we inject the data service
8. Show how we subscribe to the observable in ngOnInit(). In only one component we have used these two different ways of subscribing.
9. Go to the web browser where the application started. On the Communication tab show what happens if you push the blue button.
10. Explain how the customers list component and the app component are in totally different places in the hierarchy and still they are able to communicate.