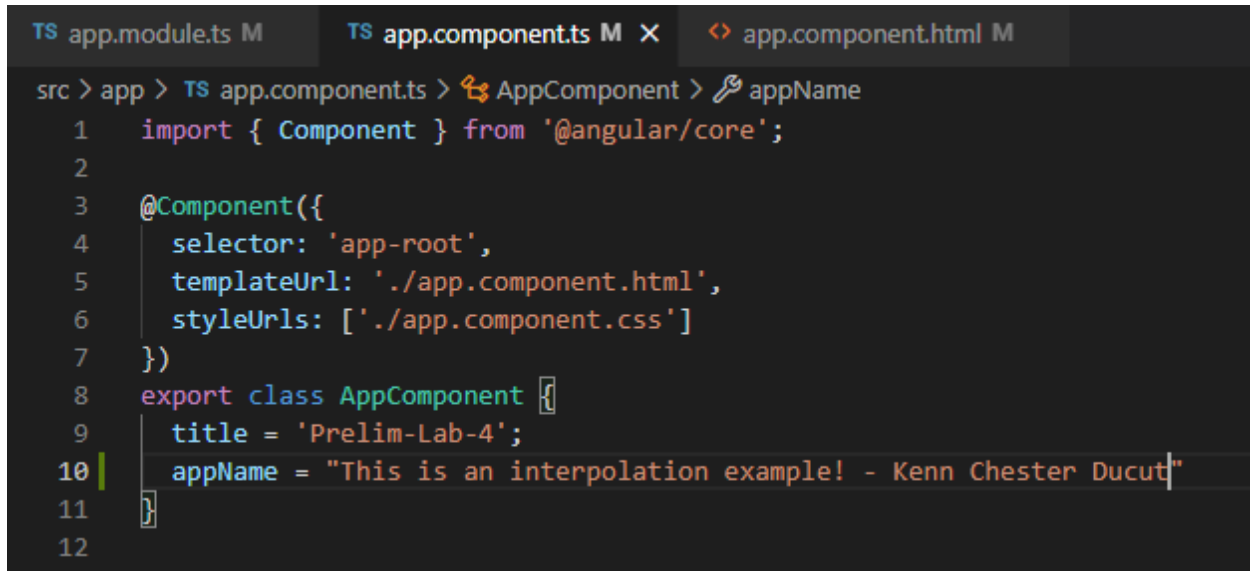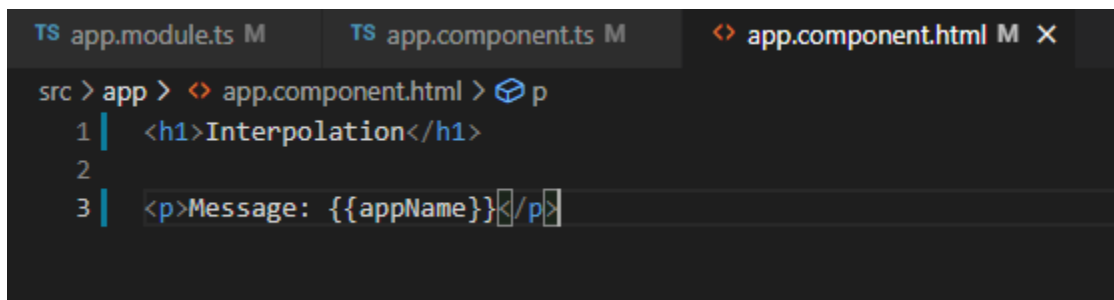Submit a screenshot of Data Binding techniques done in your local machine.

1. One-way data binding (interpolation)
    - String/Number Binding
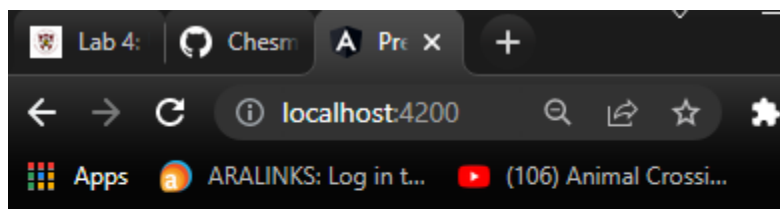
```ts
TS app.module.ts M          TS app.component.ts M ✕          <> app.component.html M

src > app > TS app.component.ts > ⚡ AppComponent > ⚙ appName
   1    import { Component } from '@angular/core';
   2
   3    @Component({
   4      selector: 'app-root',
   5      templateUrl: './app.component.html',
   6      styleUrls: ['./app.component.css']
   7    })
   8    export class AppComponent {
   9      title = 'Prelim-Lab-4';
  10      appName = "This is an interpolation example! - Kenn Chester Ducut"
  11    }
  12
```

App Component ts file

```html
TS app.module.ts M          TS app.component.ts M          <> app.component.html M ✕

src > app > <> app.component.html > ⬦ p
   1    <h1>Interpolation</h1>
   2
   3    <p>Message: {{appName}}</p>
```

app.component.html file

Interpolation

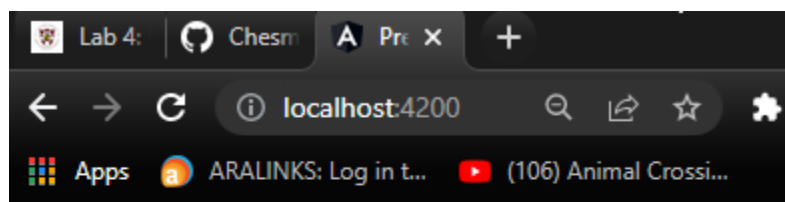Message: This is an interpolation example! - Kenn Chester Ducut

- Property Binding

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

@Component({
  selector: 'app-root',
  templateUrl: './app.component.html',
  styleUrls: ['./app.component.css']
})
export class AppComponent {
  title = 'Prelim-Lab-4';

  //Interpolation
  appName = "This is an interpolation example! - Kenn Chester Ducut"

  //Property Binding
  clientName:string = "Kenn Chester";
}
```

Appcomponent ts file

```html
<h1>Interpolation</h1>

<p>Message: {{appName}}</p>

<input type="text" [value]="clientName">
```

app.component.html file

Interpolation

Message: This is an interpolation example! - Kenn Chester Ducut

Kenn Chester

- Style Binding and Class Binding

```typescript
  5      templateUrl: './app.component.html',
  6      styleUrls: ['./app.component.css']
  7    })
  8    export class AppComponent {
  9      title = 'Prelim-Lab-4';
 10
 11      //Interpolation
 12      appName = "This is an interpolation example! - Kenn Chester Ducut"
 13
 14      //Property Binding
 15      clientName:string = "Kenn Chester";
 16
 17      //Style Binding with Class Binding
 18      appliedCSSClass = "green";
 19      notappliedCSSClass = false;
 20      myColor = "red";
 21    }
```
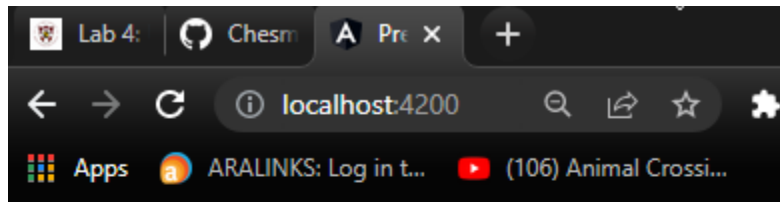
Appcomponent ts file

```html
 1    <h1>Interpolation</h1>
 2
 3    <p>Message: {{appName}}</p>
 4
 5    <!--Property Binding-->
 6    <input type="text" [value]="clientName">
 7
 8    <!--Style Binding-->
 9    <p [style.color]="myColor">Text color is styled using style binding. - Kenn Ducut</p>
 10
 11    <!--Class Binding with Style Binding-->
 12    <p [class]="appliedCSSClass">This is styled using applied CSS class -Kenn Ducut</p>
 13
 14    <p [class.blue]="notappliedCSSClass">No style binding applied in this line</p>
 15
```

appcomponent html file

```
src > app > # app.component.css > .blue
  1 ∨  .green {
  2         color: ■green;
  3     }
  4 ∨  .blue {
  5         color: ■blue;
  6     }
```

App component css file

Lab 4:   Chesm   A Pre ✕   +

← → C   ⓘ localhost:4200   Q ⤢ ☆   ✿

▦ Apps   a ARALINKS: Log in t...   ▶ (106) Animal Crossi...

Interpolation

Message: This is an interpolation example! - Kenn Chester Ducut

Kenn Chester

Text color is styled using style binding. - Kenn Ducut

This is styled using applied CSS class -Kenn Ducut

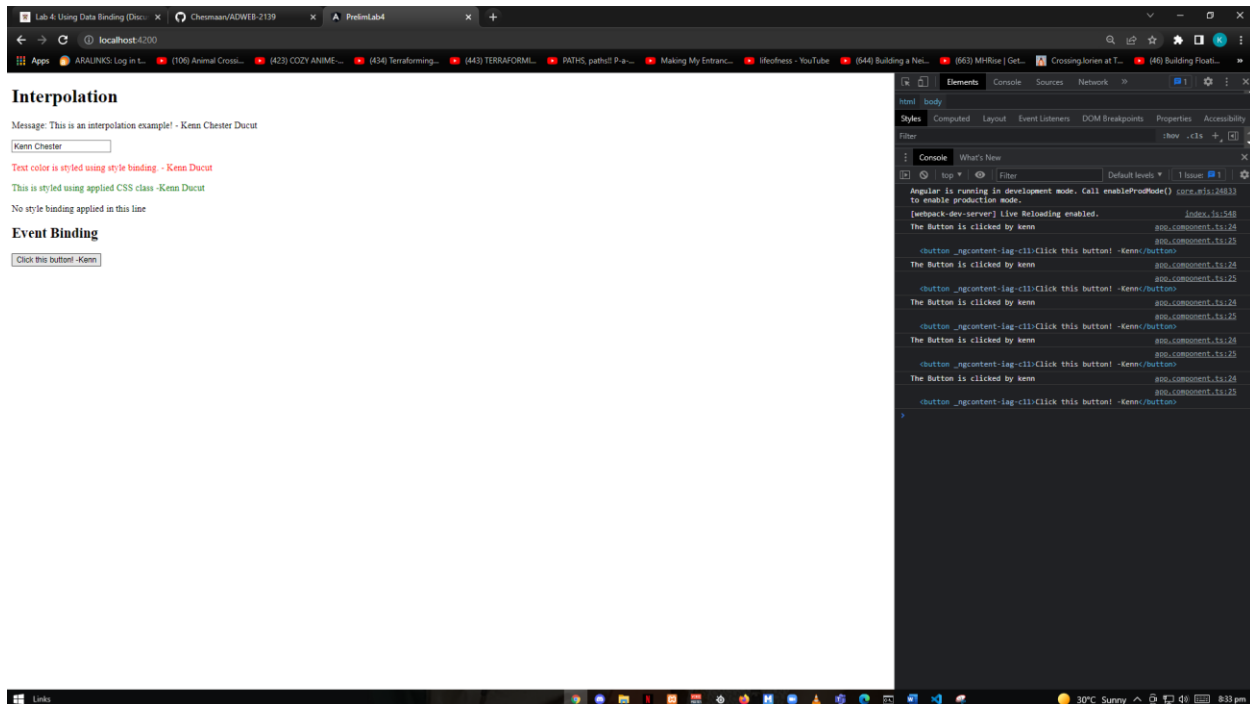No style binding applied in this line

Output

2. Two way binding
   - Events/Actions

```
//Event Binding
showData($event:any){
    console.log("The Button is clicked by kenn"); if($event){
        console.log($event.target);
    }
}
}
```

appcomponent ts file

```
16    <!--Event Binding-->
17    <h2>Event Binding</h2>
18    <button (click)="showData($event)">Click this button! -Kenn</button>
19
```

appcomponent html file

Output when the button is clicked

Another event binding using getData

```typescript
getData(data:any)
{
  console.warn(data);
}


//Event Binding
showData($event:any){
  console.log("The Button is clicked by kenn"); if($event){
    console.log($event.target);
  }
}
```

app component ts file

```html
<!--Event Binding-->
<h2>Event Binding</h2>
<button (click)="showData($event)">Click this button! -Kenn</button>

<br>
<input type="text" #keyupbox placeholder="keyup box" (keyup)="getData(keyupbox.value)"/>
<br>
<input type="text" #keyinputbox placeholder="input box" (input)="getData(keyinputbox.value)"/>
<br>
<input type="text" #keydownbox placeholder="keydown box" (keydown)="getData(keydownbox.value)"/>
<br>
<input type="text" #keyblurbox placeholder="keyblur box" (keyup)="getData(keyblurbox.value)"/>
<br>

<!--Kenn Chester Ducut WD-302-->
```
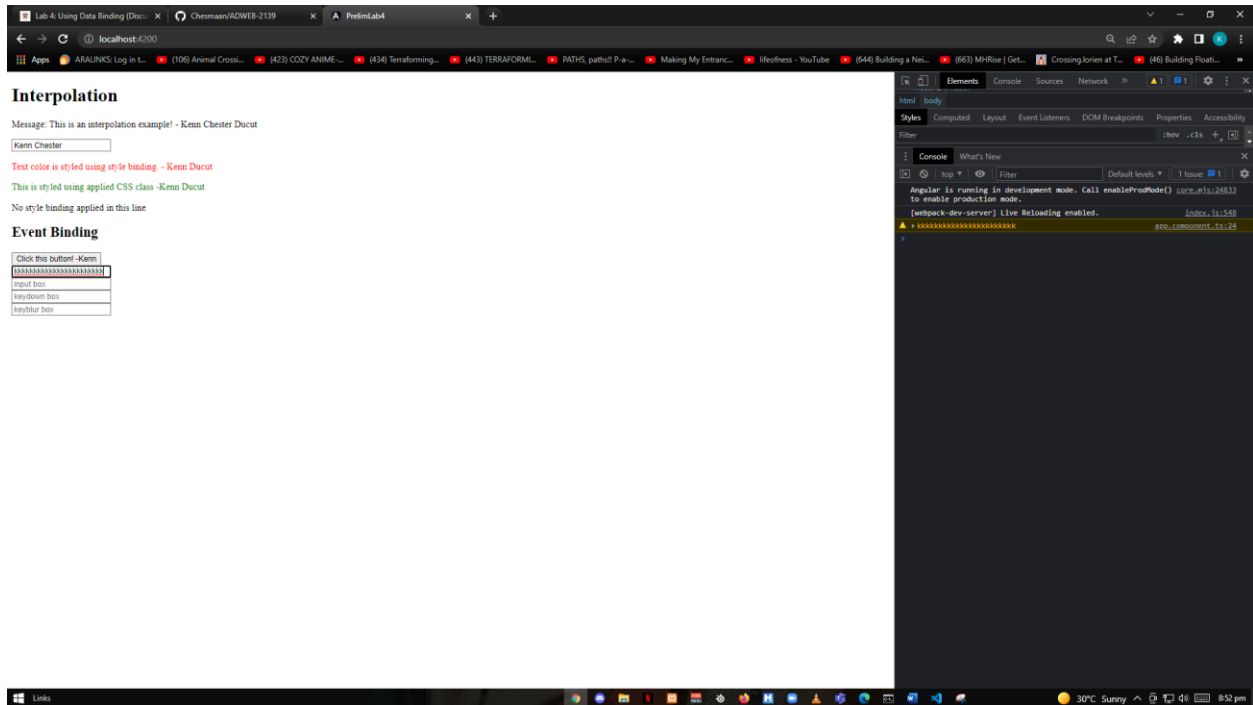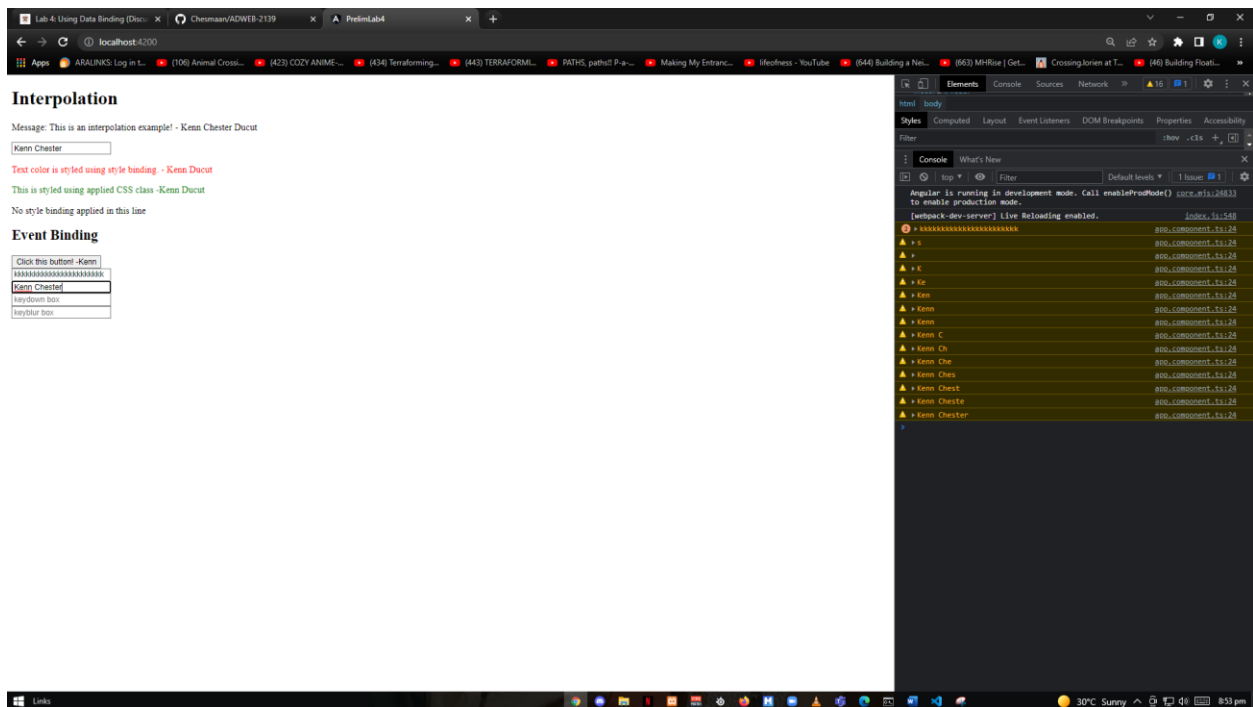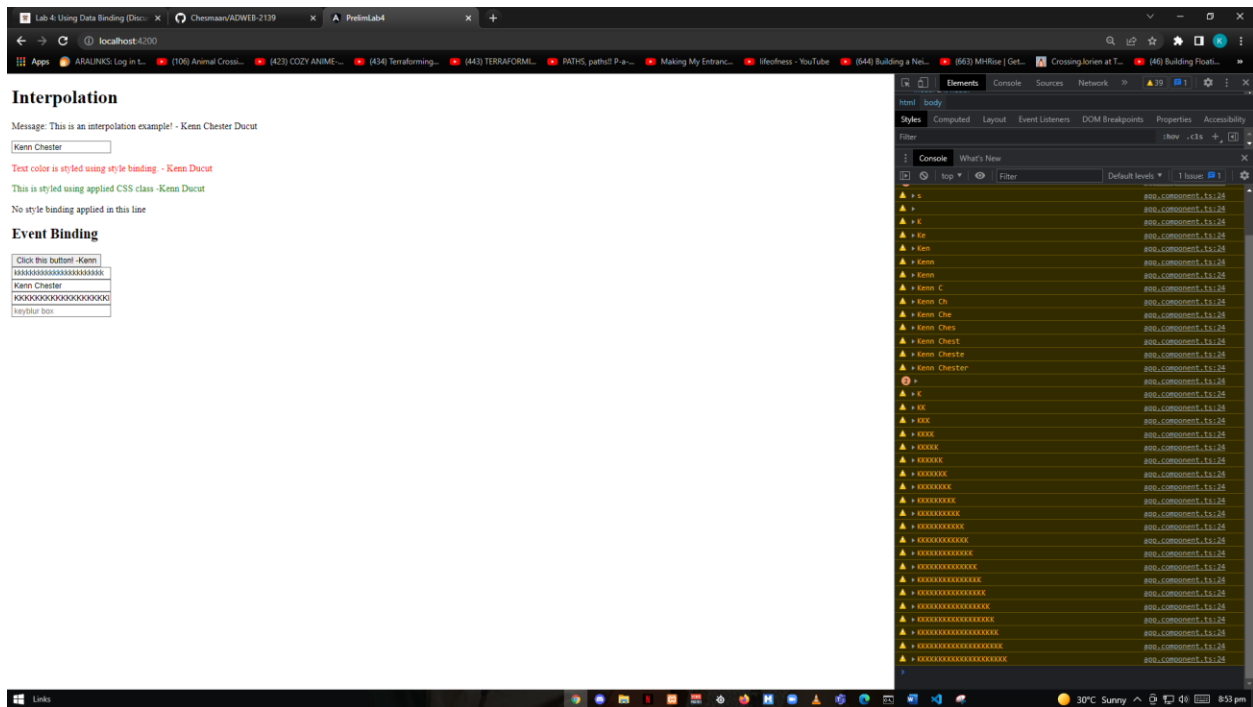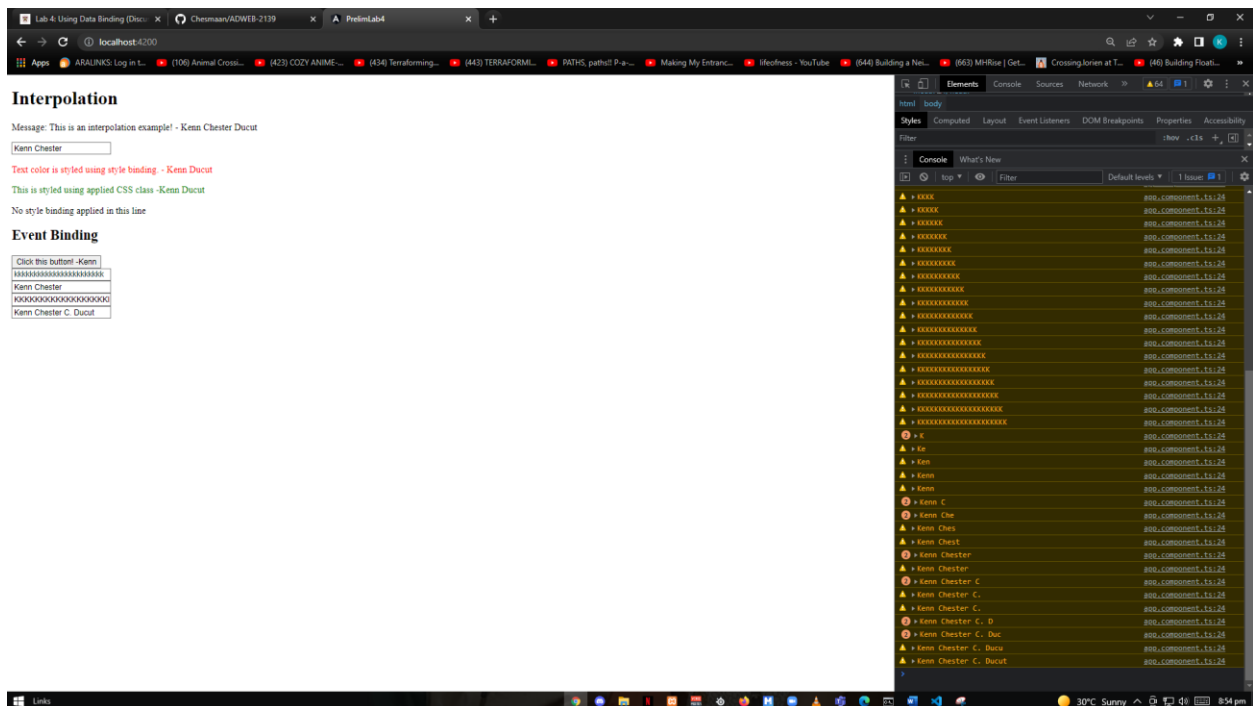
app component html file

OUTPUTS:

keyup box

input box

Keydown box

keyblur box

Image interpolation

```ts
src > app > gradebook > TS gradebook.component.ts > GradebookComponent > imageUrl
1    import { Component, OnInit } from '@angular/core';
2
3    @Component({
4      selector: 'app-gradebook',
5      templateUrl: './gradebook.component.html',
6      styleUrls: ['./gradebook.component.css']
7    })
8    export class GradebookComponent implements OnInit {
9
10     //image Interpolation/binding
11     imageUrl:string="assets/images/pic2.jpg"
12
13
14
15     constructor() { }
16
17     ngOnInit(): void {
18     }
19
20   }
```

gradebook.component ts file

```html
src > app > gradebook > <> gradebook.component.html > im
1    <hr>
2    <h1>This is the gradebook - Kenn</h1>
3
4    <img src={{imageUrl}}/>
5
```

gradebook component html file
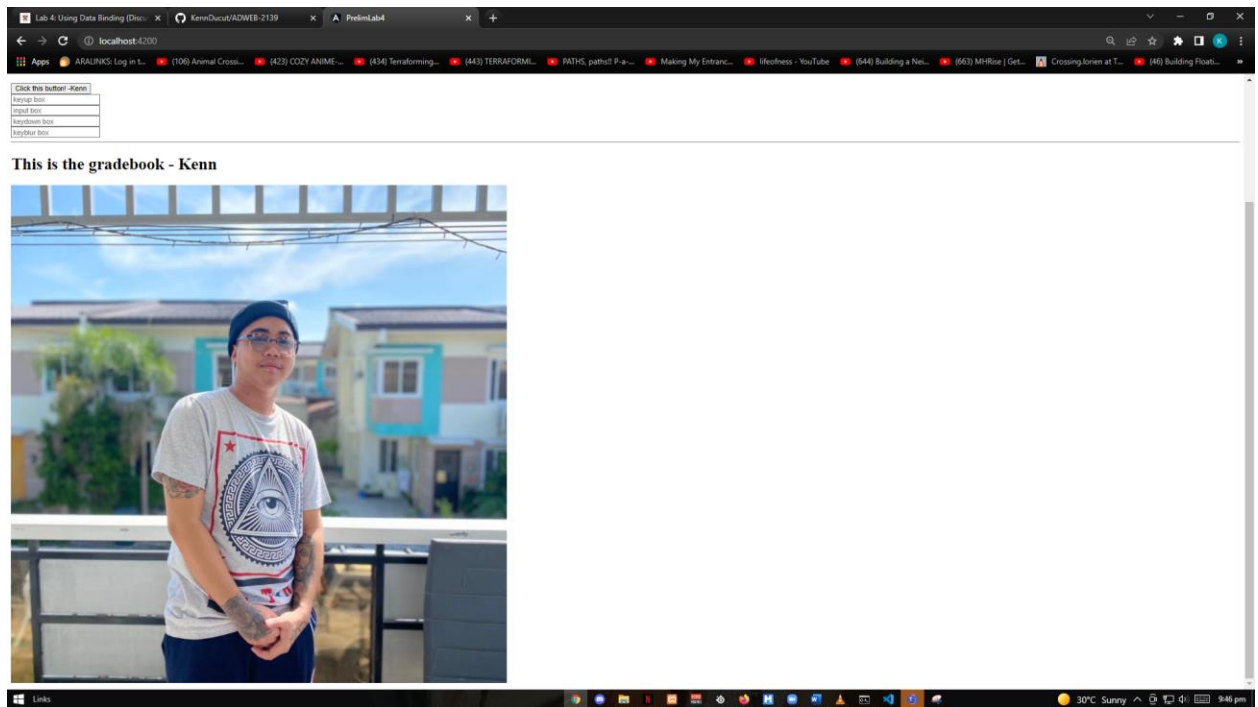
Two way data binding

```typescript
TS app.module.ts M  ✕     <> gradebook.component.html U     TS gradebook.component.ts U

src > app > TS app.module.ts > ⅏ AppModule
   1    import { NgModule } from '@angular/core';
   2    import { BrowserModule } from '@angular/platform-browser';
   3
   4    import { AppComponent } from './app.component';
   5    import { FormsModule } from '@angular/forms';
   6    import { GradebookComponent } from './gradebook/gradebook.component';
   7
   8    @NgModule({
   9      declarations: [
  10        AppComponent,
  11        GradebookComponent
  12      ],
  13      imports: [
  14        BrowserModule,
  15        FormsModule //from Forms module import
  16      ],
  17      providers: [],
  18      bootstrap: [AppComponent]
  19    })
  20    export class AppModule { }
  21
```
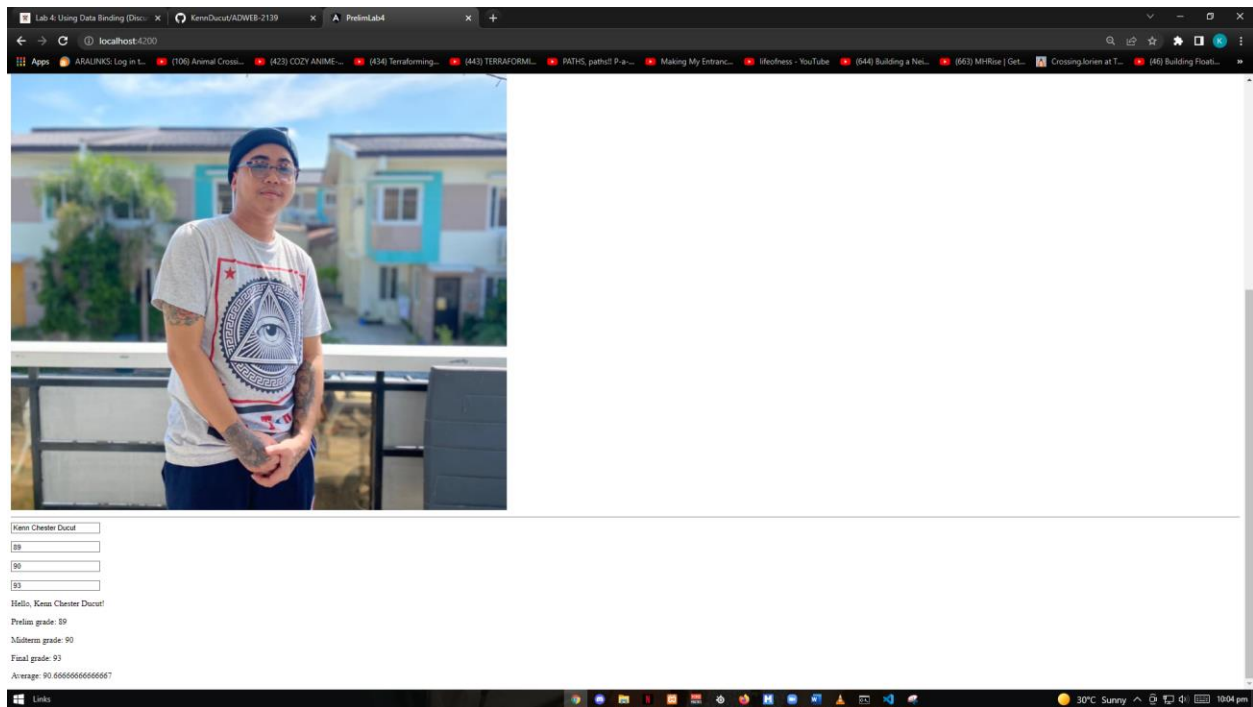
app.module to add the import

```html
TS app.module.ts M     <> gradebook.component.html U ●     TS gradebook.component.ts U

src > app > gradebook > <> gradebook.component.html > ...
   1    <hr>
   2    <h1>This is the gradebook - Kenn</h1>
   3
   4    <img src={{imageUrl}}/>
   5
   6    <hr>
   7    <input type="text" [(ngModel)]="studName" />
   8    <p><input type="number" [(ngModel)]="prelim" class="form-control" placeholder="Prelim"></p>
   9    <p><input type="number" [(ngModel)]="midterm" class="form-control" placeholder="Midterm"></p>
  10    <p><input type="number" [(ngModel)]="final" class="form-control" placeholder="Final"></p>
  11
  12    <p>Hello, {{studName}}!</p>
  13    <p>Prelim grade: {{prelim}}</p>
  14    <p>Midterm grade: {{midterm}}</p>
  15    <p>Final grade: {{final}}</p>
  16
  17    <p>Average: {{(prelim+midterm+final)/3}}</p>
  18
  19    <!--Kenn Chester Ducut WD-302-->
  20
```

gradebook component html file

```
 1    import { Component, OnInit } from '@angular/core';
 2
 3    @Component({
 4      selector: 'app-gradebook',
 5      templateUrl: './gradebook.component.html',
 6      styleUrls: ['./gradebook.component.css']
 7    })
 8    export class GradebookComponent implements OnInit {
 9
10      //image Interpolation/binding
11      imageUrl:string="assets/images/pic2.jpg"
12
13        //two way data binding
14        studName="";
15        prelim=0;
16        midterm=0;
17        final=0;
18
19
20      constructor() { }
21
22      ngOnInit(): void {
23      }
24
25    }
26    // Kenn Chester Ducut WD-302
```

gradebook component ts file

Output

GitHub Link:

https://github.com/KennDucut/ADWEB-2139.git