<form #regForm="ngForm" (ngSubmit)="Register(regForm)">

    <div>

        <label for="txtName"> Enter Name </label>

        <input type="text" name="txtName" ngModel

        required #name/>

        {{name.className}}

    </div>

    <button type="submit"> Register </button>

</form>

<form #regForm="ngForm" (ngSubmit)="Register(regForm)">

    <div>

        <label for="txtName"> Enter Name </label>

        <input type="text" name="txtName" ngModel

        required maxlength="20" minlength="5" #name="ngModel"/>

        <div \*ngIf="name.touched && name.invalid">

            <h3> NAme is req</h3>

            </div>

    </div>

    <button type="submit"> Register </button>

</form>

--------------------------------------------------

Add 2 numbers

<form  #addForm="ngForm" (ngSubmit)="Add(addForm)">

  <div>

<label> Enter No 1</label>

<input type="number" id="txtNo1" name="txtNo1" required ngModel #no1="ngModel"/>

 <div \*ngIf="no1.invalid && no1.touched">

  No 1 is not valid

 </div>

</div>

<div>

  <label> Enter No 2</label>

  <input type="number" id="txtNo2" name="txtNo2" required ngModel #no2="ngModel"/>

  </div>

  <div>

    <label> Result </label>

    <input type="number" id="txtResult" name="txtResult" ngModel [value]="res"/>

    </div>

    <button type="submit"> Add </button>

</form>

 n1 : number =0;

  n2 :  number=0;

  res : number=0;

  constructor() { }

  ngOnInit(): void {

  }

 Add(ngForm: any)

 {

  console.log(ngForm)

   console.log(ngForm.controls.txtNo1.value)

  this.n1 =  ngForm.controls.txtNo1.value;

  this.n2 =  ngForm.controls.txtNo2.value;

  this.res = this.n1 + this.n2;

//   console.log(this.n1)

//   console.log(this.n2)

// console.log(this.res);

}

Data Entry Form

<div class="container">

  <form #regForm="ngForm" (ngSubmit)="RegisterUser(regForm)">

  <div class="form-group">

  <label for="firstName">First Name</label>

<input type="text" name="firstName" pattern ="^[A-Z a-z]+" required minlength="5" maxlength="10"  #firstName="ngModel" ngModel class="form-control">

  <!-- <div \*ngIf="firstName.errors.minlength"> FirstName is must </div>  -->

  <div \*ngIf="firstName.touched && firstName.invalid">

   <div \*ngIf="firstName.errors?.['required']">

    <span class="error"> Name is must </span>

   </div>

   <div \*ngIf="firstName.errors?.['pattern']">

    <span class="error"> Name can contain only alphabets </span>

   </div>

   <div \*ngIf="firstName.errors?.['minlength']">

     <span class="error"> Minimum 5 characters are needed  </span> </div>

 </div>

</div>

<div class="form-group">

  <label for="email">email</label>

<input type="email" name="email" required email  #email="ngModel" ngModel class="form-control">

  <!-- <div \*ngIf="firstName.errors.minlength"> FirstName is must </div>  -->

  <div \*ngIf="email.touched && email.invalid">

   <div \*ngIf="firstName.errors?.['required']">

    <span class="error"> email is must </span>

   </div>

   <div \*ngIf="firstName.errors?.['email']">

    <span class="error"> email is not in correct format </span>

   </div>

 </div>

</div>

<button type="submit" [disabled]="regForm.invalid">Submit</button>

  </form>

  </div>

RegisterUser(regForm : any)

  {

    console.log(regForm.controls);

    console.log(regForm.controls.firstName.value)

  }

Reactive Forms

import { JsonPipe } from '@angular/common';

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

import { FormControl, FormGroup, FormBuilder, NgForm, Validators } from '@angular/forms';

@Component({

  selector: 'app-reactive-form',

  templateUrl: './reactive-form.component.html',

  styleUrls: ['./reactive-form.component.css']

})

export class ReactiveFormComponent implements OnInit {

  signUpForm :  FormGroup;

  FirstName : string="";

  LastName : string="";

  Email : string ="";

  Password : string ="";

  submitted = false;

  constructor(private  fb : FormBuilder)

  {

     this.signUpForm = fb.group({

      FirstName : new FormControl('', [Validators.required, Validators.minLength(10)]),

      LastName : new FormControl('', [Validators.required]),

        Email : new FormControl(''),

        Password : new FormControl('')

   });

  }

   SubmitData(signUpForm: any)

   {

    this.submitted = true;

    if (this.signUpForm.invalid) {

      return;

    }

    else

    {

      alert('SUCCESS!! :-)\n\n' + JSON.stringify(this.signUpForm.value));

    console.log("submitted");

    console.log(signUpForm.controls.FirstName.value);

    var user = JSON.stringify(this.signUpForm.value);

   }

   }

  ngOnInit(): void {

  }

}

<div class="container">

  <form [formGroup] = 'signUpForm' (ngSubmit)="SubmitData(signUpForm)">

    <div>

     <label for="FirstName"> Enter First Name </label>

     <input type="text" id="FirstName" name="FirstName" formControlName='FirstName' required>

     <div \*ngIf="submitted && signUpForm.controls['FirstName'].errors">

      <div \*ngIf="signUpForm.controls['FirstName'].hasError('required')">

       Title is required</div>

       <div \*ngIf="signUpForm.controls['FirstName'].hasError('minlength')">

        minlength is required</div>

    </div>

  </div>

    <div>

      <label for="LastName"> Enter Last Name </label>

      <input type="text" id="LastName" name="LastName" formControlName='LastName'>

      <div \*ngIf="submitted && signUpForm.controls['LastName'].errors">

        <div \*ngIf="signUpForm.controls['FirstName'].hasError('required')">

         Last Name is required</div>

      </div>

     </div>

     <div>

      <label for="Email"> Enter Email </label>

      <input type="text" id="Email" name="Email" formControlName='Email'>

     </div>

     <div>

      <label for="Password"> Enter Email </label>

      <input type="text" id="Password" name="Password" formControlName='Password'>

     </div>

    <button type="submit"> Register </button>

  </form>

</div>