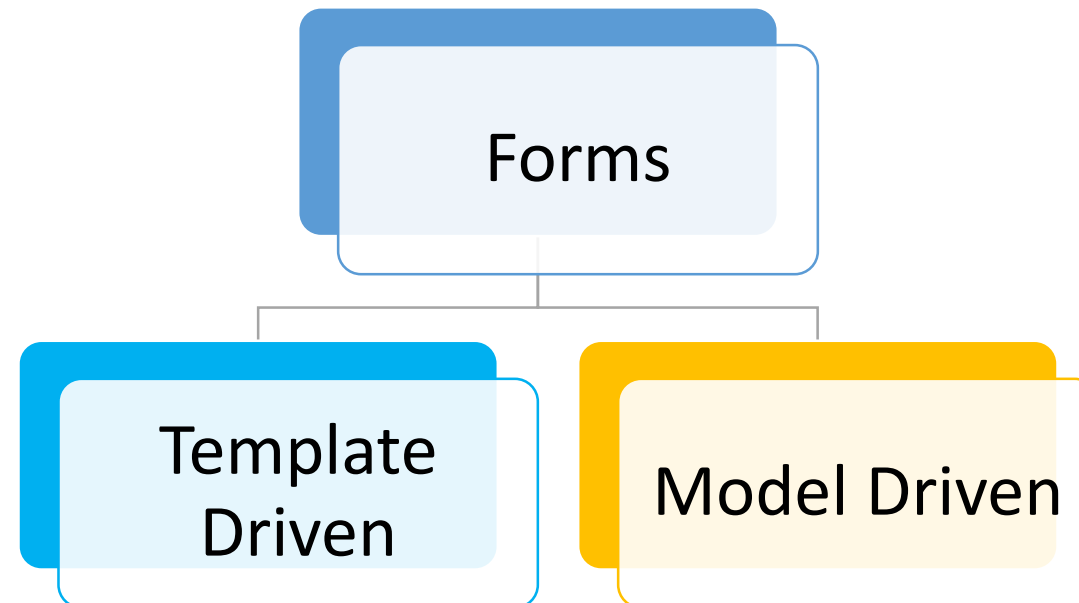


# Angular Forms and Validations

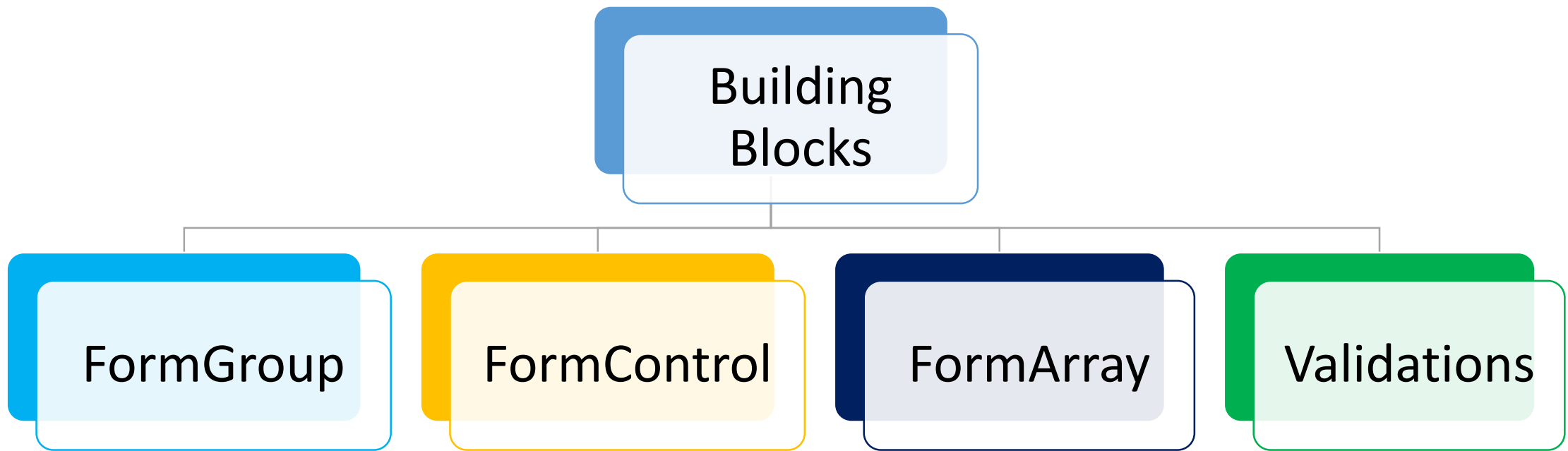
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# Angular Forms

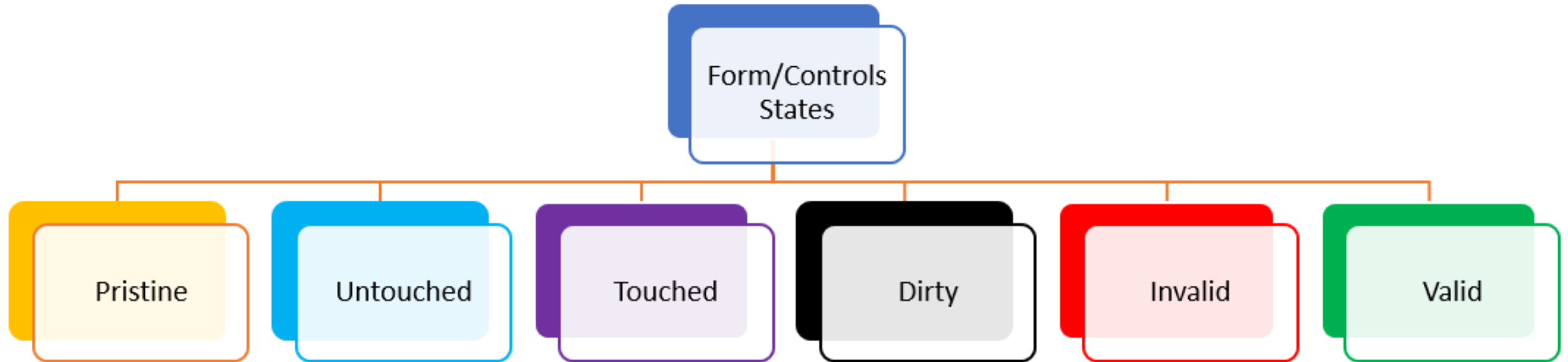
- HTML forms are an essential part of a web application
- Angular provides two ways to create form – Template Driven and Model Driven



# Angular Form Building Blocks



# Angular Form and Form Controls States

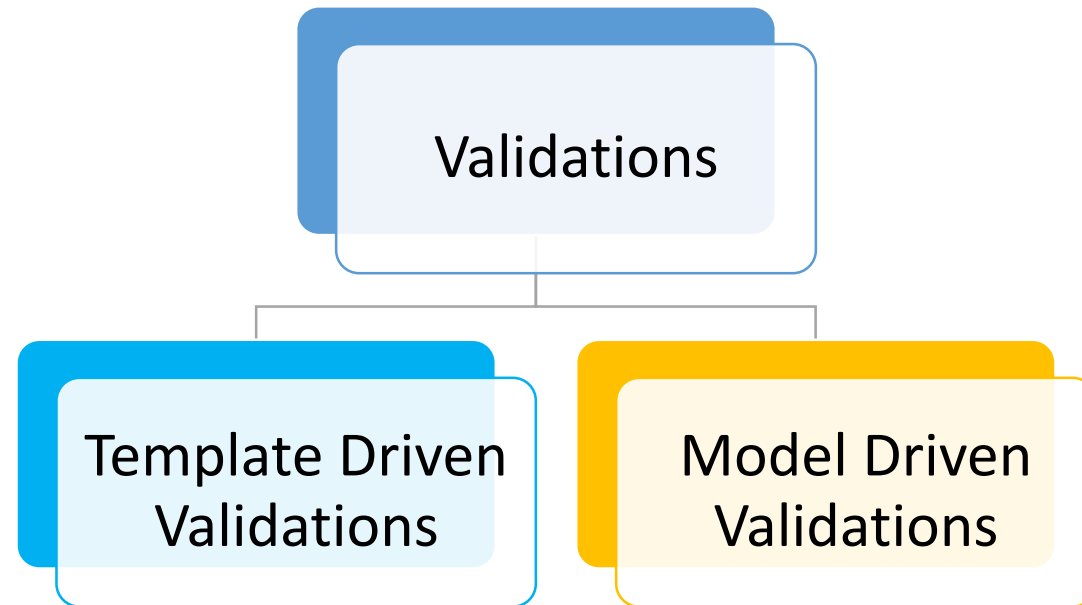


# States Transition

- untouched => touched
- invalid => valid
- pristine => dirty

# Angular Form Validations

- Validate user input for accuracy and completeness
- Performs on client side

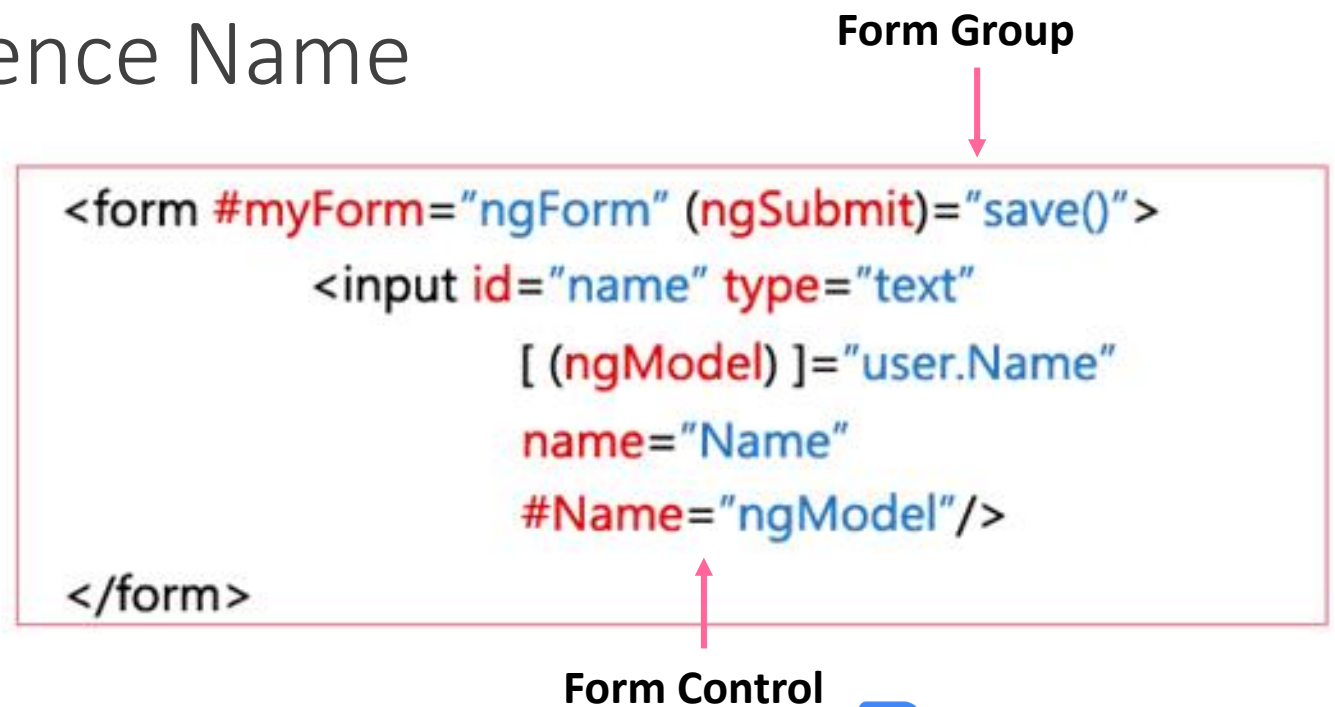


# Angular Forms Built-In Validation

- required
- minlength
- maxlength
- pattern
- email – supports in Ng4
- min
- max

# Template Driven Form

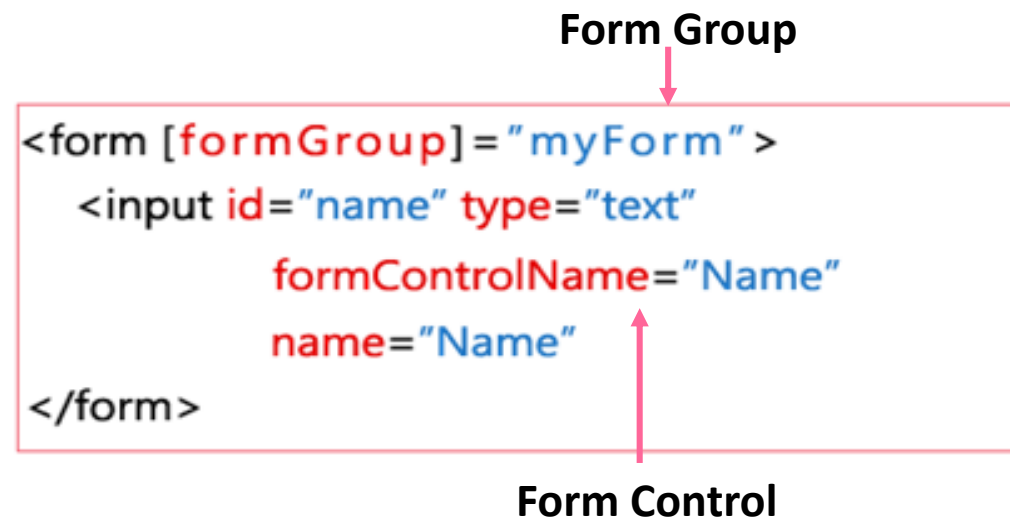
- Form is setup and configured in HTML Code
- Easy and suits for simple form
- Use Directives and Reference Name
  - ngForm
  - ngModel
  - #refName





# Model Driven (Reactive) Form

- Form is setup and configured in component class
- Based on *reactive style* of programming where you use the underlying APIs FormControl and FormGroup that track the value and validation status
- Reactive forms offer the ease of testing, and validation



# Template Driven vs. Model Driven Form

- Form is setup and configured in HTML Code
  - Easy and suits for simple form
  - Two-way data binding
  - Automatically track form and input element state
  - Form is passed to component class via *ngSubmit()*
  - Unit Testing is complex
- Form is setup and configured in component class using FormBuilder
  - Flexible and suits for complex form
  - No data binding(immutable data model)
  - Reactive Transformation that can react to changes in data across the app
  - Form can be accessed in component class without passing it via *ngSubmit()*
  - Unit Testing is easy