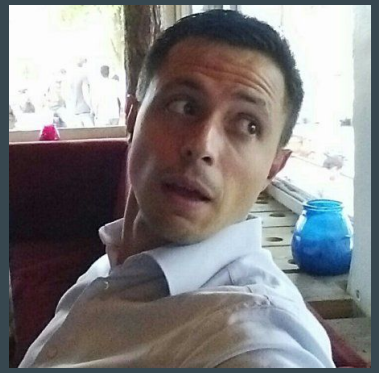
VS

ROCKET.CHAT

...

..or a tale on how to build a rocket with a meteor



ME

+

! ME

Milo

Alessandro

=

Red Babel.

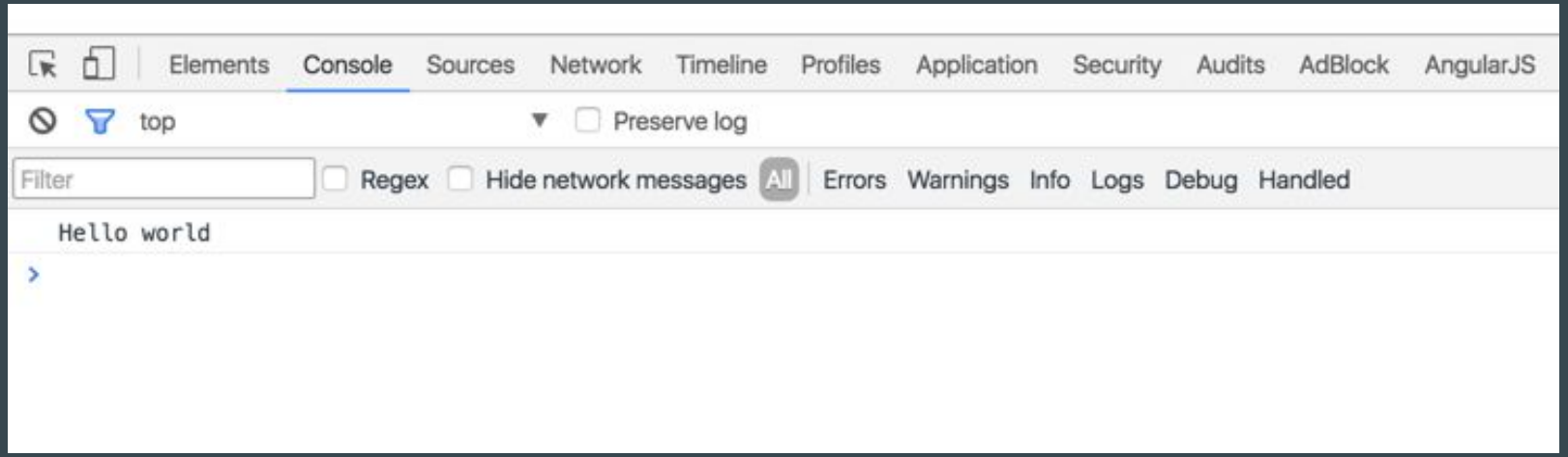
Have you ever created a web application?

*(**Web application**: a client–server software application in which the client , or the user interface, runs in a web browser. Source: wikipedia)*

MeteorJS webapp

www.meteor.com

```
console.log('Hello world');
```




```
2016-11-07 14:08:25 ☆ |2.2.3| Milos-MacBook-Pro in ~/Projects/redbabel/IS2017_workshop
o → meteor
[[[[[ ~/Projects/redbabel/IS2017_workshop ]]]]]

=> Started proxy.
=> Started MongoDB.
I20161107-14:08:35.587(1)? Hello world
=> Started your app.

=> App running at: http://localhost:3000/
```

Goals

- What is MeteorJS
- MeteorJS basic concepts
- Rocket.chat overview
- Rocket.chat package example

- Framework based on nodejs
- Isomorphic
- Reactivity
- Tool out of the box
  - Package manager

Isomorphic

Code runs both on client-side and on server-side

```
if (Meteor.isClient) {
  console.log('Hello world');
}

if (Meteor.isServer) {
  console.log('Hello world');
}

        … or

console.log('Hello world');
```

- Framework based on nodejs
- Isomorphic
- **Reactivity**
- Tool out of the box
  - Package manager

Reactivity

What is it?

"Is a property of the framework that allows your user interface to reflect the true state of the variables with minimal development effort"

Source: http://docs.meteor.com/

Reactivity

What is it?

- Describes data flow
- Meteor's core
  - Session
  - Cursor (i.e.: Collections)
  - Tracker
  - Reactive vars
  - Template

Source: https://en.wikipedia.org/wiki/Reactive_programming

Reactivity

How does it work?

- Reactive sources
  - Session
  - Cursor (i.e.: Collections)
  - Tracker
  - Reactive vars
- Reactive computation
  - Template

Reactivity

Reactive source creation

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

const Tasks = new
Mongo.Collection('tasks');
```

Reactivity

Reactive source update

```
if (Meteor.isServer) {
    Meteor.setInterval(() => {
    const now = new Date();
    Tasks.insert({
        text: "Hello world! "+now,
        createdAt: now,
    });
  }, 1000);
}
```

Reactivity

Reactive computing

```
if (Meteor.isClient) {
  import './body.html';
  Template.body.helpers({
    tasks: Tasks.find(),
  });
}
```

Do you remember?

```
const Tasks = new
Mongo.Collection('tasks');
```

Reactivity

Reactive computing

- Framework based on nodejs
- Isomorphic
- Reactivity
- **Tool out of the box**
  - **Package manager**

Package manager

... is a program used to install, uninstall and manage third party libraries, plugins etc etc (aka: packages)

- atmospherejs.com
- Out of the box
- Easy to use
- Integrates with npm (nodejs package manager)

Package manager

https://atmospherejs.com/
https://www.npmjs.com/

```
meteor help
meteor list
meteor add kadira:flow-router
meteor remove kadira:flow-router

meteor create --package mypackage
meteor publish mypackge

meteor npm install bcrypt --save
```

Q&A

- Framework based on nodejs
- Isomorphic
- Reactivity
- Tools out of the box
  - Package manager

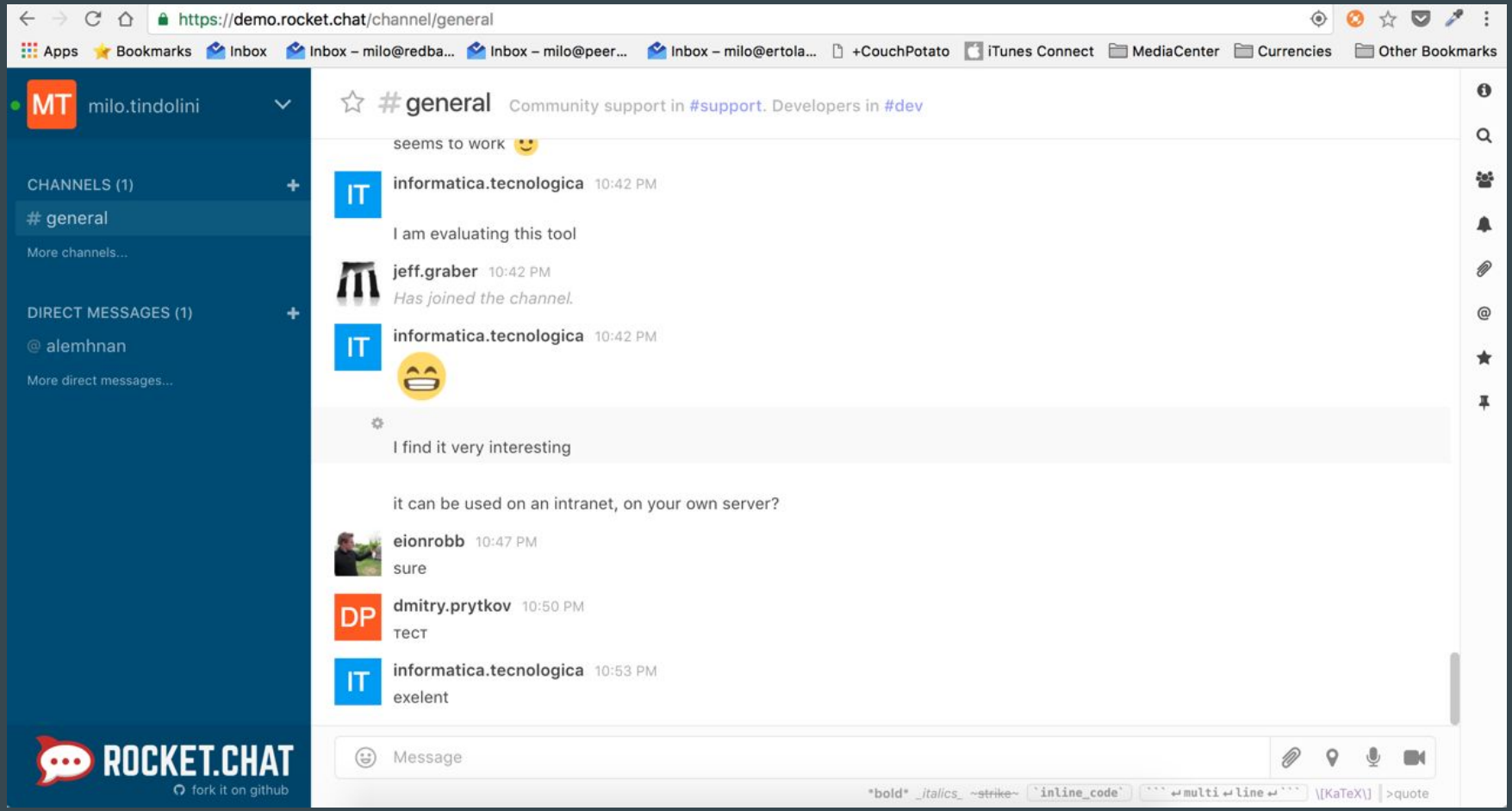
ROCKET.CHAT

Rocket.chat

https://rocket.chat/
https://rocket.chat/docs/developer-guides/
https://github.com/RocketChat/

- Chat platform
- Open source
- Meteor app
- Highly modularized
  - meteor's packages
- Docs
  - Official
  - Other packages' code
- Mostly written in coffeescript

DON’T YOU DARE TO USE COFFEESCRIPT


https://demo.rocket.chat/channel/general
Apps
Bookmarks
Inbox
Inbox – milo@redba...
Inbox – milo@peer...
Inbox – milo@ertola...
+CouchPotato
iTunes Connect
MediaCenter
Currencies
Other Bookmarks
MT
milo.tindolini
CHANNELS (1)
general
More channels...
DIRECT MESSAGES (1)
@ alemhnan
More direct messages...
general
Community support in #support. Developers in #dev
seems to work
IT
informatica.tecnologica 10:42 PM
I am evaluating this tool
jeff.graber 10:42 PM
Has joined the channel.
IT
informatica.tecnologica 10:42 PM
I find it very interesting
it can be used on an intranet, on your own server?
eionrobb 10:47 PM
sure
DP
dmitry.prytkov 10:50 PM
тест
IT
informatica.tecnologica 10:53 PM
exelent
ROCKET.CHAT
fork it on github
Message
bold _italics_ ~strike~ `inline_code` ```↵multi↵line↵``` \[KaTeX\] >quote

Rocket.chat package

https://rocket.chat/docs/developer-guides/

- Create
  - Commands
  - File structure
  - Package.js
- Coding
  - rc-is-2017.js

Rocket.chat package

create: commands

```
git clone https://github.com/RocketChat...

cd Rocket.chat

meteor create --package rc-is-2017

touch packages/rc-is-2017.js

meteor add rc-is-2017
```

Rocket.chat package

create: file structure

```
Rocket.chat/packages/rc-is-2017
    |
     -- package.js
    |
     -- rc-is-2017.js
    |
     -- README.md
```

Rocket.chat package

create: update package.js

Packages/rc-is-2017/package.js

```
Package.onUse(function(api) {
  api.versionsFrom('1.4.1.1');
  api.use([
        'ecmascript',
        'rocketchat:lib',
    ]);
  api.mainModule('rc-is-2017.js');
});
```

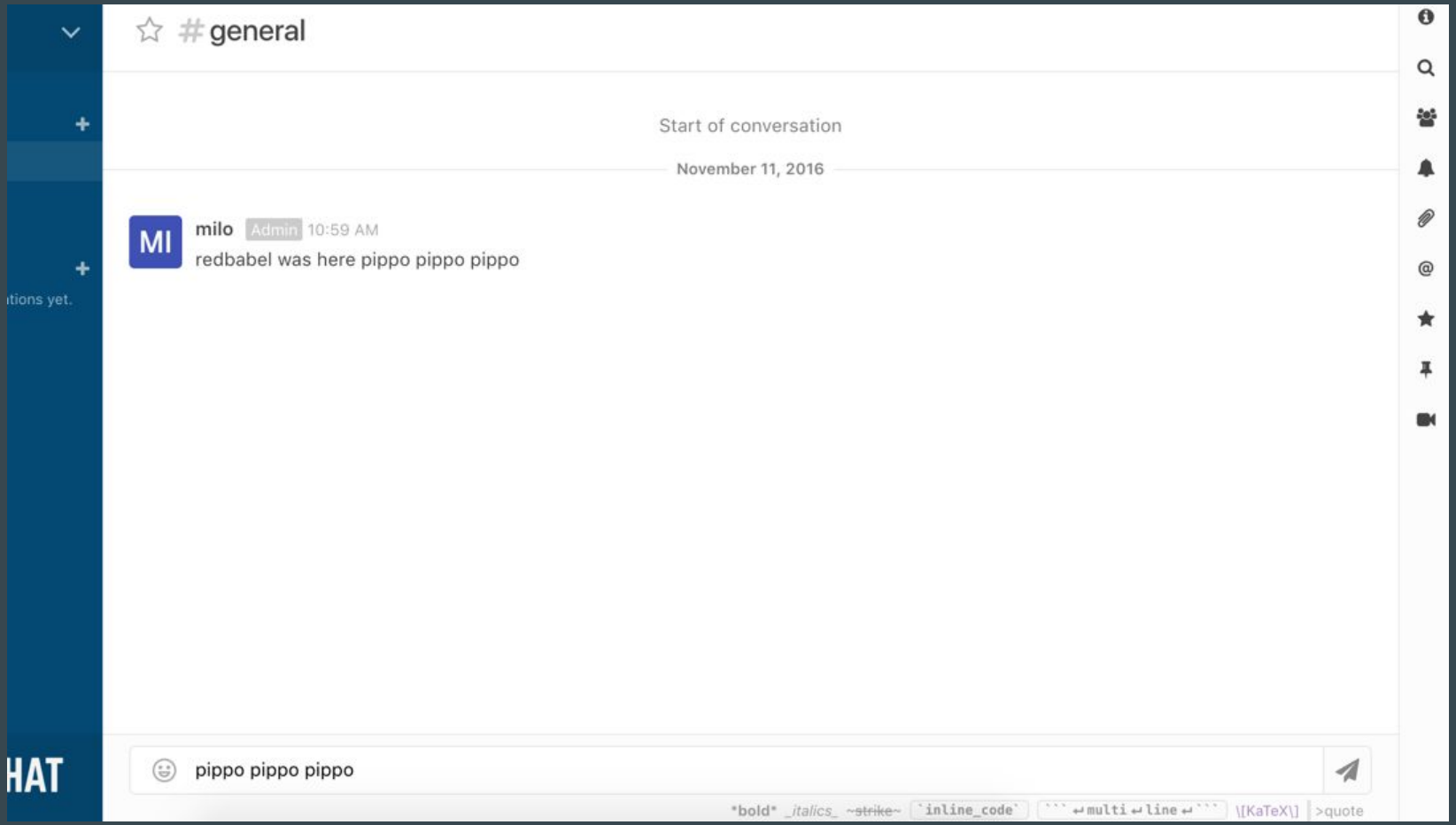
Rocket.chat package

coding: rc-is-2017.js

```
RocketChat.callbacks.add('renderMessage',
RocketIS2017,
RocketChat.callbacks.priority.HIGH - 2,
'RocketIS2017');


const RocketIS2017 = (function() {
  function RocketIS2017(message) {
    message.msg = 'redbabel was here
'+message.msg;
    message.html = 'redbabel was here
'+message.html;
    return message;
  }
  return RocketIS2017;
})();

// console.log(RocketChat.callbacks);
```


#general
Start of conversation
November 11, 2016
MI
milo Admin 10:59 AM
redbabel was here pippo pippo pippo
pippo pippo pippo
bold _italics_ ~strike~ `inline_code` ``` multi line ``` \[KaTeX\] >quote

References

- http://www.meteor.com/
- http://docs.meteor.com/
- http://isomorphic.net/javascript/
- http://www.rocket.chat/
- http://www.discovermeteor.com/blog/reactivity-basics-meteors-magic-demystified/
- http://github.com/redbabel/monolith/
- https://github.com/daschy/workshop-meteor-rocketchat/
- http://www.reactivemanifesto.org/

Goals

- What is MeteorJS
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Q&A + Happy coding

Thanks