

Tape Framework

Less random stuff in random places

clyfe

December 10, 2020

Modules

- (Ported from Duct.)
- The configuration is initiated twice.
- First into an intermediate configuration,
- which in turn is initiated into the system.



Figure: Modules

Components

- Note: two types of components:
 - Module components: fns that add to the config map.
 - System components: whatever.

```
(defmethod ig/init-key :tape/const [_ v] v)
```

Figure: Need later

Re-Frame Globals

- Re-Frame chose globals for a simpler API.

```
(ns my.app.p.controller)
(rf/reg-event-db ::index
  (fn [db _]
    {:people [...]})))
```

Figure: Re-Frame plain

```
(ns my.app.people.view)
(defn index []
  (for [person people]
    [:p person])))
```

Figure: Reagent plain

Use Integrant

- Begone globals.

```
(ns my.app.p.controller)
(defmethod ig/init-key
  ::index [_ _]
  (fn [db _]
    {:people [...]})))
```

Figure: Re-Frame Integrant

```
(ns my.app.people.view)
(defmethod ig/init-key
  ::index [_ _]
  (fn []
    (for [p peeps] [:p p])))
```

Figure: Reagent plain

Automate use Integrant

- Leverage Integrant keys inheritance.

```
(ns my.app.p.controller) (ns my.app.people.view)
(defn index [db _]      (defn index []
  {:people [...]})      (for [p peeps] [:p p]))
(derive ::index :tape/const) (derive ::index :tape/const)
```

Figure: Re-Frame Integrant

Figure: Reagent plain

Use Modules

- Modules are buckets of handlers, subscriptions, view fns.

```
;; cont'd from above
(defmethod ig/init-key
  ::module [_ _]
  (fn [config]
    (merge config
      {::index deps})))
```

Figure: Controller module

```
;; cont'd from above
(defmethod ig/init-key
  ::module [_ _]
  (fn [config]
    (merge config
      {::index deps})))
```

Figure: View module

Automate use Modules

- Have to annotate fns.

```
(c/defmodule)  
  
;; inspects ns  
;; expands into  
;; module above
```

Figure: Controller module

```
(v/defmodule  
  my.app.p.controller)  
  
;; inspects ns  
;; expands into  
;; module above
```

Figure: View module

Leverage Intuitions

- MVC is well understood.
- Let's use it in naming.
- Controller: Re-Frame stuff.
- View: Reagent stuff.
- Model: whatever.

Consistent Naming

- Force: event names to be namespaced.
- Force: handlers names to match event names.
- If a view is rendered as a result of an event handler executing, their names should match.

```
:my.app.people.controller/index ;; event  
my.app.people.controller/index ;; handler  
my.app.people.view/index        ;; view
```

Leverage Metadata

- Annotate fns.
- Automate module definition via defmodule.

```
(ns my.app.p.controller) (ns my.app.people.view)
(defn ::c/event-db index [defn] ::v/view index []
  {:people [...]})      (for [p peeps] [:p p]))
                          (v/defmodule
                           my.app.p.controller)
```

Figure: Controller module

Figure: View module

Links

<https://github.com/tape-framework>