

# Angular and Ember

# Group

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#### INTRODUCTION

Ember.js is an open source JavaScript client framework for developing web applications and using the MVC (model view controller) architecture pattern.

Feature	Explanation
Open Source	Ember.js is an open source JavaScript framework (MIT license)
Flexible	It is a flexible framework, including the concept of fast web pages. It allows you to speed up the performance of your application without reloading the entire page
Core with HTML	It has a handlebars template library like HTML, and embeds expressions that change display
Smaller	Compared to other Javascript libraries, the size of the Ember.js application is smaller
Relevance	Data binding is fully supported. It creates a link between two properties. When one property changes, the other property updates to the new value

Figure 1. Features of Ember.

Angular.js is a JS framework created by Google, which can be used to extend HTML vocabulary in applications, so as to use HTML to declare dynamic content in web applications.

Feature	Explanation
Two-way data binding	The model and the view are completely bound together, the model changes, and the view also changes, and vice versa
Template	In AngularJS, the template is equivalent to the HTML file is parsed into the DOM by the browser, AngularJS traverses these DOM, which means AngularJS uses the template as a DOM to operate, to generate some instructions to complete the data binding to the view.
Declarative dependency injection	The design pattern of the back-end language is given to the front-end code, which means that the front-end code can improve the reusability and flexibility. In the future, the pattern may put a lot of operations on the client, and the server only provides data sources and other operations that the client cannot complete
Perfect page instructions	It can be used to create custom tags, decorate elements, or manipulate DOM attributes
Test Driven Development	Angularjs has taken this as the goal from the beginning. Applications developed using Angular can easily perform unit testing and end-to-end testing, which solves the defect that traditional js code is difficult to test and maintain

Figure 2. Features of Angular.

### **COMPARION OF FRAMEWORKS**

Ember and Angular, which are under our group researching, has a lot of similarities and differences too. Ember. is is more community-based and more suitable for production environment. Compared with ember. is, angular. is is more like a research project. For example, in a learning document, Ember. is It focuses on models, views, and controllers, while the angular. is guide requires you to learn something like scope, indicator, and translation. in addition, there are many startups through Ember. is Success and start giving back Ember. is community.

Angular.js conforms to the future of the webAngular.js makes me feel like writing a web application that really supports all web concepts and extends HTML in a very fluid way. In fact, angular.js does not use its own objects or rewrite JS methods. In general, Ember has a perfect system. You can quickly build projects and greatly improve development efficiency. However, it has many constraints, can't be transformed freely and has poor expansibility.



Figure 3. Angular brand



Figure 4. Ember brand.

## **CONCLUSIONS**

Angular is a popular and easy-to-use Web frontend framework currently maintained by Google. Angular converts your templates into code, highly op timizes for modern JavaScript virtual machines, and makes it easy to get the productivity that frameworks offer, while retaining all the benefits of handwritten code. If you need to access technology resources with in a large framework, the technology within the fram ework is usually easy to migrate. Or if you need to train developers in the framework and have some confidence that they will gain some develop ment capability in the short term, then you can consider Angular.

The downside is that the popularity of Ember is now on the decline. If you're looking for maturity in a fram ework, it's hard to get Ember wrong. In addition, with extensive official and officially approved training, and a strict structure, it may be easier than other frameworks to find people who can build applications based on Ember. Js.

#### REFERENCES

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