

Meteor JS

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The logo for METEOR features the word "METEOR" in a bold, dark blue, sans-serif font. The letter "O" is replaced by a stylized orange meteor streak consisting of five parallel lines of varying lengths, slanted downwards from left to right.

METEOR

What is Meteor?

A full stack, open source platform to build web and mobile apps in Javascript

- ❖ 100% pure javascript
- ❖ One codebase, all platforms
- ❖ Open and extensible
- ❖ Fast Development



Meteor Components

- ❖ Command Line Tool
- ❖ View Layer - Blaze (Angular, React, Vue)
- ❖ Livequery
- ❖ Full stack package system - atmospherejs.com
- ❖ Build system

Cordova/Phonegap

Why Meteor?

Yesterday and Today?

Browser

Refresh Button

Individual Sessions

Links and forms

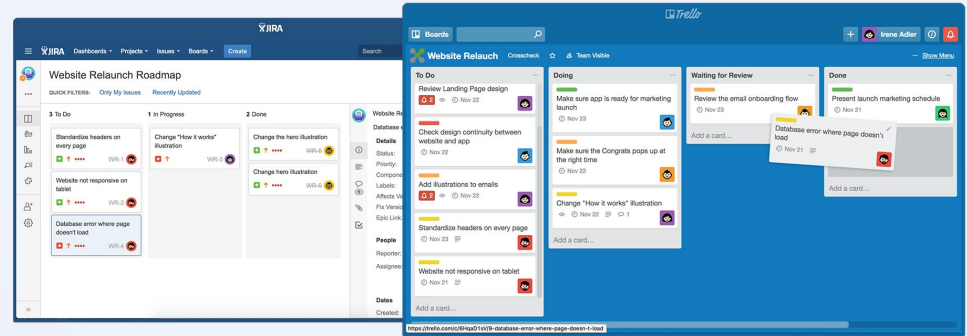


Mobile

Live Updates

Multi-user Collaboration

Native Style GUI



Seven Principles of Meteor

01. Data on the Wire
02. One language
03. Database Everywhere
04. Latency Compensation
05. Full Stack Reactivity
06. Embrace the Ecosystem
07. Simplicity Equals Productivity

Development

Getting Started

Install meteor on Windows

```
choco install meteor
```

Install meteor on Mac

```
curl https://install.meteor.com/ | sh
```

Create a project

```
meteor create simple-todos
```

Run it locally

```
cd simple-todos  
meteor npm install  
meteor  
# Meteor server running on: http://localhost:3000/
```

App structure

```
client/main.js      # a JavaScript entry point loaded on the
client             #
client/main.html   # an HTML file that defines view templates
client/main.css    # a CSS file to define your app's styles

server/main.js     # a JavaScript entry point loaded on the
server             #

test/main.js       # a JavaScript entry point when running
tests              #

package.json       # a control file for installing npm packages
package-lock.json # describes the npm dependency tree

node_modules/     # packages installed by npm

.meteor/           # internal Meteor files
.gitignore        # a control file for git
```

Meteor Templates

imports/ui/body.html

```
<body>
  <div className="container">
    <header>
      <h1>Todo List</h1>
    </header>

    <ul>
      {{#each tasks}}
        {{ > task}}
      {{/each}}
    </ul>
  </div>
</body>

<template name = "task" >
  <li> {{ text }}</li>
</template>
```

imports/ui/body.js

```
import { Template } from 'meteor/templating';

import './body.html';

Template.body.helpers({
  tasks: [
    { text: 'This is task 1' },
    { text: 'This is task 2' },
    { text: 'This is task 3' },
  ],
});
```

Meteor Collection

imports/api/tasks.js

```
import { Mongo } from 'meteor/mongo';  
  
export const Tasks = new Mongo.Collection('tasks');
```

server/main.js

```
import '../imports/api/tasks.js';
```

imports/ui/body.js

```
import { Template } from 'meteor/templating';  
  
import { Tasks } from '../api/tasks.js';  
  
import './body.html';  
  
Template.body.helpers({  
  tasks() {  
    return Tasks.find({});  
  },  
});
```

Publications and Subscriptions

Server

```
Inbox = new Mongo.Collection('inbox');

if (Meteor.isServer) {
  Meteor.publish('tasks', function () {
    return Inbox.find({$or: [{to_user_id : this.userId}, {user_id : this.userId}], {
      fields: {
        'user_id' : 1,
        'to_user_id' : 1,
        'message' : 1,
        'created_at' : 1,
      },
      sort: {
        'created_at' : -1
      }
    })
  })
}
```

Client

```
if (Meteor.isClient) {
  Meteor.subscribe('tasks');
}
```

Packages

- ❖ Adding packages was made real simple just find your desired packages and type meteor add <package>

```
meteor add accounts-base
```

- ❖ There are some useful packages that are required almost in every app: accounts-base, jquery, less, scss

```
meteor add fourseven:scss
```

- ❖ Meteor remove to remove package

```
meteor remove fourseven:scss
```

Running on mobile

- ❖ Running on an iOS simulator(Mac only), device

```
meteor install-sdk ios
meteor add-platform ios
// simulator
meteor run ios
// device
meteor run ios-device
```

- ❖ Running on an Android emulator, device

```
meteor install-sdk android
meteor add-platform android
// emulator
meteor run android
// device
meteor run android
```


Practice Questions

When not to use Meteor?

- ❖ If you want to build a website, not a web application
- ❖ When you already have a backend
- ❖ When all you want is to build a web-service/Rest API
- ❖ When core MySQL support is needed
- ❖ When you need to squeeze every last bit of performance from your app

When can you actually build with Meteor?

- ❖ Web apps with rich interfaces
- ❖ Collaborative apps (like Slack, Trello etc)
- ❖ Real-time dashboards
- ❖ Cross-Platform Apps
- ❖ Fast prototypes, MVP's

Thank you!