

bmi.services.ts:

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

@Injectable({
  providedIn: 'root',
})
export class BmiService {
  calculateBMI(height: number, weight: number): number {
    if (height <= 0 || weight <= 0) {
      return 0;
    }
    const bmi = weight / (height * height);
    return Math.round(bmi * 10) / 10; // Round to one decimal place
  }
}
```

bmi-calculator.components.ts:

```
import { Component } from '@angular/core';
import { BmiService } from '../bmi.service';

@Component({
  selector: 'app-bmi-calculator',
  templateUrl: './bmi-calculator.component.html',
  styleUrls: ['./bmi-calculator.component.css'],
})
export class BmiCalculatorComponent {
  height: number = 0;
  weight: number = 0;
  bmi: number = 0;
  bmiCategory: string = '';

  constructor(private bmiService: BmiService) {}

  calculateBMI(): void {
    this.bmi = this.bmiService.calculateBMI(this.height, this.weight);
    this.bmiCategory = this.getBmiCategory(this.bmi);
  }

  private getBmiCategory(bmi: number): string {
    if (bmi < 18.5) {
      return 'Underweight';
    } else if (bmi >= 18.5 && bmi < 25) {
      return 'Healthy Weight';
    } else if (bmi >= 25 && bmi < 30) {
      return 'Overweight';
    } else {
      return 'Obesity';
    }
  }
}
```

```

        return 'Obese';
    }
}
}

```

bmi-calculator.component.html:

```

<div class="bmi-calculator">
  <h2>BMI Calculator</h2>
  <div class="input-group">
    <label for="height">Height (m):</label>
    <input type="number" id="height" [(ngModel)]="height" />
  </div>
  <div class="input-group">
    <label for="weight">Weight (kg):</label>
    <input type="number" id="weight" [(ngModel)]="weight" />
  </div>
  <button (click)="calculateBMI()">Calculate BMI</button>
  <div class="result" *ngIf="bmi">
    <p>Your BMI is: {{ bmi }}</p>
    <p>BMI Category: {{ bmiCategory }}</p>
  </div>
</div>

```

bmi-calculator.component.css:

```

.bmi-calculator {
  max-width: 300px;
  margin: 0 auto;
  padding: 20px;
  border: 1px solid #ddd;
  border-radius: 5px;
  box-shadow: 0 0 5px rgba(0, 0, 0, 0.1);
  background-color: #f9f9f9;
}

.input-group {
  margin-bottom: 10px;
}

label {
  display: block;
  font-weight: bold;
}

input[type="number"] {
  width: 100%;
  padding: 8px;
}

```

```

    border: 1px solid #ccc;
    border-radius: 3px;
  }

  button {
    display: block;
    width: 100%;
    padding: 10px;
    background-color: #007bff;
    color: #fff;
    border: none;
    border-radius: 3px;
    cursor: pointer;
  }

  button:hover{
    background-color: darkblue;
  }

```

app.component.html:

```

<div style="text-align: center">
  <app-bmi-calculator></app-bmi-calculator>
</div>

```

app.module.ts:

```

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

import { AppComponent } from './app.component';
import { BmiCalculatorComponent } from './bmi-calculator/bmi-calculator.component';

@NgModule({
  declarations: [AppComponent, BmiCalculatorComponent],
  imports: [BrowserModule, FormsModule],
  providers: [],
  bootstrap: [AppComponent],
})
export class AppModule {}

```

OUTPUT:

BMI Calculator

Height (m):

1.6

Weight (kg):

60

Calculate BMI

Your BMI is: 23.4

BMI Category: Healthy Weight