Objective

Create a Nutritionix app which includes login and register pages. When a user registers, the credentials are to be stored in the local storage. The Nutitionix page should display calories, serving weight in grams, and perform text to speech.

Features

Routing was implemented for this app so that navigation between components was supported:

```
const routes: Routes = [
  {
    path: '',
    component: LoginComponent
  },
  {
    path: 'login',
    component: LoginComponent
  },
  {
    path: 'register',
    component: RegisterComponent
  },
  {
    path: 'nutritionix',
    component: NutritionixComponent,
    canActivate: [AppGuardGuard]
  },

  // otherwise redirect to home
  { path: '**', redirectTo: '' }
];
```

This app also features an auth service which allows user to be authenticated for the Nutritionix page. Also, a guard has been implemented to block access to this page unless the user is authenticated:

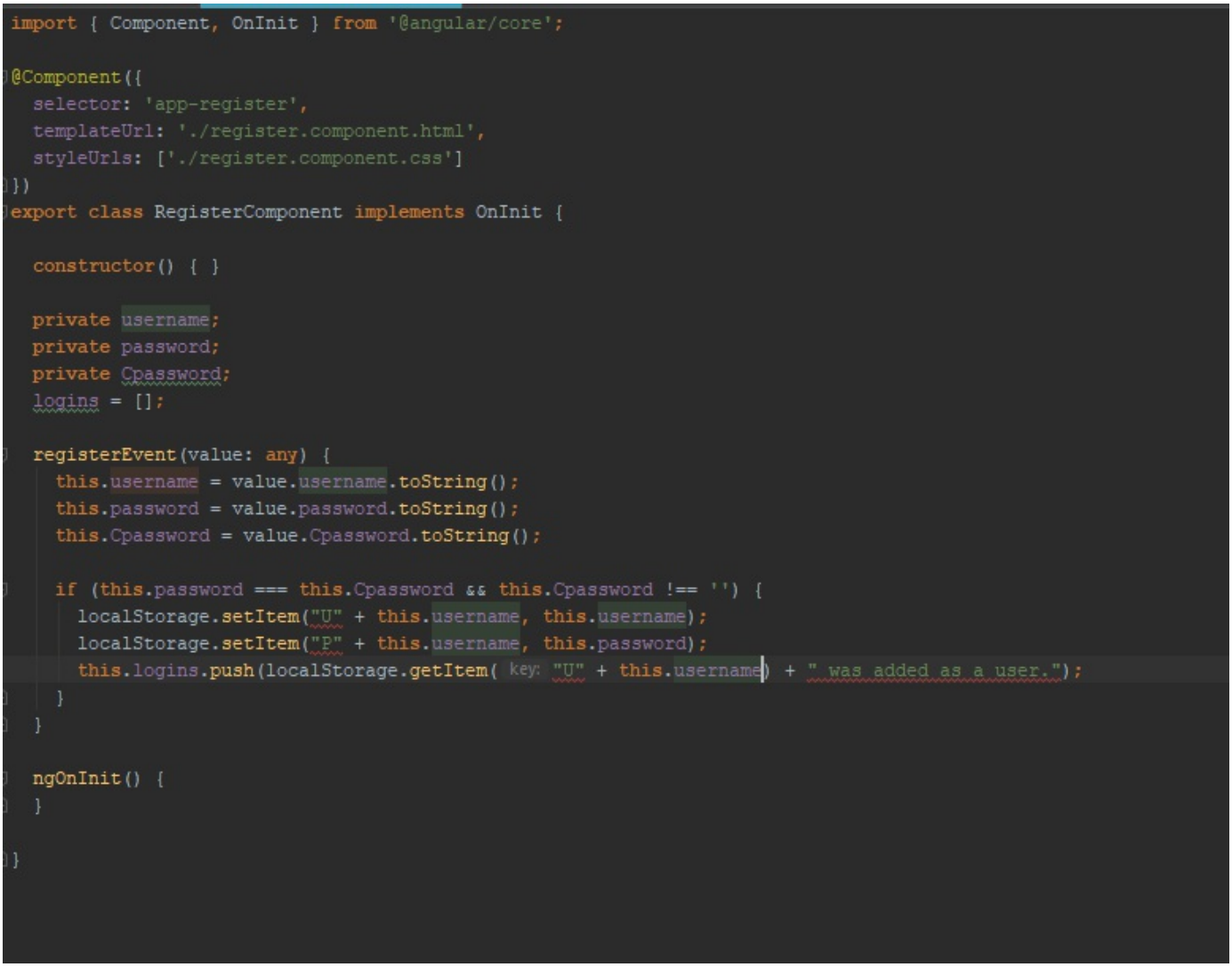
```
import { Injectable } from '@angular/core';

@Injectable({
  providedIn: 'root'
})
export class AuthService {

  private loginStatus;

  constructor() {
    this.loginStatus = false;
  }

  logoutUserStatus() {
    this.loginStatus = false;
  }

  loginUserStatus() {
    this.loginStatus = true;
  }

  getStatusLogin() {
    return this.loginStatus;
  }
}
```

Steps

The app features three components, login, register, and Nutritionix.

The register page allows users to register for the service by inputting their username, password, and confirm their password. The component checks that both password fields match before registering the user:

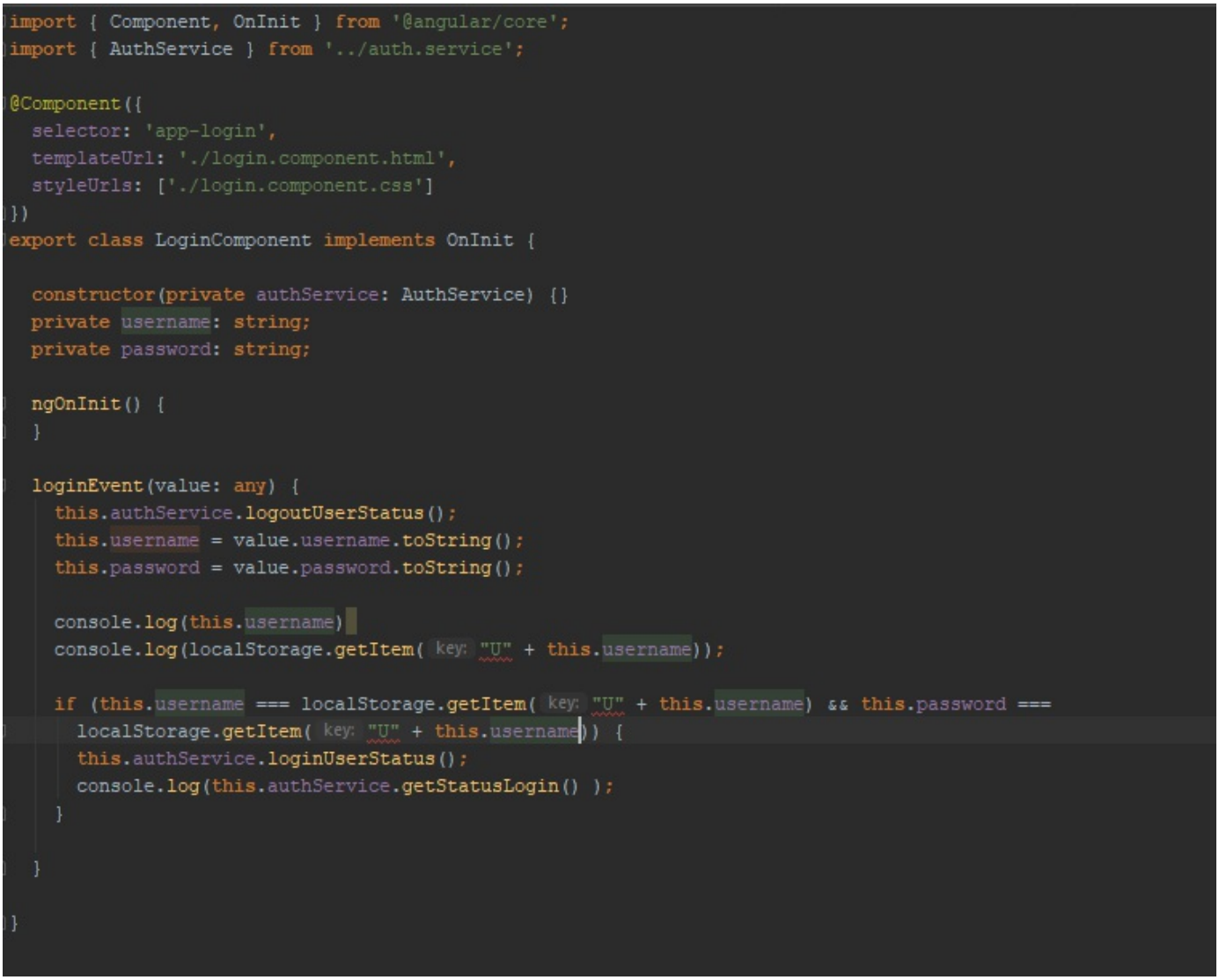
```
<form #RegForm="ngForm" (ngSubmit)="registerEvent(RegForm.value)">
<div class="panel primary-panel">
  <div class="panel-heading">
    <h2 class="panel-title">New User Registration</h2>
  </div>
  <div class="panel-body">
    <div class="form-group">
      <label>Username:</label>
      <input type="text" required class="form-control" name="username" ngModel>
    </div>
  </div>
<div class="panel primary-panel">
  <div class="form-group">
    <label>Password:</label>
    <input required type="password" class="form-control" name="password" ngModel>
  </div>
</div>

<div class="panel primary-panel">
  <div class="form-group">
    <label>Confirm Password:</label>
    <input required type="password" class="form-control" name="Cpassword" ngModel>
  </div>
</div>

<div class="panel primary-panel">
  <br>
  <button class="btn btn-primary">Register</button>
</div>
</div>
</form>

<div *ngFor="let login of logins">{{ login }}</div>



<h5>Existing User? <a routerLink="/login">Login</a><br></h5>
<a routerLink="/Nutritionix">Home</a><br>
```



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

@Component({
  selector: 'app-register',
  templateUrl: './register.component.html',
  styleUrls: ['./register.component.css']
})
export class RegisterComponent implements OnInit {

  constructor() { }

  private username;
  private password;
  private Cpassword;
  logins = [];

  registerEvent(value: any) {
    this.username = value.username.toString();
    this.password = value.password.toString();
    this.Cpassword = value.Cpassword.toString();

    if (this.password === this.Cpassword && this.Cpassword !== '') {
      localStorage.setItem("U" + this.username, this.username);
      localStorage.setItem("P" + this.username, this.password);
      this.logins.push(localStorage.getItem( key: "U" + this.username) + " was added as a user.");
    }
  }

  ngOnInit() {
  }

}
```

The login page accepts the username and password and checks local storage to determine if the credentials match what is stored in local storage:

```
<form #LoginForm="ngForm" (ngSubmit)="loginEvent(LoginForm.value)">
  <div class="panel primary-panel">
    <div class="panel-heading">
      <h2 class="panel-title">Login</h2>
    </div>
    <div class="panel-body">
      <div class="form-group">
        <label>Username:</label>
        <input type="text" required class="form-control" name="username" ngModel>
      </div>
    </div>
  </div>
  <div class="panel primary-panel">
    <div class="form-group">
      <label>Password:</label>
      <input required type="password" class="form-control" name="password" ngModel>
    </div>
  </div>

  <div class="panel primary-panel">
    <br>
    <button class="btn btn-primary">Login</button>
  </div>
</form>

<h5>New User? <a routerLink="/register">Register</a><br></h5>
<a routerLink="/nutritionix">Home</a><br>
```



```
import { Component, OnInit } from '@angular/core';
import { AuthService } from '../auth.service';

@Component({
  selector: 'app-login',
  templateUrl: './login.component.html',
  styleUrls: ['./login.component.css']
})
export class LoginComponent implements OnInit {

  constructor(private authService: AuthService) {}
  private username: string;
  private password: string;

  ngOnInit() {
  }

  loginEvent(value: any) {
    this.authService.logoutUserStatus();
    this.username = value.username.toString();
    this.password = value.password.toString();

    console.log(this.username)
    console.log(localStorage.getItem( key: "U" + this.username));

    if (this.username === localStorage.getItem( key: "U" + this.username) && this.password ===
      localStorage.getItem( key: "U" + this.username)) {
      this.authService.loginUserStatus();
      console.log(this.authService.getStatusLogin() );
    }

  }

}
```

If so, the home button is then activated and the user can navigate to the Home/Nutritionix page. The Nutritionix page allows user to input a food and then displays calories and serving weight in grams.

```
<div class="row">
  <div class="col-sm-2">
    Existing User?
    <a routerLink="/login">Login</a>
  </div>
  <div class="col-sm-2">
    New User?
    <a routerLink="/register">Register</a>
  </div>
</div>


<form #NForm="ngForm" (ngSubmit)="SubmitEvent(NForm.value)">
  <div class="panel primary-panel">
    <div class="panel-heading">
      <h2 class="panel-title">Nutrition Information</h2>
    </div>
    <div class="panel-body">
      <div class="form-group">
        <label>Search Term:</label>
        <input type="text" required class="form-control" name="searchterm" ngModel>
      </div>
    </div>
  </div>

  <div class="panel primary-panel">
    <br>
    <button class="btn btn-primary">Get Info</button>
  </div>
</form>

<div *ngIf="data">
Calories: {{data.hits[0].fields.nf_calories}} cals<br>
Weight: {{data.hits[0].fields.nf_serving_weight_grams}} grams
</div>
```

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

@Component({
  selector: 'app-nutritionix',
  templateUrl: './nutritionix.component.html',
  styleUrls: ['./nutritionix.component.css']
})
export class NutritionixComponent implements OnInit {

  private searchterm;
  calories: string;
  sWeight: string;
  data: any;

  constructor(private http: HttpClient) { }

  SubmitEvent(value: any):void {
    this.searchterm = value.searchterm.toString();

    this.http.get( url: 'https://api.nutritionix.com/v1_1/search/%22' + this.searchterm +
                  '%22?results=0:1&fields=*&appId=2972d721&appKey=d1a617bbe2e43ec825625373764e27bf').subscribe( next: (data) => {
this.data = data;
console.log(data);
    });
  }

  ngOnInit() {
  }

}
```

Limitations

We we’re unable to implement the Watson Text-To-Speech service. Also, buttons are not dithered when inactivated which is not ideal.

References

tutorial-II source code (from class)

https://www.youtube.com/watch?v=3ZkGUI6KNHY

https://www.w3schools.com/