

Realtime UIAppearance refresh

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UIAppearance

```
func setupStyle() {  
    UITableView.appearance(whenContainedInInstancesOf:  
[UINavigationController.self]).backgroundColor = .clear  
}
```

Looks familiar?

```
func forceRefreshAppearance() {  
    let windows = UIApplication.shared.windows.filter {  
        $0 as? MyAppWindow != nil  
    }  
  
    windows.forEach { window in  
        let subviews = window.subviews  
  
        for view in subviews {  
            view.removeFromSuperview()  
            window.addSubview(view)  
        }  
    }  
}
```

_UIAppearance

Apple's implementation of "The Appearance Proxy"

```
@interface _UIAppearance: NSProxy
```

```
@end
```

_UIAppearance

Apple's implementation of "The Appearance Proxy"

```
@implementation _UIAppearance
```

```
- (NSMethodSignature *)methodSignatureForSelector:(SEL)sel
{
    return [[_customizableClassInfo _customizableViewClass]
instanceMethodForSelector:sel];
}

- (void)forwardInvocation:(NSInvocation *)invocation
{
    // Invocation is setBackgroundColor: with argument UIColor.clear.
    // Store invocation to replay it later
}
```

```
@end
```

_UIAppearance

Apple's implementation of "The Appearance Proxy"

- addSubview: will trigger the saved invocations

RDRAppearance

Our wrapper

- Usage:

```
[[UITableView rdr_appearance] setBackgroundColor:[UIColor whiteColor]];
```

```
[[UITableView rdr_appearanceWhenContainedInInstancesOfClasses:  
@[[UINavigationControllerClass class]] setBackgroundColor:  
[UIColor clearColor]];
```

RDRAppearance

Our wrapper

- Let UIKit deal with container hierarchies
 - We hook into the existing `_UIAppearance` flow

RDRAppearance

Step 1

```
UITableView.rdr_appearance().backgroundColor = .white
```

RDRAppearance

Step 1

```
UITableView.rdr_appearance().backgroundColor = .white
```

Create if not exists instance r1 of RDRAppearance and store on
UITableView.appearance as associated object

```
-[r1 forwardInvocation:]
```

RDRAppearance

Step 1

```
UITableView.rdr_appearance().backgroundColor = .white
```

Create if not exists instance r1 of RDRAppearance and store on UITableView.appearance as associated object

```
-[r1 forwardInvocation:]
```

HashForInvocation(inv)	r1 (RDRAppearance)
------------------------	--------------------

Global mapping

RDRAppearance

Step 1

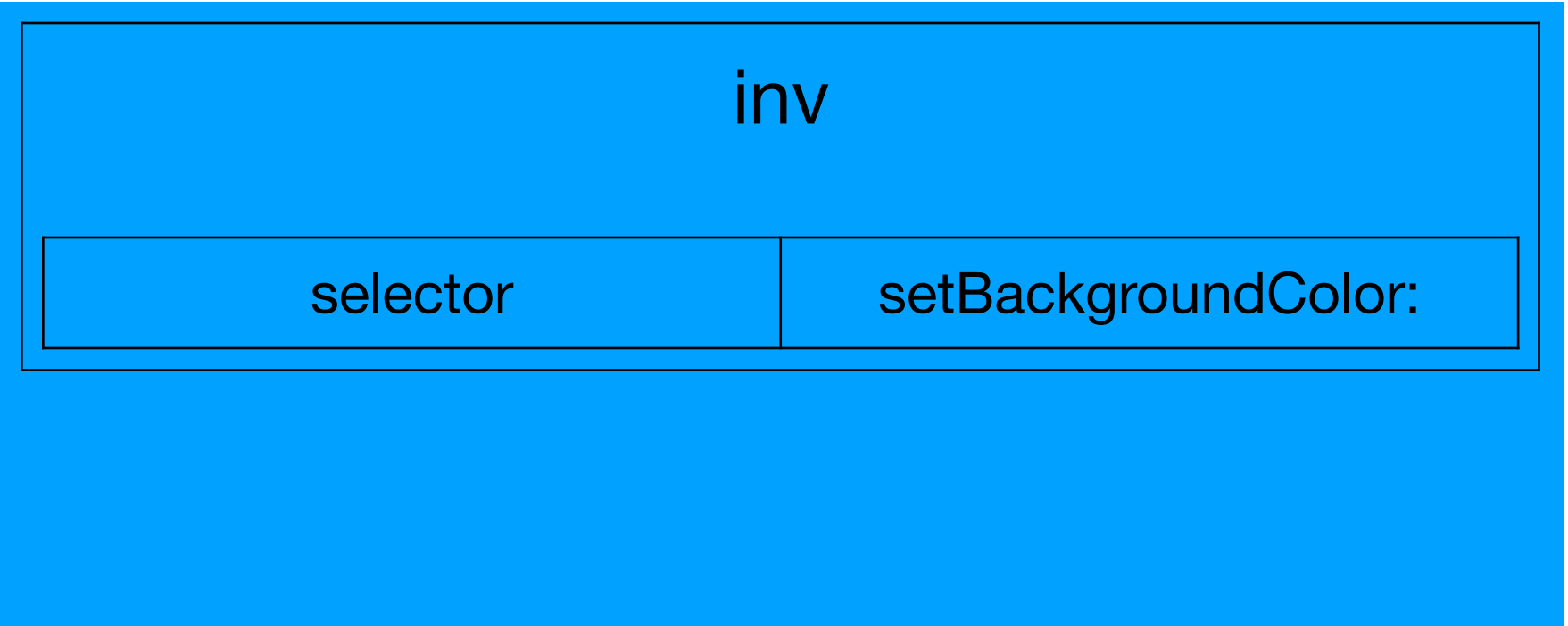
```
UITableView.rdr_appearance().backgroundColor = .white
```

Create if not exists instance r1 of RDRAppearance and store on UITableView.appearance as associated object

```
-[r1 forwardInvocation:]
```

HashForInvocation(inv)	r1 (RDRAppearance)
------------------------	--------------------

Global mapping



r1

RDRAppearance

Step 2

```
[self.view addSubview:myTableView]
```

RDRAppearance

Step 2

```
[self.view addSubview:myTableView]
```



UIKit replays

```
-[NSInvocation invokeUsingIMP:]  
-[NSInvocation invokeWithTarget:]
```

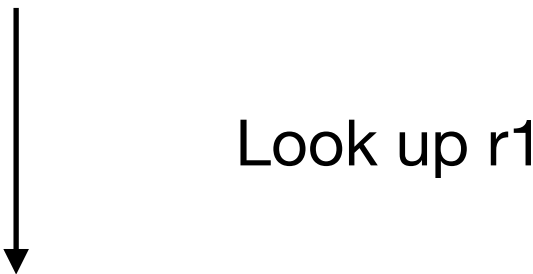
RDRAppearance

Step 2

```
[self.view addSubview:myTableView]
```



```
-[NSInvocation invokeUsingIMP:]  
-[NSInvocation invokeWithTarget:]
```



HashForInvocation(inv)	r1 (RDRAppearance)
------------------------	--------------------

Global mapping

RDRAppearance

Step 2

[self.view addSubview:myTableView]

UIKit replays

-[NSInvocation invokeUsingIMP:]
-[NSInvocation invokeWithTarget:]

Look up r1

HashForInvocation(inv)	r1 (RDRAppearance)
------------------------	--------------------

Global mapping

Selector

Appearance instance

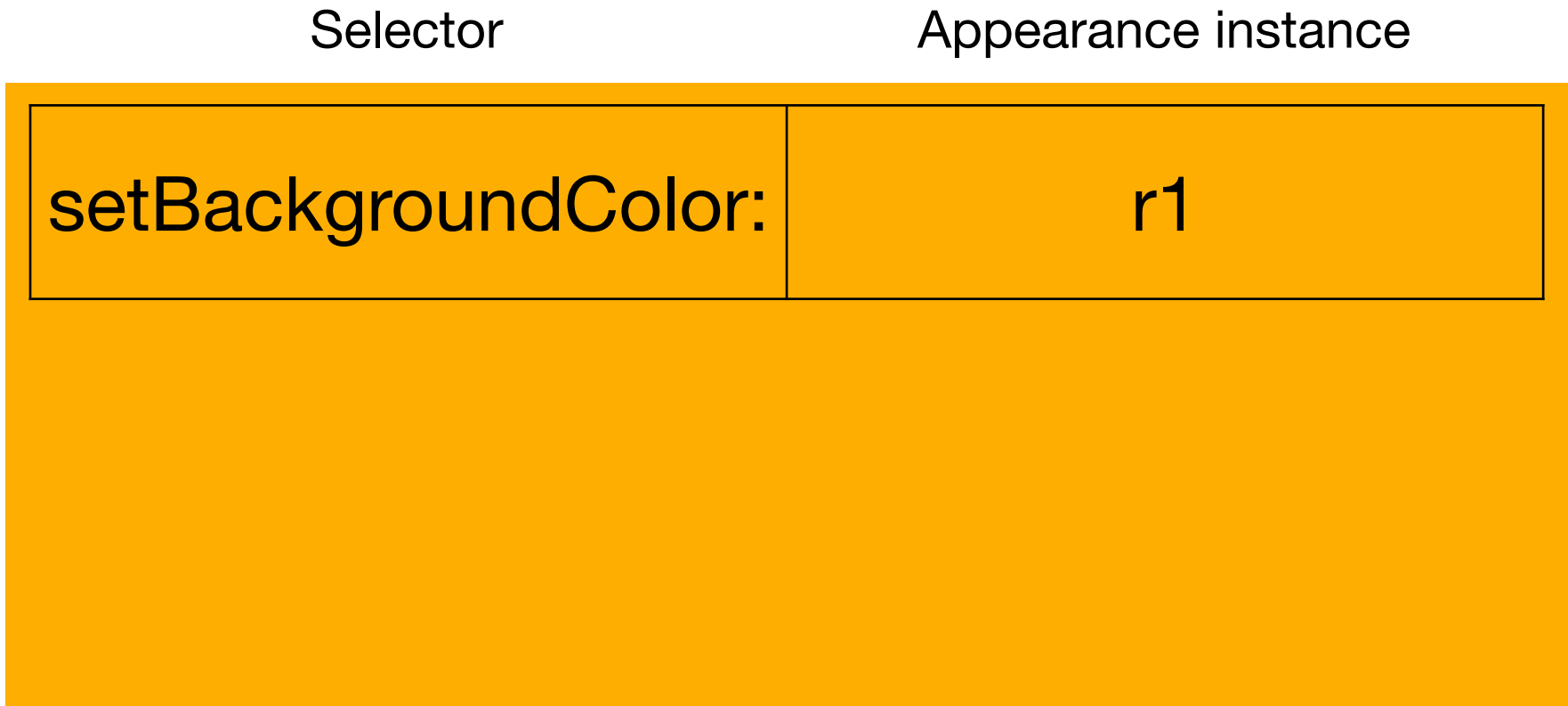
setBackgroundColor:

r1

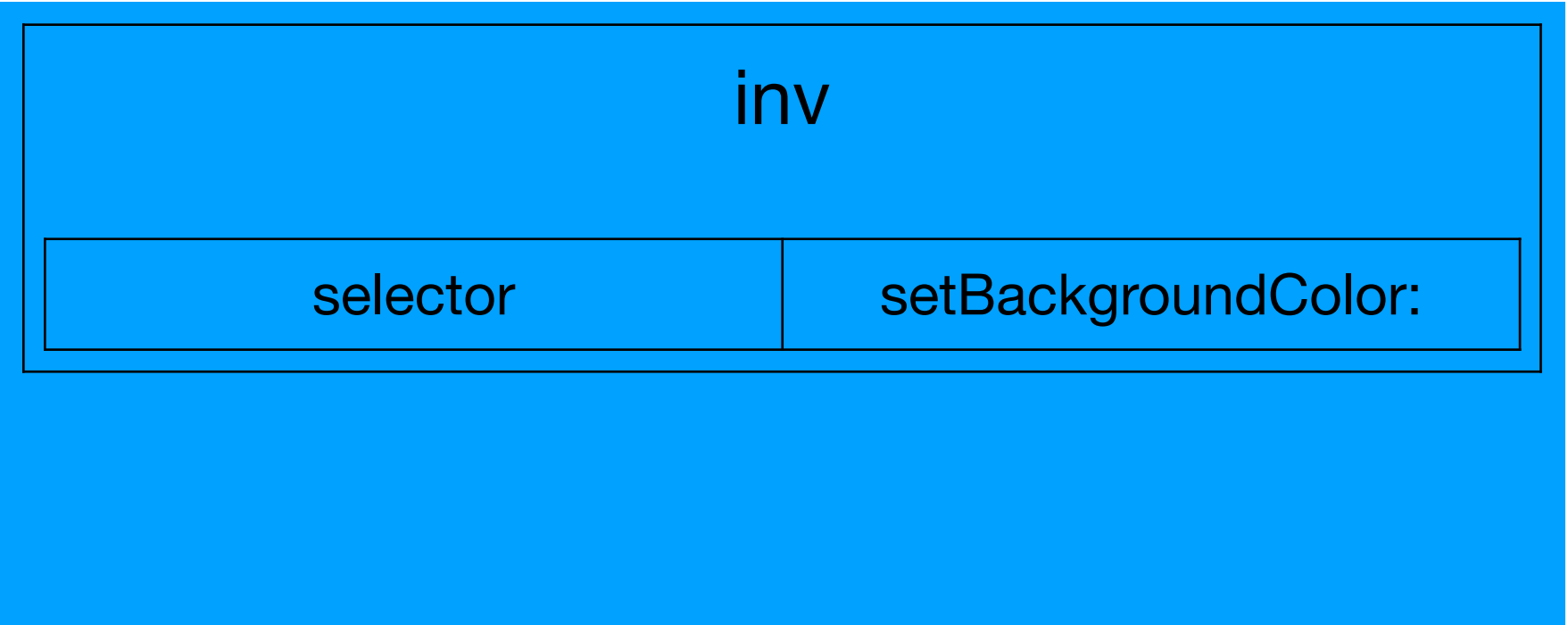
UITableView (= inv.target)

RDRAppearance

Step 3



UIApplication



r1

INCIDENT

NETWERK

STATUS

PROCEDURES

TAKEN



Damiaan Twelker

OEFEN
INCIDENT

1 dag, 19 uur

9170

22-05-2023 21:17:56

PRIO 5

Leefmilieu \ Water/weer
problemen \
Stormschade

LOCATIE

Roomweg 77
7523 BL Enschede

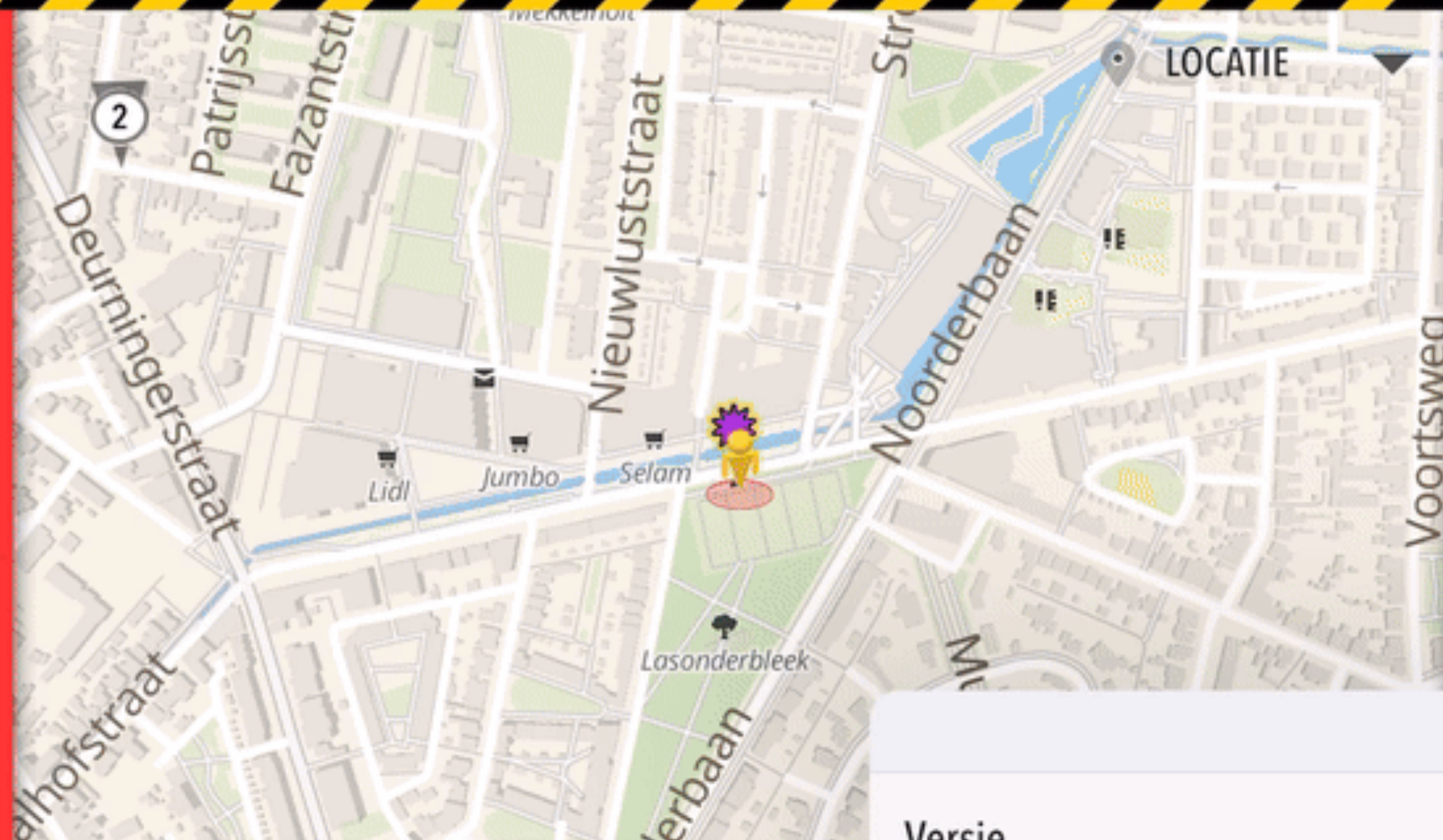
BAG FUNCTIE

OPSCHALING

GESPREKSGROEP

EENHEDEN

DISCIPLINES



MELDING

KLADBLOK

Versie 3.50.8

Donkere modus



Feedback

Synchroniseren

Reset

ONLINE

Thank you



Link to blogpost