## JavaScript MVC

Start to write object-oriented JavaScript code using **ThinkMVC** – by Nanfei

#### Challenges:

- I. JavaScript has been more and more popular in web applications in order to improve customer experience.
- II. JavaScript has been heavier and heavier at the client side.

#### Benefits from OO and MVC:

- I. Everything is object. Easier to map what we think of what we see to code.
- II. Make JavaScript code much better structured, more maintainable, readable and extendable.

# Why choose 00 and MVC for your JavaScript code?

AUI is a tool library based on jQuery and provides useful common components. Another big contribution is, AUI separates code into modules. It meets the <u>Asynchronous Module Definition</u> (AMD) rule.

global variables
function {...}
function {...}

```
Module1 {
  variables
  function {...}
  function {...}
}

Module2 {
  variables
  function {...}
  function {...}
}
```

## **AUI VS. ThinkMVC**

#### Backbone is a MV\* framework.

```
// business logic
Backbone.Model {
  variables: { },
  change: function {
     this.trigger('change');
  }
}
```

events

```
global variables
function {...}
function {...}
```

Dependent libs:

understorejs: view template

requirejs: AMD

```
// subscribe window/model events
and update UI

Backbone.View {
  events: {
    'click #box': 'method1'
  } // window events

method1: function {
    model.on('change', callback);
    model.change();
  }
}
```

### Backbone VS. ThinkMVC

#### ThinkMVC is a MVC framework.

```
// dispatch window events
thinkMVC.Controller {
  events: {
      'click #box': 'method1'
  } // window events

method1: function () {
      model.change();
  }
}
```

function call

```
// business logic
thinkMVC.Model {
  variables: {},
  change: function {
    ...
    this.trigger('change');
  }
}
```

- I. Controller: handle customer requests (window events)
- II. Model: handle business logic
- III. View: handle model events and update UI

```
// dispatch model events and update
UI

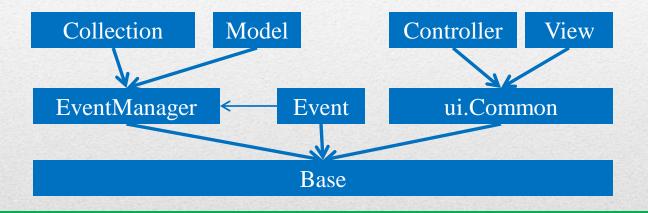
thinkMVC.View {
   events: {
      'change': 'method1'
   }, // model events

method1: function { // update UI }
}
```

## ThinkMVC — C:M:V

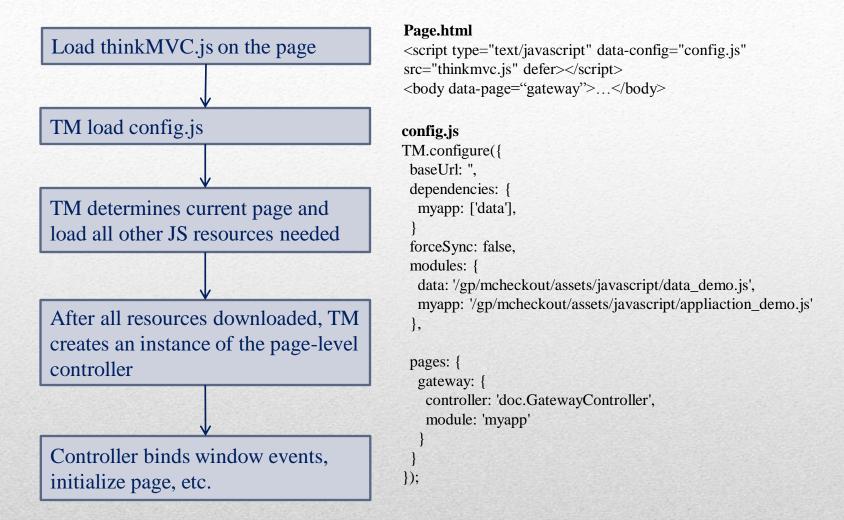
CustomCollection CustomModel

CustomController CustomView



Core

## **Architecture of ThinkMVC**



### How does ThinkMVC work?

#### TM.declare().inherit().extend().share();

See example code:

https://github.com/chennanfei/ThinkMVC/blob/master/demo.js

## Write JavaScript code with ThinkMVC



Welcome your ideas and help make ThinkMVC more powerful