

# Angular Form Validation

- Turn off HTML5 form validation:  
    <form novalidate>
- Angular takes over responsibility for validation

# Angular Template Reference Variables

```
<form novalidate #loginForm="ngForm">
```

```
<input . . . #username="ngModel" . . . >
```

- Template variables set to ngForm and ngModel gives reference to the Angular directive
  - Use this in the template to check for control states such as valid, dirty, errors

# Control States

- Use template variable name and its control state to check

State	Description
.pristine	true if field/form has not been changed
.dirty	reverse of .pristine
.valid	true if form field/whole form is valid
.invalid	reverse of .valid

# Form Validation Examples

- Disable submit button:  

```
<button type="submit" . . .  
  [disabled]="loginForm.form.invalid">Login</button>
```
- Display error message  

```
<md-input-container  
  dividerColor="{{password.invalid && !password.pristine ? 'warn' : 'primary'}}">  
  <input . . . #password="ngModel" required>  
  <md-hint>  
    <span [hidden]="password.pristine">  
      <span [hidden]="!password.errors?.required">password is required</span>  
    </span>  
  </md-hint>  
</md-input-container>
```