

defrecord

```
(defrecord CarModel [make model])
```

```
(def fiat-500 (->CarModel "Fiat" "500"))
```

```
(def ford-focus (map->CarModel {:make "Ford" :model "Focus"}))
```

```
(map->CarModel {})| => {:make nil, :model nil}
```

```
(defprotocol Display
  (title [this])
  (description [this description]))
```

```
(defrecord CarModel [make model]
  Display
  (title [this] (str "This is a " make " " model))
  (description [this descr] (str "The " make " " model " is " descr)))
```

```
(def fiat-500 (->CarModel "Fiat" "500"))
```

```
(title fiat-500) => "This is a Fiat 500"
```

```
(def toaster (->Product "Toaster"))
```

```
(extend-protocol Display
  Product
  (title [p] (str "This product is a " (:name p)))
  (description [p descr] (str "The " (:name p) " is " descr))) => nil
```

```
(title toaster)
```

```
(description toaster "flippin nice")| => "The Toaster is flippin nice"
```

```
;; from Stu's examples:
```

```
(defrecord Person [fname lname address])
-> user.Person
```

```
(defrecord Address [street city state zip])
-> user.Address

(def stu (Person. "Stu" "Halloway"
  (Address. "200 N Mangum"
    "Durham"
    "NC"
    27701)))

-> #'user/stu

(:lname stu)
-> "Halloway"

(-> stu :address :city)
-> "Durham"

(assoc stu :fname "Stuart")
-> #:user.Person{:fname "Stuart", :lname "Halloway", :address
#:user.Address{:street "200 N Mangum", :city "Durham", :state "NC", :zip
27701}}

(update-in stu [:address :zip] inc)
-> #:user.Person{:fname "Stu", :lname "Halloway", :address
#:user.Address{:street "200 N Mangum", :city "Durham", :state "NC", :zip
27702}}
```

; general form

(defrecord *name fields specs*)

; general form of a spec

protocol methods

; general form of a method

(*method-name parameters body*)

```
(defrecord Nadine [x y z]
  Roger
  (foo [this]
    (do-stuff y))
  (foo [this a b]
    (do-other-stuff b this a)))
  (bar [this]
    (yet-more-stuff x z)))

(def adam (new Nadine 3 "hi" false))
(foo adam 7 2)
(. adam x)           ; returns 3
(get adam :x)        ; returns 3
```

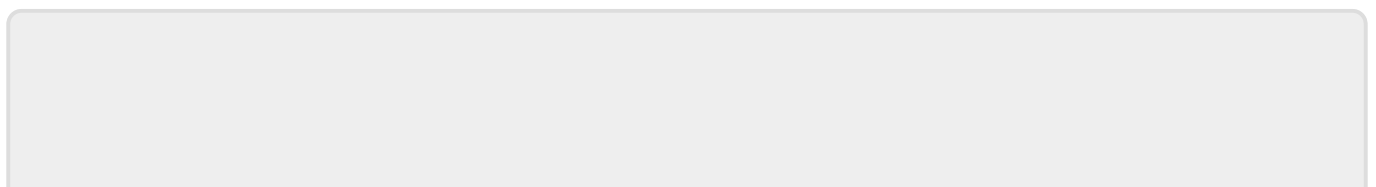
```
(assoc adam :x 5)      ; returns new Nadine record {:x 5 :y "hi" :z false}
(assoc adam :a 5)      ; returns new Nadine record {:x 5 :y "hi" :z false :a 5}
(conj adam [:a 5])     ; returns new Nadine record {:x 5 :y "hi" :z false :a 5}
```

```
(def ted (assoc adam :a 5)) ; returns new Nadine record {:x 5 :y "hi" :z false :a 5}
(dissoc ted :x)             ; returns map {:y "hi" :z false :a 5}
(dissoc ted :a)             ; returns the Nadine record {:x 3 :y "hi" :z false}
```

Links

- <https://clojuredocs.org/clojure.core/defrecord>
- <https://github.com/bbatsov/clojure-style-guide#custom-record-constructors-naming>

Plugin Backlinks:



From:

<https://jace.link/> - **Various Ways**

Permanent link:

<https://jace.link/open/defrecord>

Last update: **2022/06/19 23:59**

