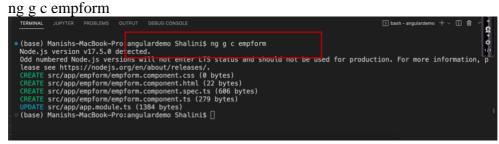
## STEP 11: Template Driven Forms

- 1. Make sure to add FormsModule in app.module.ts file
- 2. Add empform component from within the angulardemo folder as follows:





- 3. Add an employee property in employee.component.ts file: emp = {ename:''}
- 4. Add the below code in employee.component.html file:

```
<form>
    <input type="text" class="form-control" required/>
</form>
```

5. Add the following on the form tag:

```
{{empform.value | json}}
<form #empform ="ngForm">
It prints nothing as angular ngForm does not tracks by default for all the controls.
```

- 6. To tell which controls to track add ngModel to all the controls: <input type="text" class="form-control" required ngModel name='ename'/> With ngModel name attribute is mandatory.
- 7. To see the state, angular tracks for, modify the input element as follows:

```
REMOVE ngModel from above code and add below:
<input type="text" class="form-control" required [(ngModel)] = 'emp.ename'
name='ename ' #ename >
<br/>
<br/>
<br/>
<br/>
<br/>
TODO: remove this: {{eid.className}}
```

- 8. Add custom CSS, to display for error messages: <input type="text" class="form-control is-invalid" required [(ngModel)] = 'emp.ename' name='ename' #ename>
- 9. But red border should be applied conditionally only if control is invalid Use class binding of angular instead and remove **is-invalid** applied above <input type="text" class="form-control" [class.is-invalid]="ename.invalid" required [(ngModel)] = 'emp.ename' name='ename' #ename="ngModel">

## **COMMENT** {{ename.className}}

10. Now we don't want red border to be applied on page load without user interaction. So lets add the following as well:

[class.is-invalid]="ename.invalid && ename.touched"

11. Lets validate name with only alphabets

```
pattern="^[A-Za-z]+$"
```

With the above code and [class.is-invalid] attribute it displays red border on the control.

12. Lets display error messages. Add the following in the div of name input element <small class="text-danger" [class.d-none]="ename.valid || ename.untouched"> Name required

</small>

With class text-danger of bootstrap class, it displays error message in red.

Now change the error message to display for required and pattern validation <small class="text-danger"

[class.d-none]="ename.valid | | ename.untouched">

Name required and it should be only alphabets</small> Here it displays both the message for anything not valid.

13. Modify the above error messages for custom message:

```
<div *ngIf="ename.touched">
<div *ngIf="ename.errors && (ename.invalid)">
<small class="text-danger" *ngIf="ename.errors['required']">
<small class="text-danger" *ngIf="ename.errors['pattern']">
it can contain only alphabets and space</small>
</div>
```

14. Now comment all the above code and update the ts and html respectively:

```
saveEmployee(emp:any)
 {
    console.log(emp.value)
  });
<div class="container">
<h1>Add Employee</h1>
<!-- ngModel , ngForm => we have FormsModule in app.module.ts-->
<!-- template reference variable > local to the tmeplate-->
<!-- <p>{ empform.value | json } }  -->
<form #empform="ngForm" (submit)="saveEmployee(empform)">
  <div class="mb-3">
     <input type="text" class="form-control" [class.errborder]="eid.invalid &&</pre>
eid.touched" required
       placeholder="enter id" #eid="ngModel" ngModel name="eid"/>
    <!-- <span>{ {ename.className} } </span> -->
    <div *ngIf="eid.touched">
       <div *ngIf="eid.errors && (eid.invalid)">
         <small class="text-danger" *ngIf="eid.errors?.required">
           Id required </small>
       </div>
    </div>
  </div>
  <div class="mb-3">
    <input type="text" class="form-control" [class.is-invalid]="ename.invalid &&</pre>
ename.touched" minlength="5"
      required placeholder="enter name" #ename="ngModel" ngModel
name="ename" />
    <!-- <span>{ {ename.className} } </span> -->
    <div *ngIf="ename.touched">
       <div *ngIf="ename.errors && (ename.invalid)">
         <small class="text-danger" *ngIf="ename.errors?.required">
           ename required </small>
         <small class="text-danger" *ngIf="ename.errors?.minlength">
           it should have minimin 5 characters</small>
       </div>
    </div>
  </div>
  <div class="mb-3">
```

```
<input type="email" class="form-control" [class.is-invalid]="email.invalid &&</pre>
email.touched" minlength="5"
       required placeholder="enter email" #email="ngModel" ngModel
name="email" />
    <!-- <span>{ {ename.className} } </span> -->
    <div *ngIf="email.touched">
       <div *ngIf="email.errors && (email.invalid)">
         <small class="text-danger" *ngIf="email.errors?.required">
           email required </small>
       </div>
    </div>
  </div>
  <div class="mb-3">
    <input type="password" class="form-control" [class.is-</pre>
invalid]="password.invalid && password.touched" minlength="5"
       required placeholder="enter password" #password="ngModel" ngModel
name="password" />
    <!-- <span>{ {ename.className} } </span> -->
    <div *ngIf="password.touched">
       <div *ngIf="password.errors && (password.invalid)">
         <small class="text-danger" *ngIf="password.errors?.required">
           password required </small>
       </div>
    </div>
  </div>
  <div class="mb-3">
    <input type="text" class="form-control" [class.is-invalid]="phone.invalid &&</pre>
phone.touched" minlength="5"
       required placeholder="enter phone" #phone="ngModel" ngModel
name="phone" />
    <!-- <span>{ {ename.className} } </span> -->
    <div *ngIf="phone.touched">
       <div *ngIf="phone.errors && (phone.invalid)">
         <small class="text-danger" *ngIf="phone.errors?.required">
           Phone required </small>
       </div>
    </div>
  </div>
  <div ngModelGroup="address">
    <div class="mb-3">
       <input type="text" class="form-control" placeholder="enter city"</pre>
#city="ngModel" ngModel name="city" />
    </div>
    <div class="mb-3">
       <input type="text" class="form-control" placeholder="enter country"</pre>
       required
       #country="ngModel" ngModel name="country" />
       <div *ngIf="country.touched">
         <div *ngIf="country.errors && (country.invalid)">
           <small class="text-danger" *ngIf="country.errors?.required">
```