

Only JavaScript, only Meteor.js

Development in PHP

- Context switching
 - Server language vs. JavaScript

Development in PHP

- Context switching
 - Server language vs. JavaScript
- Different function names in PHP and JavaScript

Development in PHP

WRONG!!!

Node.js

- JavaScript on the server

Node.js

- JavaScript on the server
- Isomorphic applications

Node.js

- JavaScript on the server
- Isomorphic applications
- JavaScript everywhere

Node.js frameworks

- Sails.js, Geddy.js, Tower.js, Total.js,...

Node.js frameworks

- Sails.js, Geddy.js, Tower.js, Total.js, ...
 - not much killer features

Node.js frameworks

- Sails.js, Geddy.js, Tower.js, Total.js, ...
 - not much killer features
 - very small community

Node.js frameworks

- Sails.js, Geddy.js, Tower.js, Total.js, ...
 - not much killer features
 - very small community
 - lack of learning resources

Node.js frameworks

- Express.js
 - very lightweight

Node.js frameworks

- Express.js
 - very lightweight
 - programmer has to do a lot of work himself

Node.js frameworks

- Meteor.js
 - a lot of killer features

Node.js frameworks

- Meteor.js
 - a lot of killer features
 - easy to learn

Node.js frameworks

- Meteor.js
 - a lot of killer features
 - easy to learn
 - good documentation

Node.js frameworks

- Meteor.js
 - a lot of killer features
 - easy to learn
 - good documentation
 - large passionate community

Node.js frameworks

- Meteor.js
 - a lot of killer features
 - easy to learn
 - good documentation
 - large passionate community
 - a lot of learning resources

What is Meteor?

Full stack JavaScript platform for building real-time applications.

Built on top of Node.js

Meteor.js (killer) features

- Live reload - forget about F5

Meteor.js (killer) features

- Live reload - forget about F5
- Automatic CSS and JS minification on production server

Meteor.js (killer) features

- No need to include CSS, JS files manually

~~<link rel="stylesheet" href="bower_components/bootstrap/dist/css/bootstrap.css" />~~

~~...~~

~~<script src="bower_components/jquery/dist/jquery.js"></script>~~

~~...~~

Meteor.js (killer) features

- Real-time by default

```
Messages = new Mongo.Collection('messages');
```

```
Messages.insert({ text: 'Hello Meteor', timestamp: Date.now() });
```

Meteor.js (killer) features

- Built in client-side technologies
 - Templates, Helpers, Events, Session

Meteor.js (killer) features

- Built in client-side technologies

```
Template.hello.helpers({  
  counter: function() {  
    return Session.get('counter');  
  }  
});
```

Meteor.js (killer) features

- Built in client-side technologies

```
<template name="hello">  
  <button class="increase-counter">Click me</button>  
  <p>You clicked {{counter}} times</p>  
</template>
```

Meteor.js (killer) features

- Built in client-side technologies

```
Template.hello.events({  
  'click .increase-counter': function(evt, tpl) {  
    Session.set('counter', Session.get('counter') + 1);  
  }  
});
```

Meteor.js (killer) features

- MiniMongo

//client-side code

```
var messagesFromFuture = Messages.find({  
  timestamp: { $gt: Date.now() }  
});
```

Meteor.js (killer) features

- Latency compensation
 - instant feedback for user interaction

Meteor.js (killer) features

- Package manager

```
$ meteor add accounts-ui accounts-password
```

Meteor.js (killer) features

- Package manager

```
$ meteor add accounts-ui accounts-password
```

```
<template name="hello">  
  <h1>Sign in / Sign up:</h1>  
  {{> loginButtons}}  
</template>
```

Meteor.js (killer) features

- Package manager

```
$ meteor add less
```

```
$ meteor add coffeescript
```

atmospherejs.com

Meteor.js (killer) features

- Package manager
 - You can also use NPM

Meteor.js (killer) features

- Built in authentication/registration
 - Email, Facebook, Twitter, Google, Github,...

\$ meteor add service-configuration

\$ meteor add accounts-facebook

Meteor.js (killer) features

- Built in authentication/registration
 - Email, Facebook, Twitter, Google, Github,...

```
ServiceConfiguration.configurations.insert({  
  service: "facebook",  
  appId: "yourAppId",  
  secret: "yourSecret"  
});
```

Meteor.js (killer) features

- Built in authentication/registration
 - Email, Facebook, Twitter, Google, Github,...

Meteor.loginWithFacebook();

Meteor.js (killer) features

- Easy deployment

```
$ meteor deploy appname
```

```
http://www.appname.meteor.com
```

Meteor.js (killer) features

- Easy deployment
 - Meteor up package

```
$ npm install -g mup
```

```
$ cd /app-folder
```

```
$ mup init
```

```
$ mup deploy
```

Meteor.js (killer) features

- Mobile apps in Meteor (Android, iOS)

```
$ meteor install-sdk android
```

```
$ meteor add-platform android
```

```
$ meteor run android
```

Specialities

Publish/Subscribe

```
//server
```

```
Meteor.publish("userTasks", function () {  
    return Tasks.find({ userId: this.userId });  
});
```

```
//client
```

```
Meteor.subscribe("userTasks");
```


Specialities

Autopublish, Insecure package

\$ meteor remove autopublish

\$ meteor remove insecure

Specialities

Directory structure

app/

client/

lib/

public/

server/

...

Meteor.js caveats

- Only MongoDB support at this time.

Meteor.js community

The image shows a screenshot of a Facebook group page. At the top, the group name "Learn MeteorJS properly" is displayed in the search bar area. The profile picture of the group is a woman's face. The main cover image features the text "Learn METEOR Properly" in a large, bold font, with the "E" in "METEOR" stylized with red diagonal lines. Below the cover image, there are navigation tabs for "Learn MeteorJS properly", "Members", "Events", "Photos", and "Files". A search bar for the group is also present. The left sidebar shows the user's profile "Tomislav Elfoslav Hromislav" and a list of navigation options: News Feed, Ads Manager, Messages, Events (14), Photos, Browse, Seenist, FasterChat, CoderMania, and Saved (2). Below the sidebar, there are "PAGES" like UNI Bike and Pages Feed (20+), and a "RECENT ACTIVITY" section. The main content area has a "Write Post" button and a text input field with the placeholder "Write something...". On the right, there are buttons for "Joined", "Share", "Notifications", and a menu icon. Below that, there is an "ABOUT" section for a "Public Group" with 717 members and a description: "To learn Meteor properly you need someone who knows Meteor properly. In this group, you can shar... See More · Edit".

Learn MeteorJS properly

Tomislav Elfoslav Hromislav
Edit Profile

News Feed
Ads Manager
Messages
Events 14
Photos
Browse
Seenist
FasterChat
CoderMania
Saved 2

PAGES
UNI Bike
Pages Feed 20+
Like Pages

RECENT ACTIVITY

Learn METEOR Properly

Joined Share Notifications

Learn MeteorJS properly Members Events Photos Files

Search this group

Write Post Add Photo / Video Ask Question Add File

Write something...

ABOUT 717 members
Public Group
To learn Meteor properly you need someone who knows Meteor properly. In this group, you can shar... See More · Edit

Meteor.js community

<https://forums.meteor.com/>

My Meteor applications

TodoToday <http://todotoday.meteor.com/> (OS)

Home + Add task Show tasks + Add project Show projects History Settings About Improve TodoToday

All tasks: 108 | Your tasks: 63 | Total day time: 3.87h

Manage your tasks

TODO all (13) | [Add](#)

Eleda - Settings form	→	✓	✎	✖
Eleda - oprava chyb (Exceptions)	→	✓	✎	✖
Eleda - privacy settings form	→	✓	✎	✖
Eleda - profile privacy	→	✓	✎	✖
Eleda - studovanie podkladov	→	✓	✎	✖
Reading twitter	→	✓	✎	✖
Supper	→	✓	✎	✖
Testing time task	→	✓	✎	✖
TodoToday - project times	→	✓	✎	✖
Eleda - prečistenie kódu	→	✓	✎	✖
Make meteor.hromnik.com page	→	✓	✎	✖
TodoToday - How important the task is	→	✓	✎	✖

TODO today (8) | [Add](#)

Eleda - Multiple choice gapfill	←	✓	✎	✖
Eleda - bugy problemy nedomyslenosti	←	✓	✎	✖
Eleda - editacia modulu	←	✓	✎	✖
Eleda - homeworks	←	✓	✎	✖
Eleda - úprava profilu	←	✓	✎	✖
Eleda - úprava registr. formulára	←	✓	✎	✖
TodoToday - add meta tags and spiderable package	←	✓	✎	✖
TodoToday video presentation	←	✓	✎	✖

My Meteor applications

Seenist <http://seenist.com/>

SEENist bands events users bands

Bands seen live

1. Korpiklaani (10x) ▾
2. Arkona (8x) ▾
3. Fintroll (8x) ▾
4. Eluveite (7x) ▾
5. Stratovarius (7x) ▾
6. Attack of Rage (7x) ▾
7. Behemoth (6x) ▾
8. Kataklysm (6x) ▾
9. Dying Fetus (5x) ▾
10. Nightwish (5x) ▾
11. In Flames (5x) ▾
12. Billy Barman (5x) ▾
13. Rage (5x) ▾
14. Amon Amarth (5x) ▾
15. Heaven Shall Burn (5x) ▾
16. Arch Enemy (5x) ▾
17. Silent Stream of Godless Elegy (4x) ▾
18. Opeth (4x) ▾
19. Epica (4x) ▾
20. Suburban Terrorist (4x) ▾
21. Arakain (4x) ▾
22. Horkýže sláze (4x) ▾
23. Carcass (4x) ▾
24. Puding Pani Elvisovej (4x) ▾
25. Alestorm (4x) ▾

What's going on

Efoslav has seen NL at NIL unplugged - Stará pekárna Bmo
Efoslav has seen Hental Corporation at Brutalassault 2013
Efoslav has seen NL at NIL and WITCH WIFE unplugged
Marika has seen Aeon Winds at TÁU Tour Europe 2014
Marika has seen Darkfall at TÁU Tour Europe 2014
Marika has seen Negura Bunget at TÁU Tour Europe 2014
Marika has seen Lunatic Gods at TÁU Tour Europe 2014
Efoslav has seen Harmony Bay at Brutalassault 2008
Efoslav has seen Attack of Rage at Brutalassault 2008
Efoslav has seen The Berzerker at Brutalassault 2008
Efoslav has seen Exodus at Brutalassault 2008
Efoslav has seen Hate at Brutalassault 2008
Efoslav has seen Six Feet Under at Brutalassault 2008
Efoslav has seen Ador Dorath at Brutalassault 2008
Efoslav has seen Wayd at Brutalassault 2008
Efoslav has seen Carcass at Brutalassault 2008
Efoslav has seen Kalmah at Brutalassault 2008
Efoslav has seen Cannibal Corpse at Brutalassault 2008
Efoslav has seen Fear Factory at Brutalassault 2008
Efoslav has seen Behemoth at Brutalassault 2008
Marika has seen Nazareth at Rockové mrazenie 2007
Marika has seen Suburban Terrorist at Voices of Death vol.6
Marika has seen Attack of Rage at Voices of Death vol.6
Marika has seen Silent Stream of Godless Elegy at Voices of Death vol.6
Marika has seen Keep on Rotting at Metalgate massacre 2012

My Meteor applications

Typefast <http://typefast.meteor.com/> (OS)

Welcome to Typefast competition! (2 users online)

Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book. It has survived not only five centuries, but also the leap into electronic typesetting, remaining essentially unchanged. It was popularised in the 1960s with the release of Letraset sheets containing Lorem Ipsum passages, and more recently with desktop publishing software like Aldus PageMaker including versions of Lorem Ipsum.

Start typing text above ↑ :

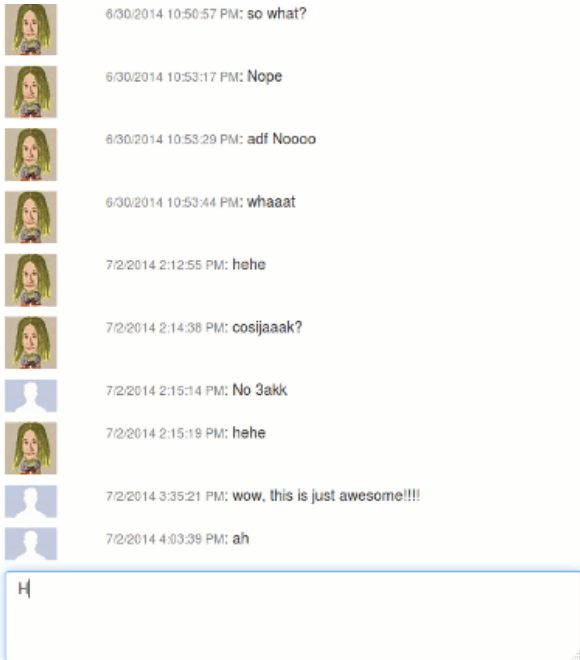
Lorem Ipsum is simply

See what your competitor is typing:

Lorem Ipsum is simply dummy

My Meteor applications

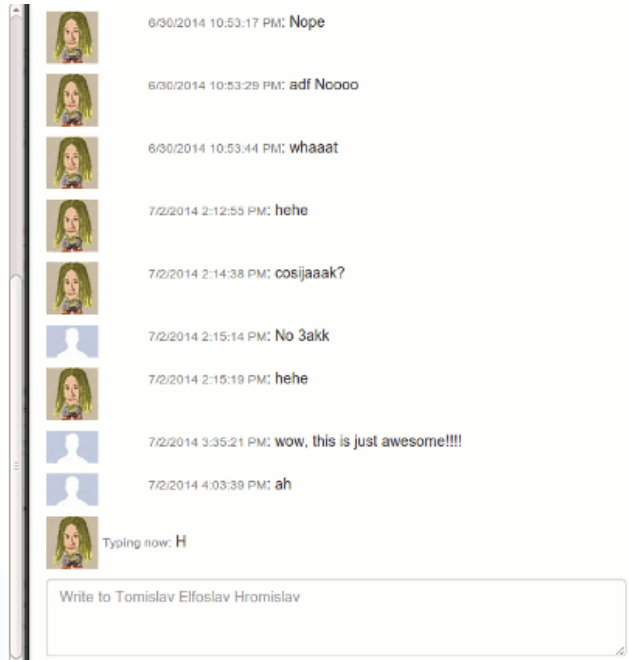
FasterChat <https://fasterchat.com> (OS)



A screenshot of a chat interface showing a list of messages on the left side of a split-screen view. Each message is preceded by a small circular profile picture of a woman with blonde hair. The messages are as follows:

- 6/30/2014 10:50:57 PM: so what?
- 6/30/2014 10:53:17 PM: Nope
- 6/30/2014 10:53:29 PM: adf Noooo
- 6/30/2014 10:53:44 PM: whaaat
- 7/2/2014 2:12:55 PM: hehe
- 7/2/2014 2:14:38 PM: cosijaak?
- 7/2/2014 2:15:14 PM: No 3akk
- 7/2/2014 2:15:19 PM: hehe
- 7/2/2014 3:35:21 PM: wow, this is just awesome!!!!
- 7/2/2014 4:03:39 PM: ah

At the bottom of the chat window, there is a text input field containing the letter 'H'.



A screenshot of a chat interface showing a list of messages on the right side of a split-screen view. Each message is preceded by a small circular profile picture of a woman with blonde hair. The messages are as follows:

- 6/30/2014 10:53:17 PM: Nope
- 6/30/2014 10:53:29 PM: adf Noooo
- 6/30/2014 10:53:44 PM: whaaat
- 7/2/2014 2:12:55 PM: hehe
- 7/2/2014 2:14:38 PM: cosijaak?
- 7/2/2014 2:15:14 PM: No 3akk
- 7/2/2014 2:15:19 PM: hehe
- 7/2/2014 3:35:21 PM: wow, this is just awesome!!!!
- 7/2/2014 4:03:39 PM: ah

At the bottom of the chat window, there is a text input field containing the text "Typing now: H". Below this, there is a larger text input field with the placeholder text "Write to Tomislav Elfoslav Hromislav".

My Meteor applications

CoderMania <http://codermania.com>

The screenshot shows the CoderMania website interface. At the top, there is a navigation bar with the logo 'CoderMania beta' and links for 'Lessons', 'Exercises', 'Students', and 'Leaderboard'. The user's profile 'efoslav' is visible in the top right. Below the navigation bar, there are three tabs for 'Level 1', 'Level 2', and 'Level 3', with 'Level 1' being the active tab. A breadcrumb trail reads: 'Hello world! > Comments > Expressions > Variables - introduction > Coding conventions > Arithmetic Operators > Comparison Operators'. The main heading is 'Lesson 1: Hello world!'. Underneath, there is an 'Assignment' section with the text: 'console.log() is a function that prints values in output. Let's create our first "Hello world" program. Type following code into code editor and press submit button:'. Below this text is a code editor containing the code: `console.log("Hello world");`. A blue box contains a note: 'If you do not know the solution and you need help, press button below and our teacher will help you ASAP.'. To the right of the assignment is a 'Code editor (assignment)' window with a dark background and a blue 'Submit' button at the bottom. Further right is a 'Result' window with a dark background and the text '- Press submit'.

Learning resources

- Official Meteor web: <http://meteor.com>
- Meteorhacks: <http://meteorhacks.com>
- E-book: <https://www.discovermeteor.com>
- Meteor screencasts: <https://www.eventedmind.com>
- Video courses on Udemy: <https://www.udemy.com>
- Meteor packages: <https://atmospherejs.com>
- My Meteor blog: <http://meteor.hromnik.com>
- Twitter: @meteorjs, #meteorjs

Only JavaScript, only Meteor.js

Try to build an application in Meteor