

mozaic.js

Our way of making JS
apps interactive 😊

by uberVU

Our goals

- < 1s response time for most UI actions
- widgets should be highly re-usable
 - Render data without knowing its origin
- support extremely complex interactions
(Vladimir, our CPO, has a passion for that 😊)

Mozaic is built on ..

- Backbone.js + custom “collections” for 1-way data-binding
- Coffeescript
 - Keeps our codebase really small 😊
- Require.js
 - Load 90% of the code async, when it’s needed

Main concepts

- Widget
 - Responds to data events from Backbone collections (reset, add, change)
 - Responds to GUI events from user
- Datasource
 - A collection of Backbone.Collection (oversimplified)
 - Widgets declare their interest in certain collections of the Datasource and they are bound automatically

Complete workflow

- user enters index.html#hashbang
- router delegates to a Controller class
 - Extension of Backbone.Router
- Controller injects widgets
- Widgets inject widgets
- ...
- Widgets stop injecting more widgets

Complete workflow (2)

- All widgets are subscribed to “data channels”
- Most of the channels are created by the controller
- Channels are passed down from parent widgets to children widgets

What are we using this for?

- Complete revamp of our current frontend
 - Less than 20% of the LOC
 - Much more responsive
 - Hundreds of nested widgets on each page
 - Complete responsiveness

What can you do with it?

- Anything you want 😊
- The core is yours to take and improve
- Spread the word and turn this into a movement
- Enjoy our first open-source launch with us!
- Tell us what you think! hello@ubervu.com