

## Working with Angular Services

### app.component.css

```
.container {  
  margin-top: 30px;  
}
```

### app.component.html

```
div class="container">  
  <div class="row">  
    <div class="col-xs-12 col-md-8 col-md-offset-2">  
      <app-new-account></app-new-account>  
      <hr>  
      <app-account  
        *ngFor="let acc of accounts; let i = index"  
        [account]="acc"  
        [id]="i"></app-account>  
    </div>  
  </div>  
</div>
```

### app.component.ts

```
import { Component, OnInit } from '@angular/core';
```

```
import { AccountsService } from './accounts.service';
```

```
@Component({  
  selector: 'app-root',  
  templateUrl: './app.component.html',  
  styleUrls: ['./app.component.css']  
})
```

```
export class AppComponent implements OnInit {
  accounts: {name: string, status: string}[] = [];

  constructor(private accountsService: AccountsService) {}

  ngOnInit() {
    this.accounts = this.accountsService.accounts;
  }
}
```

### **app.module.ts**

```
import { BrowserModule } from '@angular/platform-browser';
import { NgModule } from '@angular/core';
import { FormsModule } from '@angular/forms';

import { AppComponent } from './app.component';
import { AccountComponent } from './account/account.component';
import { NewAccountComponent } from './new-account/new-account.component';
import { AccountsService } from './accounts.service';
import { LoggingService } from './logging.service';

@NgModule({
  declarations: [
    AppComponent,
    AccountComponent,
    NewAccountComponent
  ],
  imports: [
    BrowserModule,
    FormsModule,
  ],
  providers: [AccountsService, LoggingService],
})
```

```
bootstrap: [AppComponent]
}))
export class AppModule { }
```

#### **account.component.css**

```
.row {
  border: 1px solid #ccc;
  margin: 10px 0;
  padding: 10px 0;
}
```

#### **account.component.html**

```
<div class="row">
  <div class="col-xs-12 col-md-8 col-md-offset-2">
    <h5>{{ account.name }}</h5>
    <hr>
    <p>This account is {{ account.status }}</p>
    <button class="btn btn-default" (click)="onSetTo('active')">Set to 'active'</button>
    <button class="btn btn-default" (click)="onSetTo('inactive')">Set to 'inactive'</
button>
    <button class="btn btn-default" (click)="onSetTo('unknown')">Set to 'unknown'</
button>
  </div>
</div>
```

#### **account.component.ts**

```
import { Component, Input } from '@angular/core';

import { LoggingService } from '../logging.service';
import { AccountsService } from '../accounts.service';
```

```

@Component({
  selector: 'app-account',
  templateUrl: './account.component.html',
  styleUrls: ['./account.component.css'],
  // providers: [LoggingService]
})
export class AccountComponent {
  @Input() account: {name: string, status: string};
  @Input() id: number;

  constructor(private loggingService: LoggingService,
               private accountsService: AccountsService) {}

  onSetTo(status: string) {
    this.accountsService.updateStatus(this.id, status);
    // this.loggingService.logStatusChange(status);
    this.accountsService.statusUpdated.emit(status);
  }
}

```

### **new-account.component.html**

```

<div class="row">
  <div class="col-xs-12 col-md-8 col-md-offset-2">
    <div class="form-group">
      <label>Account Name</label>
      <input
        type="text"
        class="form-control"
        #accountName>
    </div>
    <div class="form-group">
      <select class="form-control" #status>
        <option value="active">Active</option>
        <option value="inactive">Inactive</option>
        <option value="hidden">Hidden</option>
      </select>
    </div>
  </div>
</div>

```

```

    </select>
  </div>
  <button
    class="btn btn-primary"
    (click)="onCreateAccount(accountName.value, status.value)">
    Add Account
  </button>
</div>
</div>

```

### **new-account.component.ts**

```

import { Component } from '@angular/core';

import { LoggingService } from '../logging.service';
import { AccountsService } from '../accounts.service';

@Component({
  selector: 'app-new-account',
  templateUrl: './new-account.component.html',
  styleUrls: ['./new-account.component.css'],
  // providers: [LoggingService]
})
export class NewAccountComponent {

  constructor(private loggingService: LoggingService,
    private accountsService: AccountsService) {
    this.accountsService.statusUpdated.subscribe(
      (status: string) => alert('New Status: ' + status)
    );
  }

  onCreateAccount(accountName: string, accountStatus: string) {
    this.accountsService.addAccount(accountName, accountStatus);
    // this.loggingService.logStatusChange(accountStatus);
  }
}

```

```
}  
}
```

### **loginng.service.ts**

```
export class LoggingService {  
  logStatusChange(status: string) {  
    console.log('A server status changed, new status: ' + status);  
  }  
}
```

### **accounts.service.ts**

```
import { EventEmitter, Injectable } from '@angular/core';
```

```
import { LoggingService } from '../logging.service';
```

```
@Injectable()
```

```
export class AccountsService {
```

```
  accounts = [
```

```
    {
```

```
      name: 'Master Account',
```

```
      status: 'active'
```

```
    },
```

```
    {
```

```
      name: 'Testaccount',
```

```
      status: 'inactive'
```

```
    },
```

```
    {
```

```
      name: 'Hidden Account',
```

```
      status: 'unknown'
```

```
    }  
  ];
```

```
  statusUpdated = new EventEmitter<string>();
```

```
  constructor(private loggingService: LoggingService) {}
```

```
addAccount(name: string, status: string) {  
  this.accounts.push({name: name, status: status});  
  this.loggingService.logStatusChange(status);  
}  
  
updateStatus(id: number, status: string) {  
  this.accounts[id].status = status;  
  this.loggingService.logStatusChange(status);  
}  
}
```