# Angular JS 学习笔记

Angular Intro

1. AngularJS extends HTML attributes with **Directives**, and binds data to HTML with **Expressions**.
2. AngularJS extends HTML with **ng-directives**.
3. The **ng-app** directive defines an AngularJS application.
4. The **ng-model** directive binds the value of HTML controls (input, select, textarea) to application data.
5. The **ng-bind** directive binds application data to the HTML view.
6. AngularJS expressions are written inside double braces: **{{ expression }}**.
7. AngularJS expressions bind AngularJS data to HTML the same way as the **ng-bind** directive.
8. AngularJS **modules** define AngularJS applications.

AngularJS **controllers** control AngularJS applications.

The **ng-app** directive defines the application, the **ng-controller** directive defines the controller.

AngularJS Expression

1. AngularJS expressions can be written inside double braces: {{ *expression* }} or inside a directive: ng-bind="*expression*".
2. AngularJS Expressions vs. JavaScript Expressions
3. Like JavaScript expressions, AngularJS expressions can contain literals, operators, and variables.
4. Unlike JavaScript expressions, AngularJS expressions can be written inside HTML.
5. AngularJS expressions do not support conditionals, loops, and exceptions, while JavaScript expressions do.
6. AngularJS expressions support filters, while JavaScript expressions do not.

AngularJS Modules

1. An AngularJS module defines an application.
2. The module is a container for the different parts of an application.
3. The module is a container for the application controllers.
4. Controllers always belong to a module
5. The [] parameter in the module definition can be used to define dependent modules. Without the [] parameter, you are not creating a new module, but retrieving an existing one.

AngularJS Directives

1. AngularJS lets you extend HTML with new attributes called **Directives**.
2. AngularJS has a set of built-in directives which offers functionality to your applications.
3. AngularJS also lets you define your own directives.

The ng-app Directive:

1. The ng-app directive defines the **root element** of an AngularJS application.
2. The ng-app directive will **auto-bootstrap** (automatically initialize) the application when a web page is loaded.

The ng-init Directive:

The ng-init directive defines **initial values** for an AngularJS application.

Normally, you will not use ng-init. You will use a controller or module instead.

The ng-model Directive:

The ng-model directive binds the value of HTML controls (input, select, textarea) to application data.

The ng-model directive can also:

* Provide type validation for application data (number, email, required).
* Provide status for application data (invalid, dirty, touched, error).
* Provide CSS classes for HTML elements.
* Bind HTML elements to HTML forms.

AngularJS ng-model Directive

The ng-model directive binds the value of HTML controls (input, select, textarea) to application data.