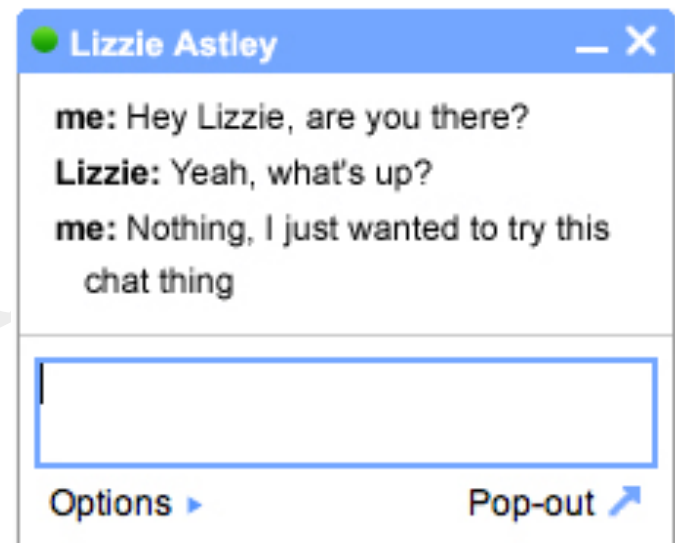# Social and Real-time Web Applications
## using Meteor

*Developing Real-time Web Apps in JavaScript on Linux*

Anurag Bhandari

A real-time application (RTA) is an application program that functions within a time frame that the user senses as immediate or current. The latency must be less than a defined value, usually measured in seconds.

- Gmail Chat / Talk
- Google Docs
- Etherpad

**Lizzie Astley** — ✕

me: Hey Lizzie, are you there?
Lizzie: Yeah, what's up?
me: Nothing, I just wanted to try this chat thing

Options ▸                    Pop-out ↗

*What is a real-time app?*

" Meteor is an open-source platform for building top-quality

web apps in a fraction of the time, whether you're an expert

developer or just getting started. "

What is Meteor?

- Data on the Wire

- One Language

- Database Everywhere

- Latency Compensation

- Full Stack Reactivity

- Embrace the Ecosystem

- Simplicity Equals Productivity

*Seven Principles of Meteor*

Meteor is powered by:

- *node.js* Event-driven I/O server-side JavaScript environment based on V8.

- *MongoDB* (from "humongous") is an open-source document database, and the leading NoSQL database.

- *Handlebars* Templating Engine in JavaScript (inspired by Mustache.JS); uses text file templates; accepts JSON data as input.

*Meteor: Behind the Scenes*

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

Meteor can be as easily updated via a simple:

```
$ meteor update
```

```
$ meteor create myapp

$ cd myapp

$ meteor
```

Creating a New App

| Name ▼ | Size | Type |
|---|---|---|
| ⊟ 📁 client | 3 items | folder |
|    📄 client.js | 8.3 kB | JavaScript program |
|    📄 parties.css | 1.1 kB | CSS stylesheet |
|    🌐 parties.html | 5.6 kB | HTML document |
| ⊟ 📁 public | 1 item | folder |
|    🖼 soma.png | 128.8 kB | PNG image |
| ⊟ 📁 server | 1 item | folder |
|    📄 server.js | 296 bytes | JavaScript program |
| 📄 model.js | 5.9 kB | JavaScript program |

*Structuring Your App*

```
$ meteor add pkg-name
```

Available packages:

- Bootstrap

- CoffeeScript

- D3

- jQuery

- Less

- Underscore

- more...

*Smart Packages*

Meteor makes use of [Handlebars.js](Handlebars.js) for implementing templates.

```
<template name="hello">

   Hello there, {{first}} {{last}}!

</template>
```

Let's see it live!

```
$ meteor deploy myapp.meteor.com
OR
$ meteor bundle myapp.tgz
```

- Deployment is a breeze: deployment on Linux is supported out of the box, though there's no official way yet to deploy on Windows.

- As Meteor is essentially based on node.js, so a Meteor app can be deployed just as any other node app.
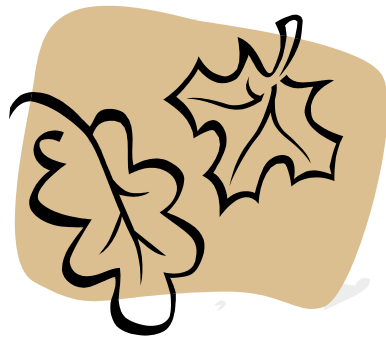
*Deploying*

- Always start with docs.meteor.com

- Not to be missed short videos
  - http://meteor.com/screencast
  - http://meteor.com/authcast

- More screencasts at eventedmind.com

- There's also a book at discovermeteor.com

- Unofficial Meteor research labs at meteorhacks.com

*Delving Further*

- Connect with me online:
  - Email –– ab@anuragbhandari.com
  - Google Talk –– same as above

- Official Meteor channels:
  - IRC –– https://www.meteor.com/irc
  - Stackoverflow –– http://stackoverflow.com/questions/tagged/meteor

*Questions?*

Thank You