

NGRX / STORE

Pavan Podila



minions

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Sapient

Director, Interactive Development

REDUCKS

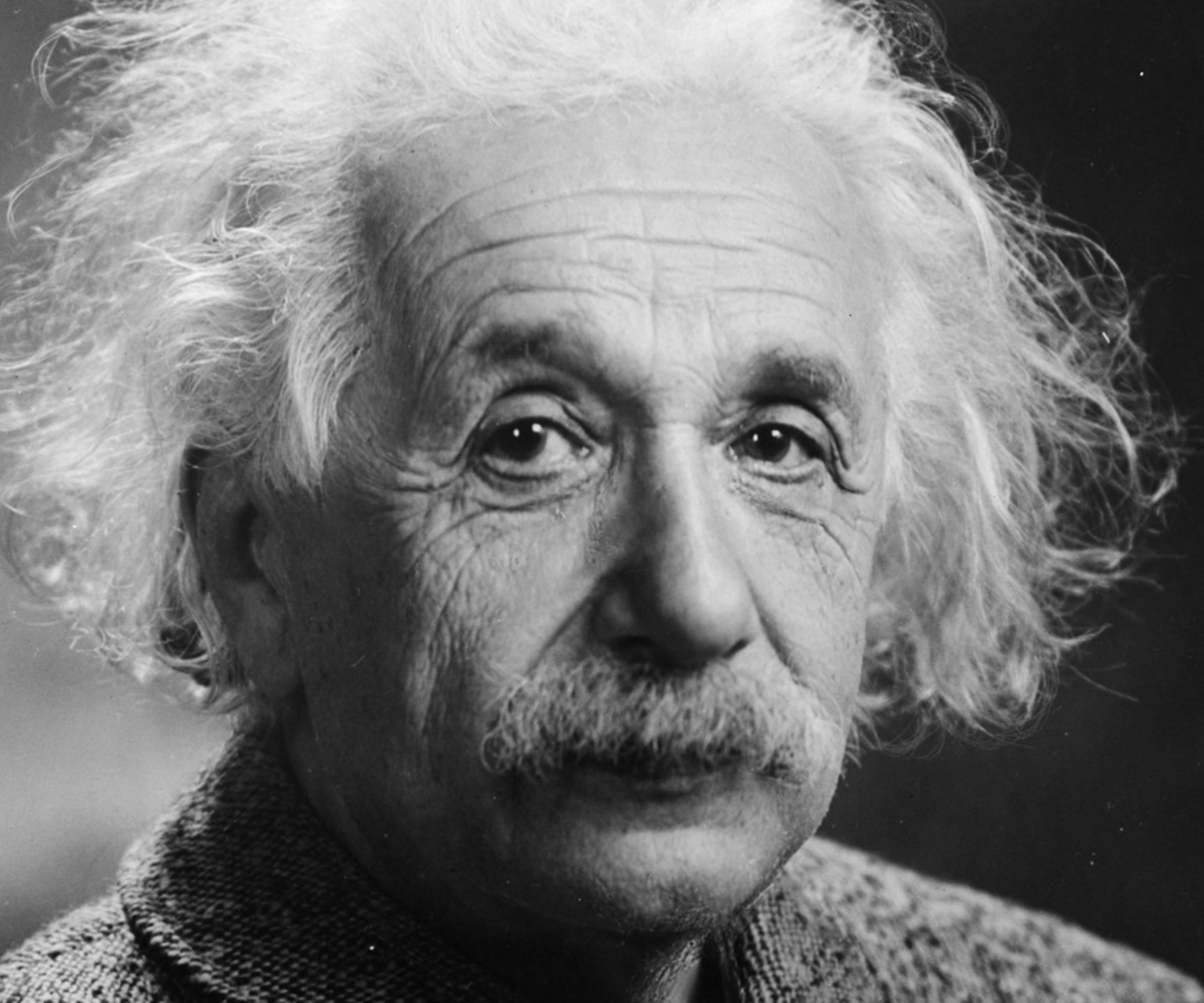
World famous Duck Simulator





Redux

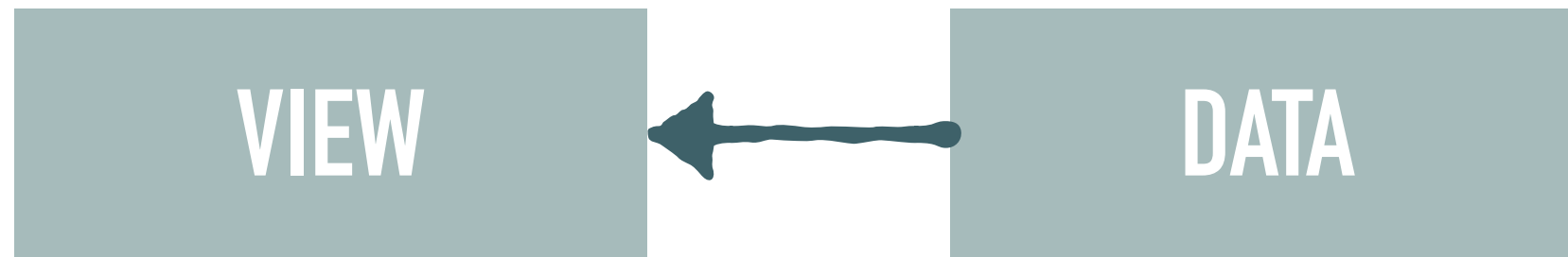
$$UI = fn(state)$$



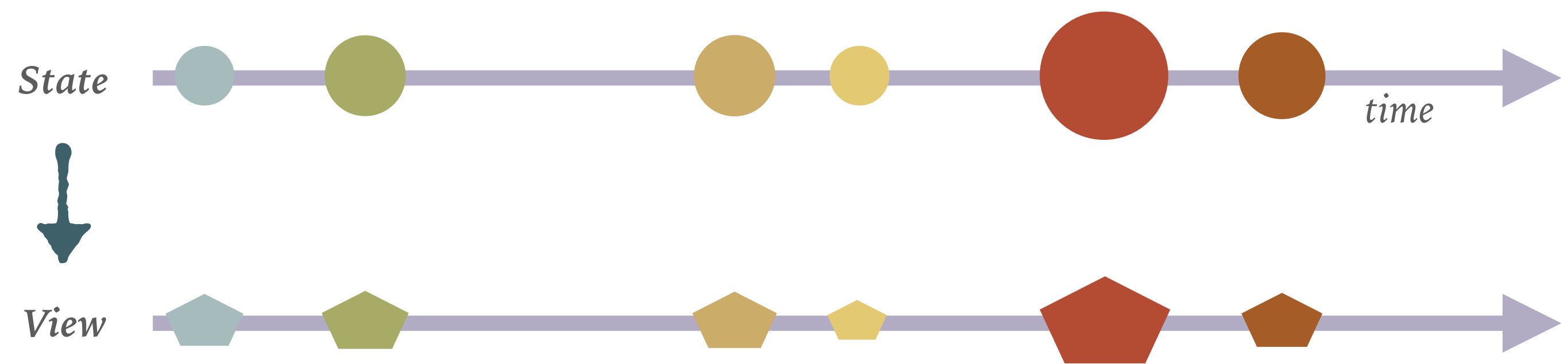
$$E=MC^2$$

$$UI = fn(state)$$

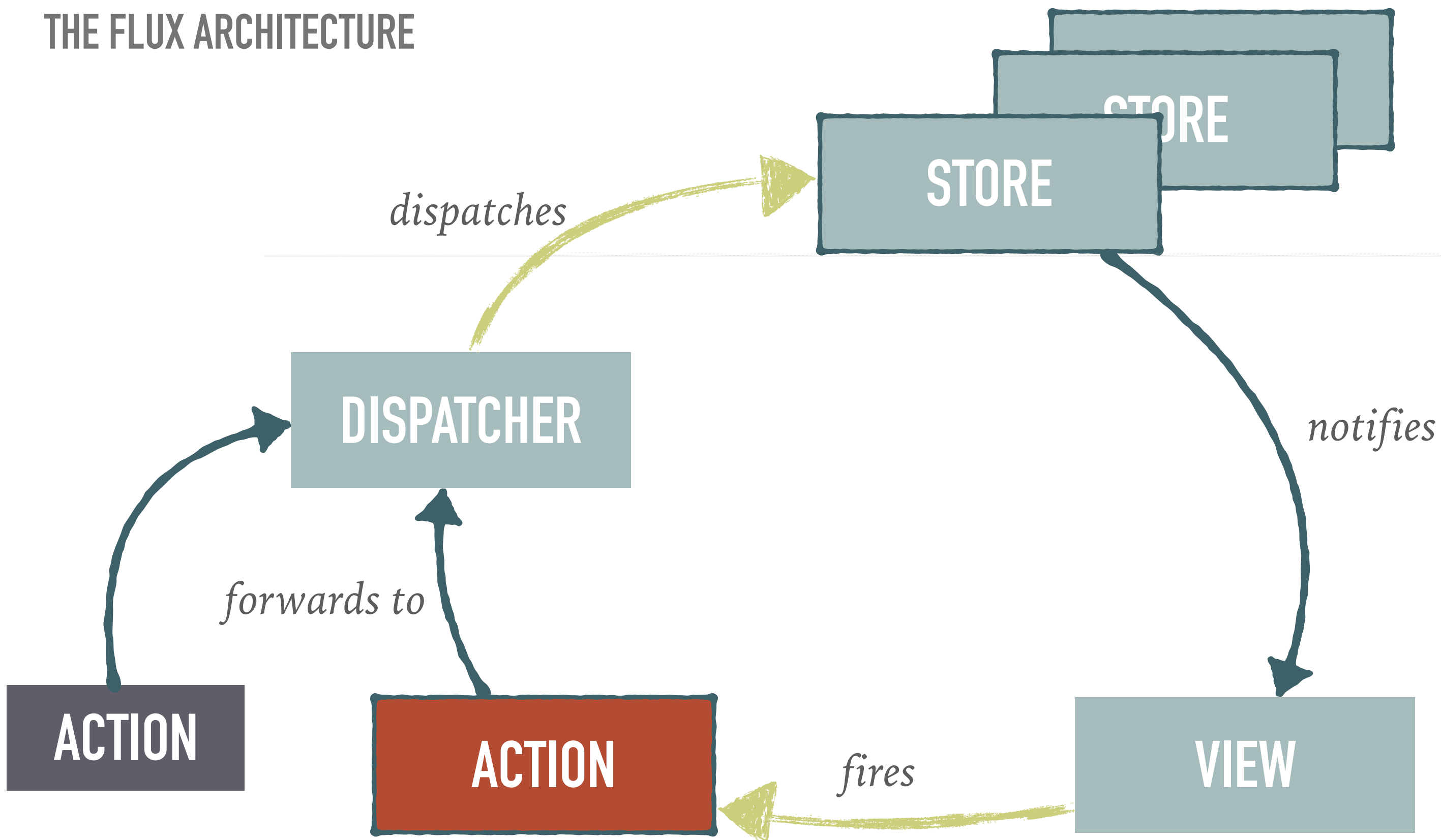
$$UI = fn(state)$$



SNAPSHOTS

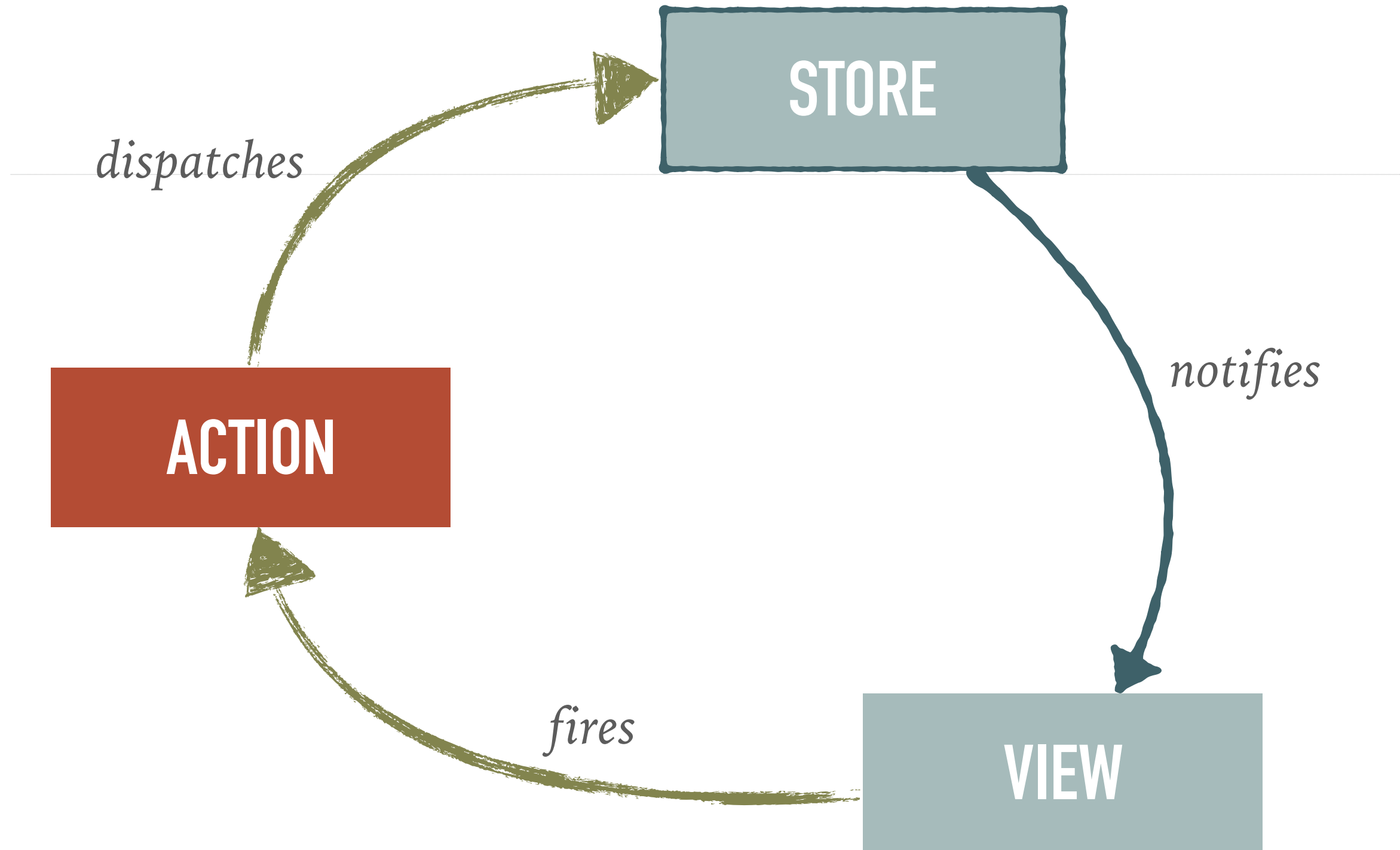


THE FLUX ARCHITECTURE

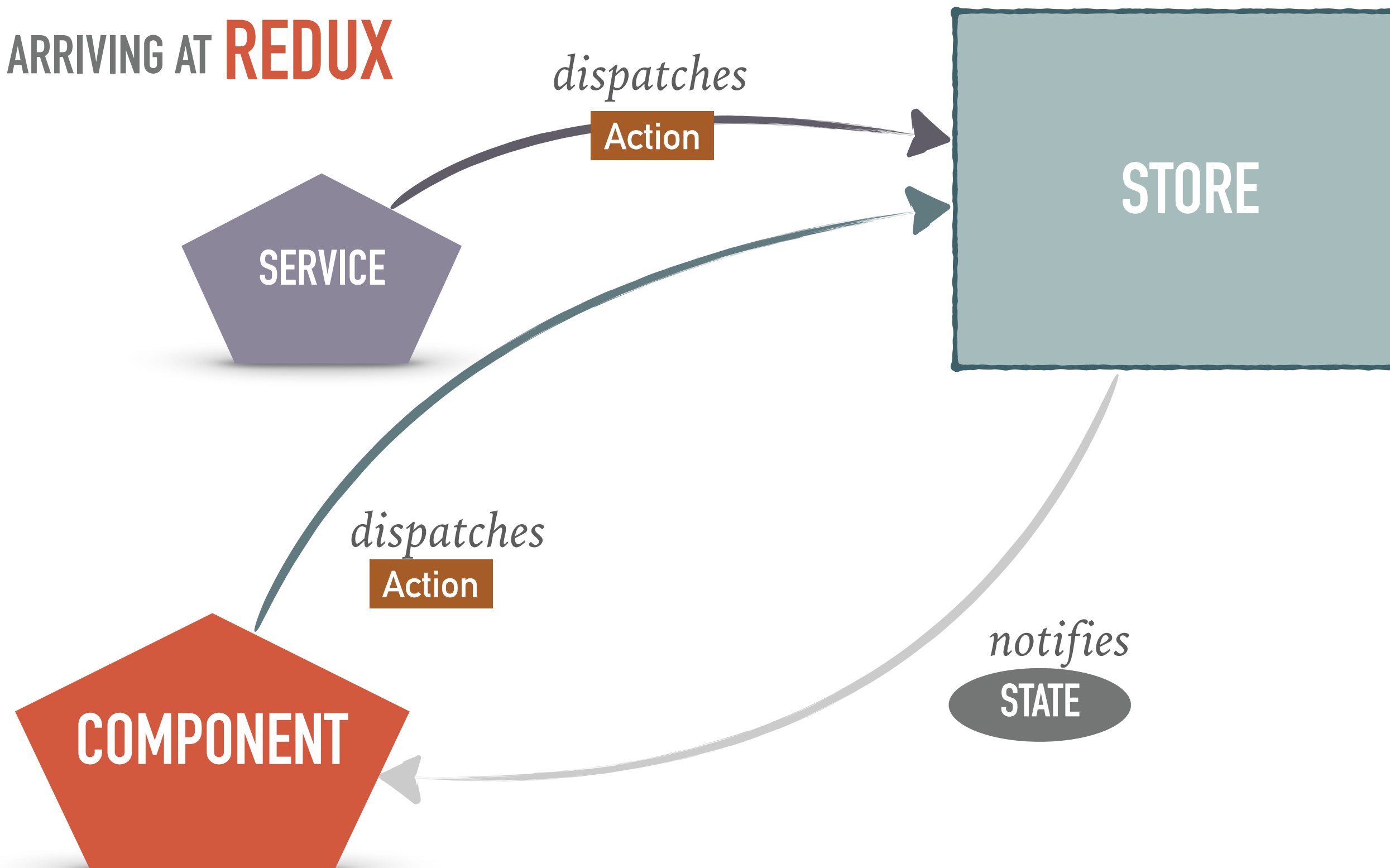


Simplifying

THE FLUX ARCHITECTURE

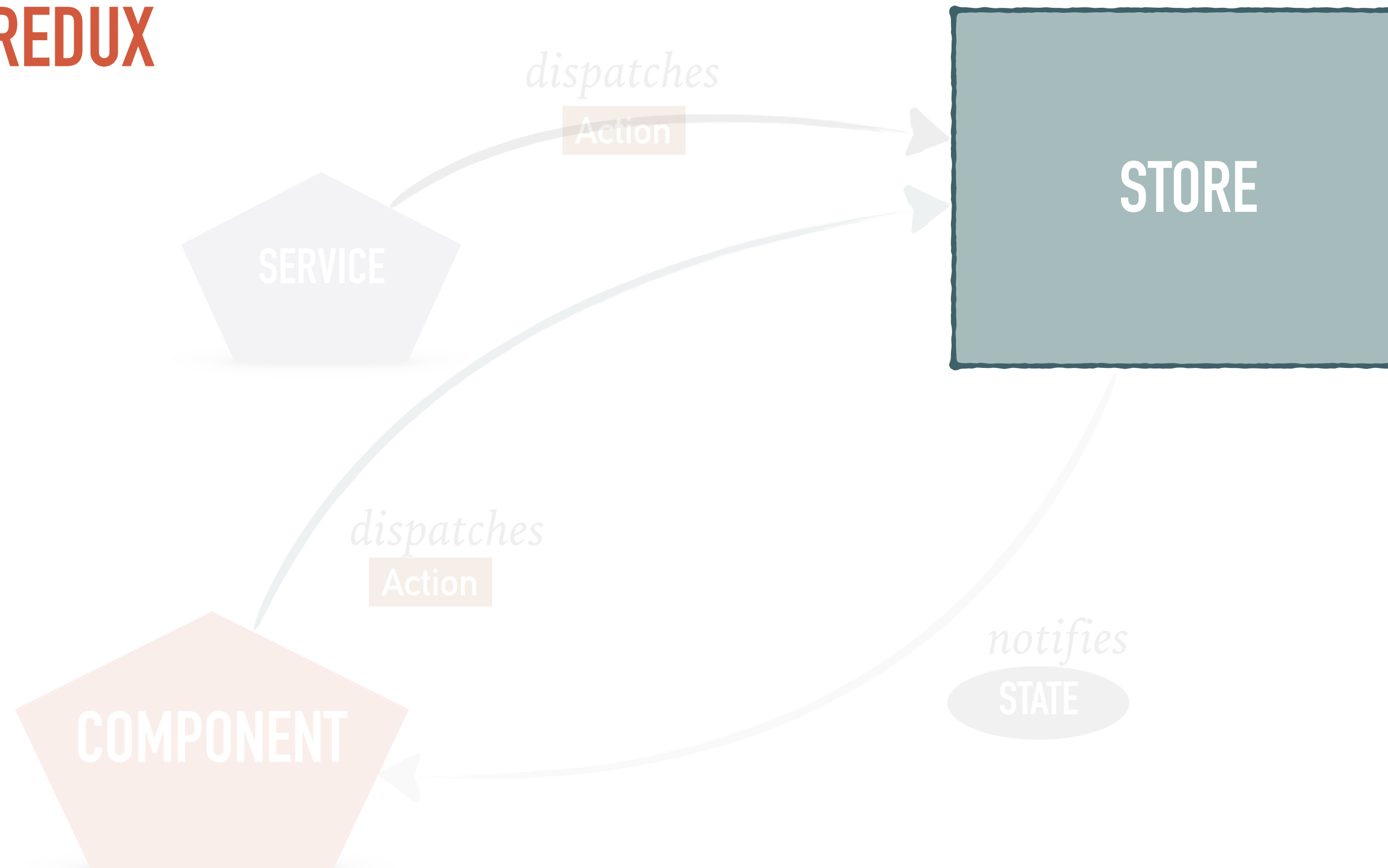


ARRIVING AT **REDUX**

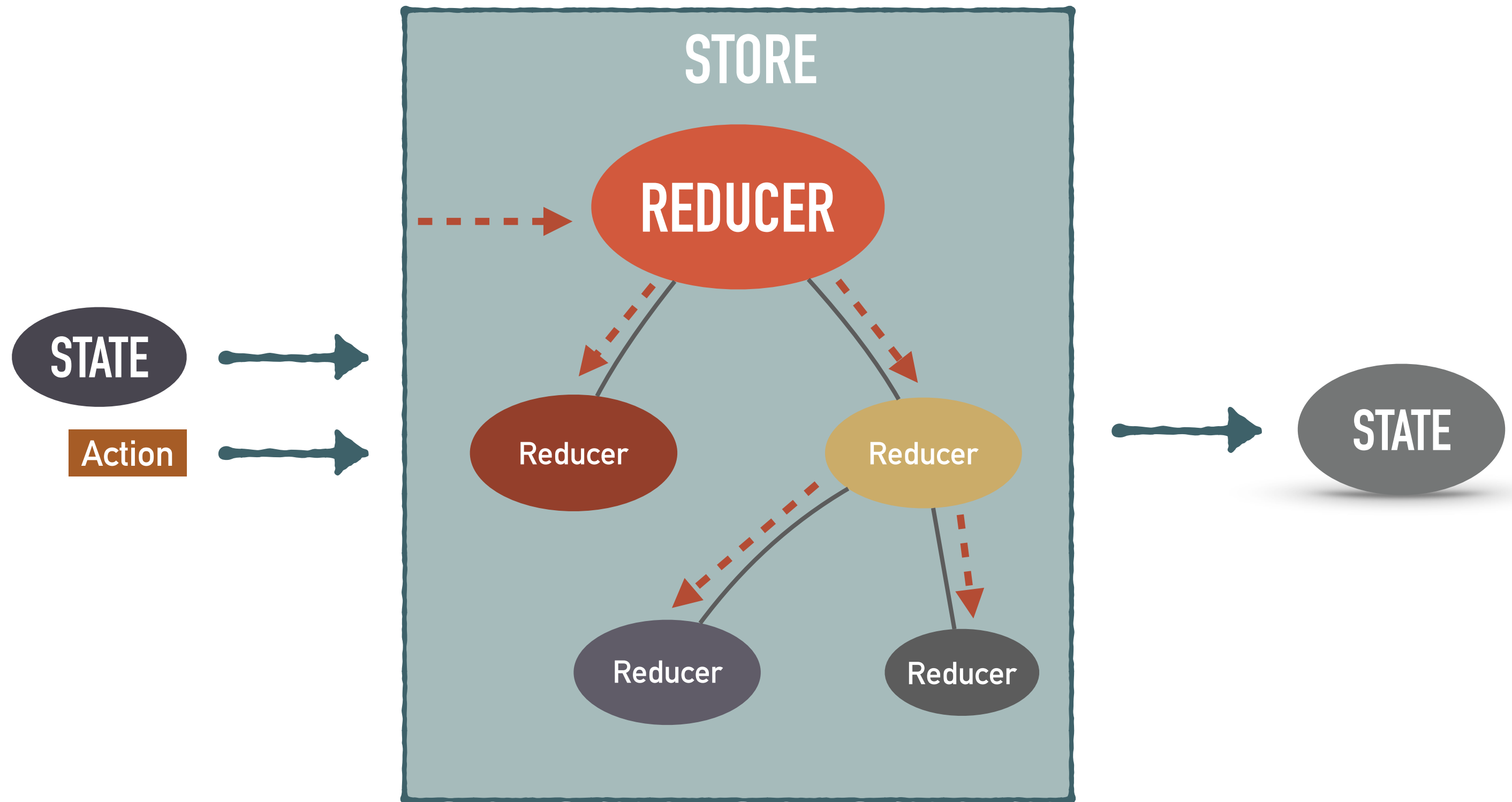


$$UI = fn(state)$$

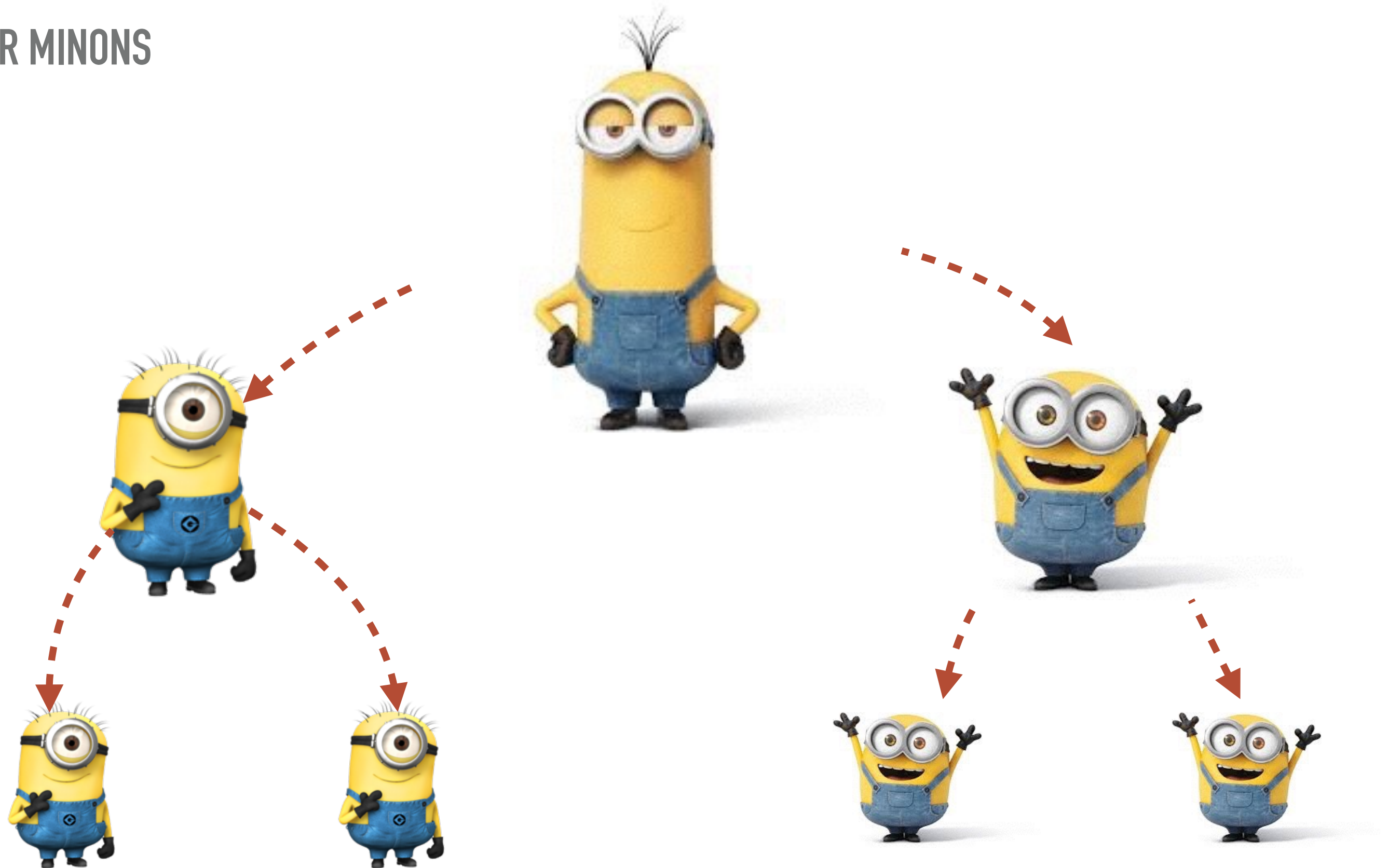
REDUX

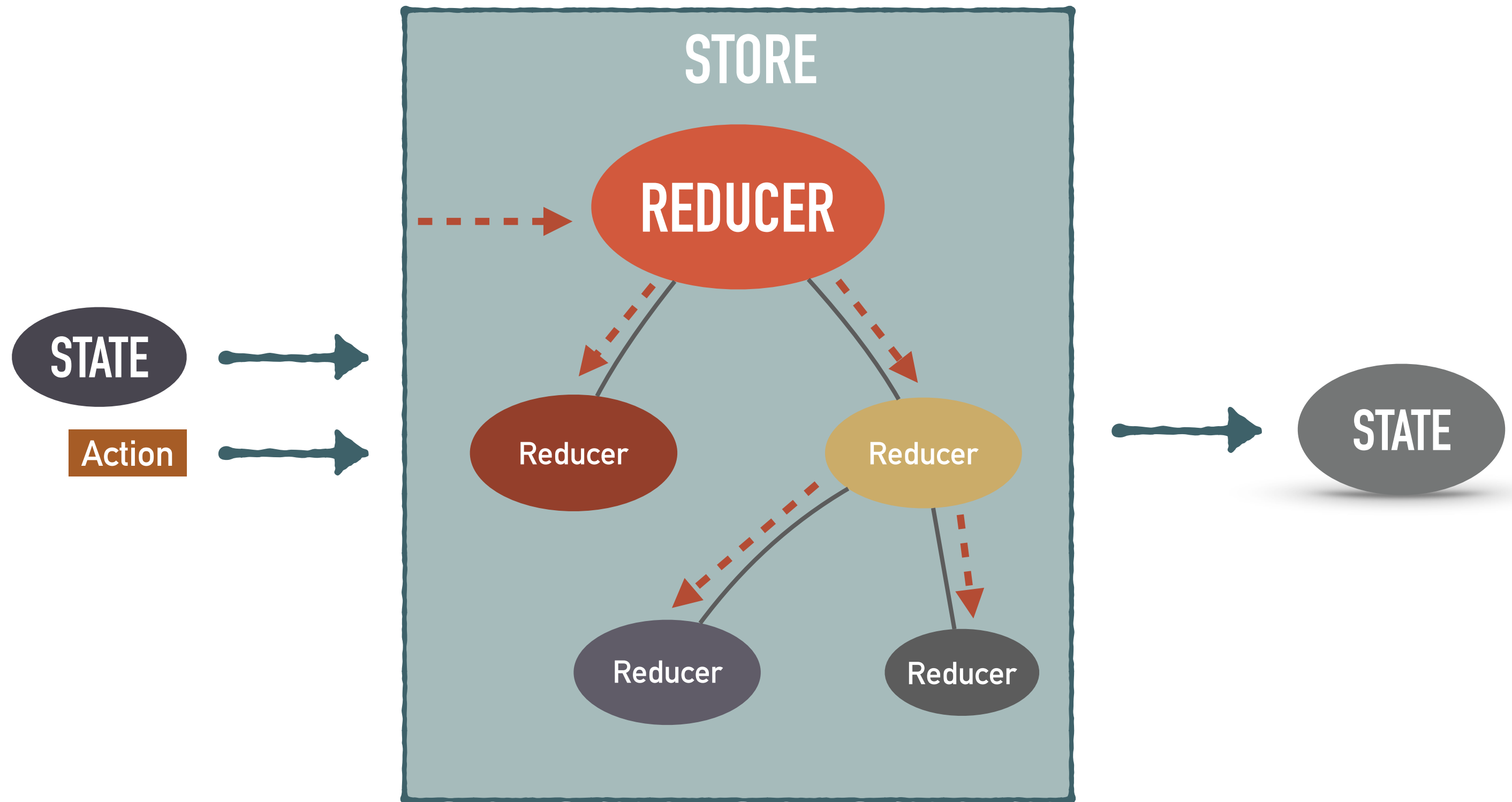


$UI = fn(state)$




REDUCER MINONS





REDUCER



```
1 function reducer(state, action) {  
2  
3   switch (action.type) {  
4     case START_ALBUMS_LOAD:  
5       return Object.assign({}, state, {loadingAlbums: true});  
6  
7     case END_ALBUMS_LOAD:  
8       return Object.assign({}, state, {loadingAlbums: false});  
9  
10    default:  
11      return state;  
12  }  
13  
14 }
```

The diagram consists of three red circular callouts with white numbers. Callout 1 points to the `reducer` function name. Callout 2 points to the `action.type` property access. Callout 3 points to the `Object.assign` function call.

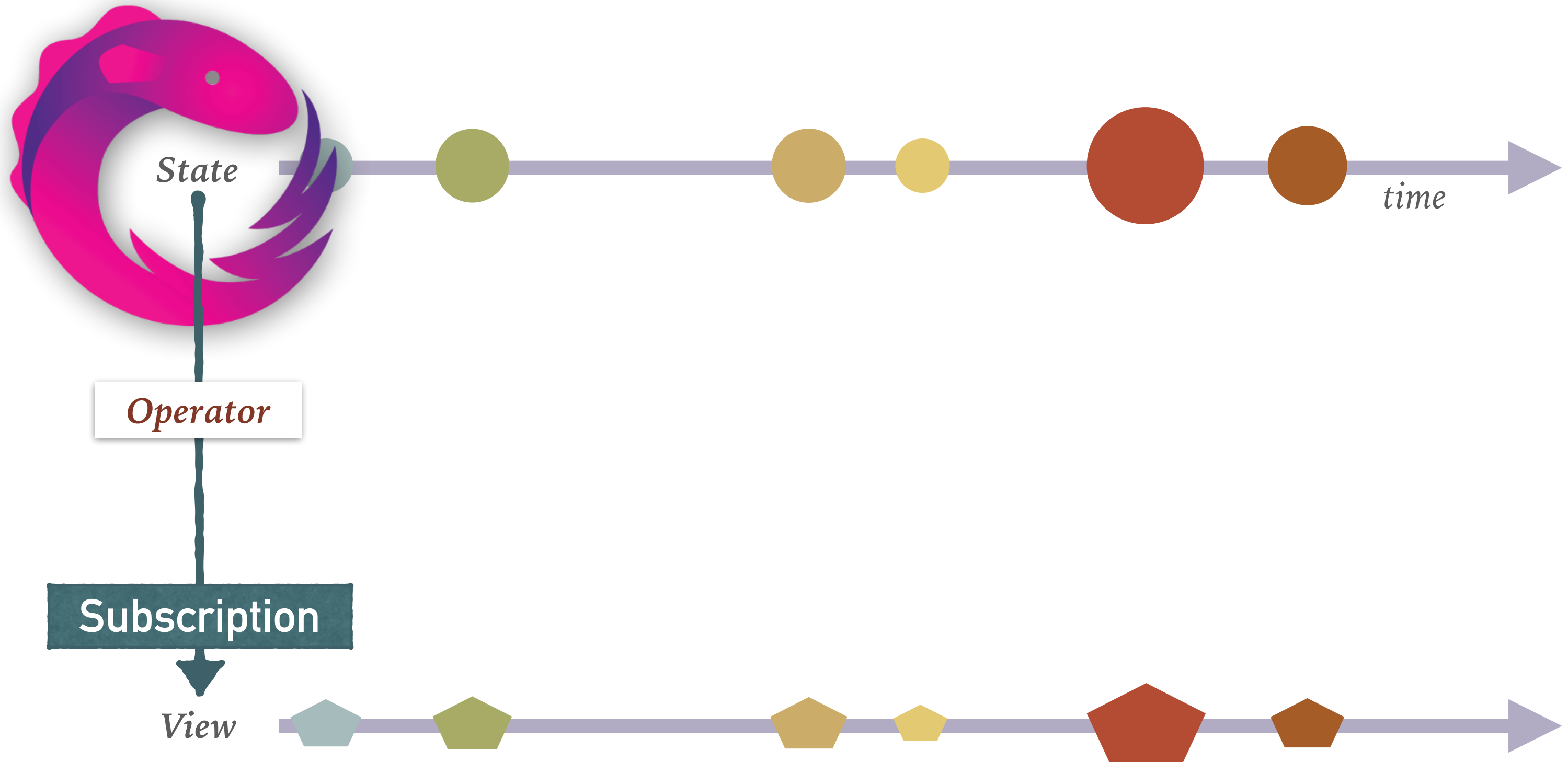
NGRX / STORE

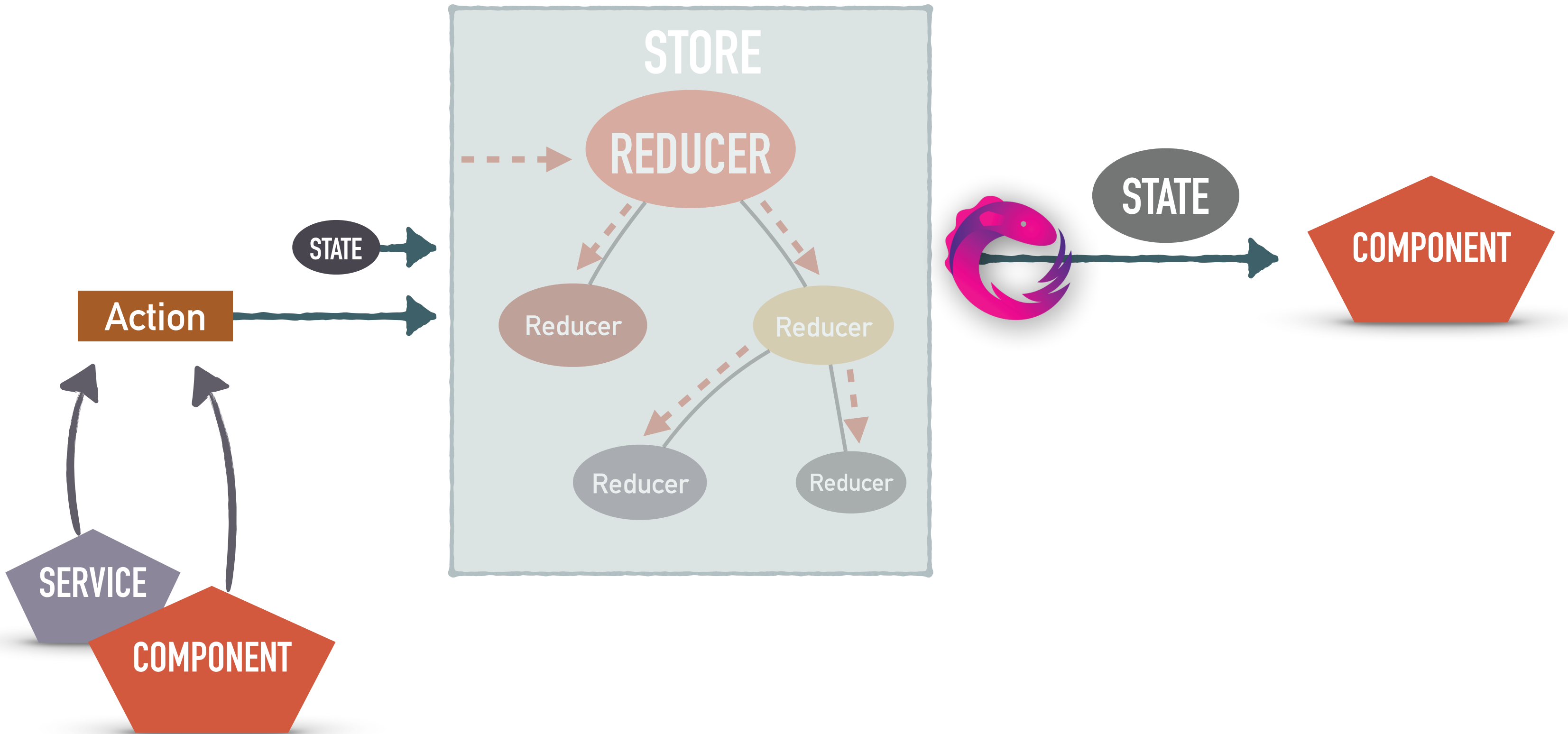
<https://github.com/ngrx/store>

NGRX / STORE



STREAM OF APPLICATION STATES





CODE



SUPPLYING STORE

```
1 @NgModule({
2   imports: [
3     RouterModule, FormsModule, BrowserModule,
4     StoreModule.provideStore(reducer),
5     routing
6   ],
7   providers: [PhotoService],
8   declarations: [
9     ShellComponent, DashboardComponent, UnknownComponent,
10    AlbumComponent, PhotoComponent, AlbumDetail
11  ],
12  bootstrap: [ShellComponent]
13 })
14 export class AppModule {
15 }
```

INJECTING STORE

```
1 @Component({
2     selector: 'photo',
3     template: require('./photo.html')
4 })
5 export class PhotoComponent implements OnInit, OnDestroy {
6
7     constructor(private route: ActivatedRoute,
8                 private store: Store<AppState>,
9                 private service: PhotoService) {
10     }
11 }
```

DISPATCHING ACTIONS

```
1 @Injectable()
2 export class PhotoService {
3
4     constructor(private store: Store<AppState>) {
5     }
6
7     /* ... */
8
9     loadAlbums() {
10         this.store.dispatch({
11             type: START_ALBUMS_LOAD
12         });
13     }
14 }
15
```


SLICING STATE IN COMPONENTS

```
1 this.subscription = this.store.select(x => x.albums.selectedPhoto)
2   .subscribe((photo: Photo) => {
3     this.photo = photo;
4   });
5
6 this.loadSubscription = this.store.select(x => x.operation.loadingPhoto)
7   .subscribe(flag => {
8     this.loading = flag;
9   });
```



DEMO



<https://www.learnrxjs.io>

NGRX / STORE <https://github.com/ngrx/store>

REDUX-DEVTOOLS <https://github.com/zalmoxisus/redux-devtools-extension>

DEMO <https://github.com/pavanpodila/angular-nyc-ngrx-store>



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