

A photograph of two women with blonde hair, one wearing a red jacket and the other in a green dress, looking intently at a black smartphone held by the woman in green. They appear to be in a social setting with blurred lights in the background.

MIJN INKOMEN LATER



2/64 - NATIONALE-NEDERLANDEN - ROWDY RABOUW - THE LONGEST DAY 2019 - @ROWDYRABOUW

A close-up photograph of a man with dark hair and glasses, wearing a light blue button-down shirt. He is looking intently at a black smartphone held in his hands. The background is blurred, showing what appears to be an office environment with other people and desks.

B2C MOBILE APP DEV NATIONALE-NEDERLANDEN



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ROWDY RABOUW

- SENIOR ENGINEER NATIONALE-NEDERLANDEN
- LEAD DEVELOPER NN PENSION APP: MIJN INKOMEN LATER
- PROGRESS DEVELOPER EXPERT FOR NATIVESCRIPT
- CO-ORGANIZER NATIVESCRIPT DEVELOPER DAY EUROPE



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MIJN.PENSIOEN

A photograph showing a man wearing a straw hat and a young boy sitting at a table outdoors. The man is holding some papers and a calculator, while the boy looks on. They appear to be reviewing financial documents together.



nationale
nederlanden

mijn.**pensioen**



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MIJN PENSIENCOACH

CALCULATION OBJECTS

- PENSION APP CALCULATION ENGINE (PACE)
- PENSION ADVISORY CALCULATION ENGINE (PEACE)
 - FAMILY PENSION PLAN (FPP)
 - DOELINKOMEN ADVISEUR (DIA)



2015

EXTERNAL PARTNER

NATIVE

IOS + ANDROID

OBJECTIVE-C + JAVA

NATIVE PERFORMANCE

PROGRESS ... ?



2015

EXTERNAL PARTNER

NATIVE

IOS + ANDROID

OBJECTIVE-C + JAVA

NATIVE PERFORMANCE

UNHAPPY WITH THE PROGRESS



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PROOF OF CONCEPT

A photograph showing a man in a blue shirt working on a construction or demolition site. He is bent over, focused on his task. In the foreground, a wheelbarrow is filled with a large pile of broken red and white tiles. The background shows more debris and some vertical poles, possibly part of a building under construction or renovation.

02-22 17:36:39.05699897 -0700

/sys/kernel/slab/dax_cache/trace'

Blocks: 0 IO Block: 4096 regular file
20d Inode: 8086 Links: 1
0/-rw-----) Uid: (0/ root) Gid: (0/ root)

Feb 22 17:36:41.505507144 -0700

Feb 22 17:36:41.505507144 -0700

Feb 22 17:36:41.505507144 -0700

sys/module/snd_hda_core/sections/.note.gnu.build-id'
Blocks: 0 IO Block: 4096 regular file
6
1/20d Inode: 22822 Links: 1
0/-r--r--r--) Uid: (0/ root) Gid: (0/ root)

Feb 22 17:40:18.050778293 -0700

Feb 22 17:40:18.050778293 -0700

Feb 22 17:40:18.050778293 -0700

18/20d Inode: 10000:00:0000:00:1a.0/usb1/1-0:1.0/usb1-port1/uevent'
Blocks: 0 IO Block: 4096 regular file
096
0/-rw-----) Uid: (0/ root) Gid: (0/ root)

Feb 22 17:36:39.064999895 -0700

Feb 22 17:36:39.064999895 -0700

4h/20d Inode: 14880 Links: 1
0/-rw-r--r--) Uid: (0/ root) Gid: (0/ root)

dxx

col:

EBFONT 59 Bad font file format

EKEYREVOKED 128 Key has been revoked

Feb 20 00:34:26 JomboMint kernel: [18001.264416] subboot: CPU 2 is now offline

Feb 20 00:34:26 JomboMint kernel: [18001.287226] Broke affinity for irq 1

Feb 19 15:06:20 JomboMint NetworkManager[841]: [151907.950.1605] ncp

Floating point exception= w : 0 R] I * N E c - U 2 ^ / e 4 X

U B . F \$ C L + 179 B/s

32KiB Speedometer 2.8 - 1.24 KiB/s 135 B/s - 237 B/s - 298 B/s -

32KiB 2.29 KiB/s - 2.53 KiB/s - 2.33 KiB/s - 2.21 KiB/s - 1.90 KiB/s -

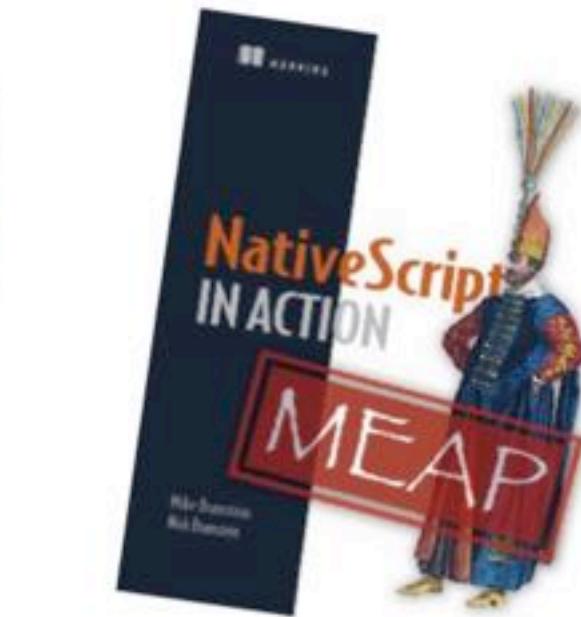
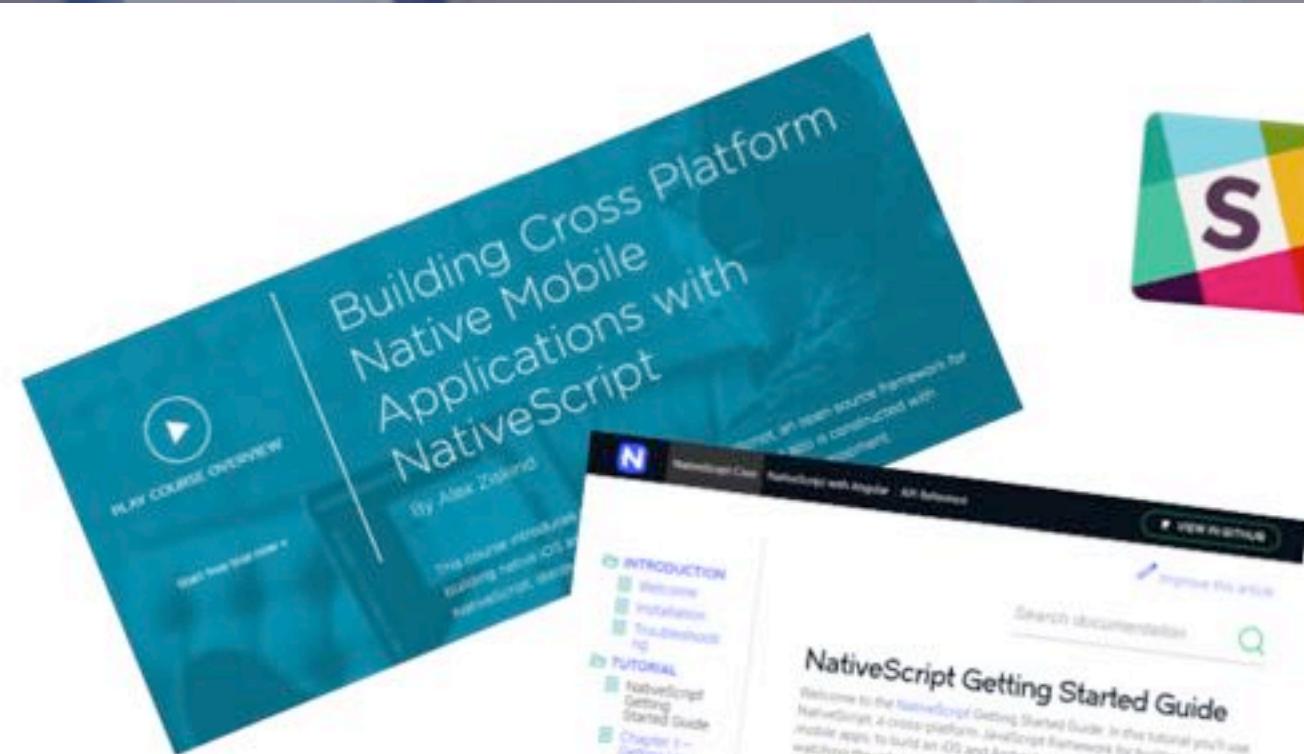
GNgucharmap(1)

10:200 -> ../../devices/virtual/misc/tun

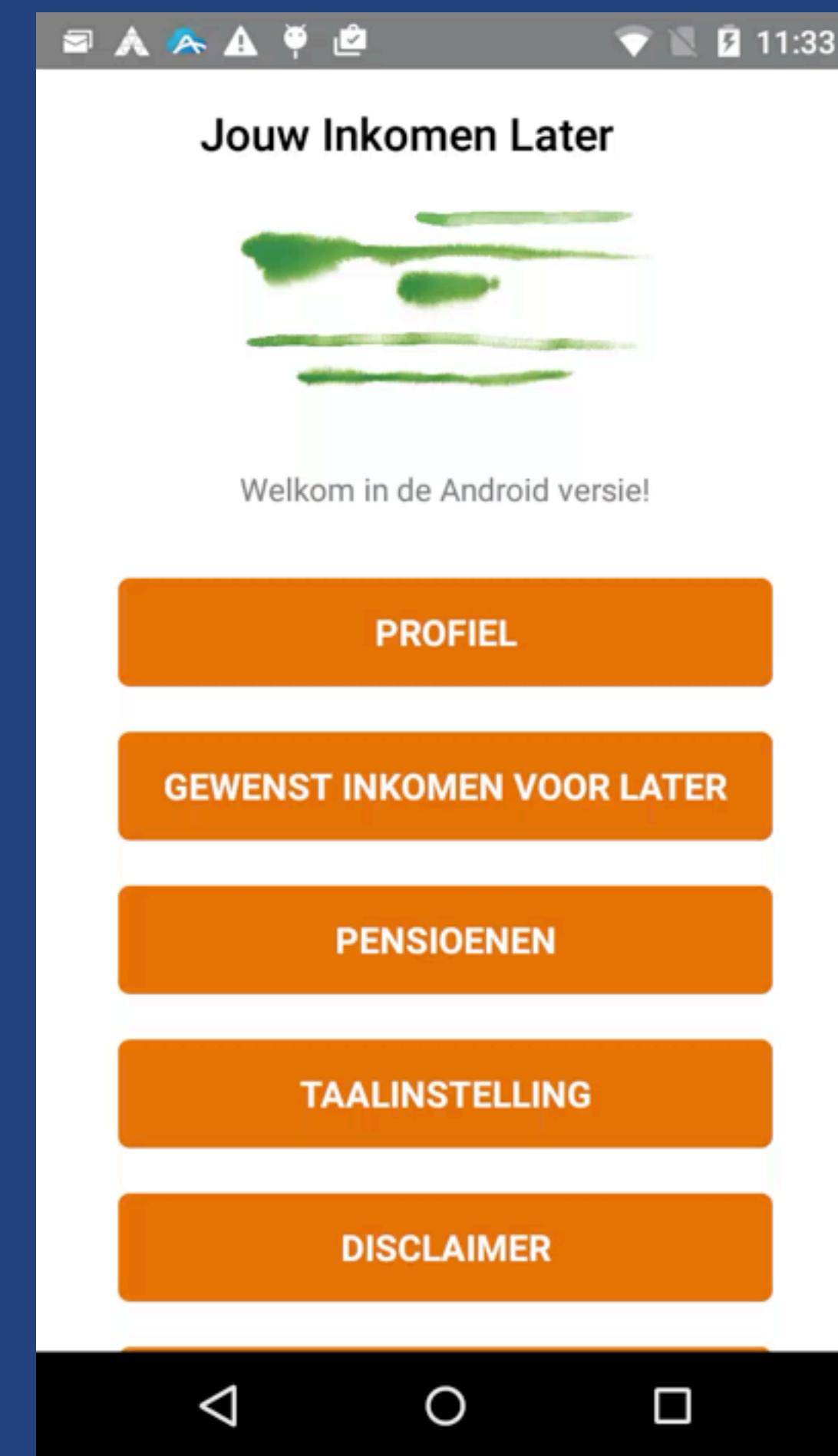
10:223 -> 0.0fle/devices/virtual/misc/tun

Tasks: 148 Load average: 85.110 83.283

10:221 -> 10:223 -> 0.0fle/devices/virtual/misc/tun



NativeScript





N

ANGULAR

- OPINIONATED FRAMEWORK
- OBJECT ORIENTED
- TYPESCRIPT
- FULL-FEATURED ROUTING
- DEPENDENCY INJECTION
- DATA BINDING

CALCULATION OBJECTS → TYPESCRIPT

- PENSION APP CALCULATION ENGINE (PACE)
- PENSION ADVISORY CALCULATION ENGINE (PEACE)
- FAMILY PENSION PLAN (FPP)
- DOELINKOMEN ADVISEUR (DIA)

CALCULATION OBJECTS → TYPESCRIPT

- BELASTINGDIENST
- CALCULATOR
- DATABASE (JSON IPV SQLITE)
- HELPER / LOGGER
- NNVERZEKERAAAR
- SOCIALEVERZEKERINGSBANK

DATASERVICE

- > INstantiate CALCULATION OBJECTS
- > CALL CALCULATION OBJECTS METHODS
- > GET AND SET SETTINGS LIKE LANGUAGE
 - > LOAD JSON DATABASE (TAFFYDB)
- > ENCRYPT AND SAVE SENSITIVE USER INPUT

VALIDATION SERVICE

- RANGES FOR SPINNERS
- MAXIMUM LENGTH FOR INPUTS
- VALIDATE INPUT FIELDS
- MINIMUM AND MAXIMUM VALUES FOR SLIDERS

VALIDATION SERVICE

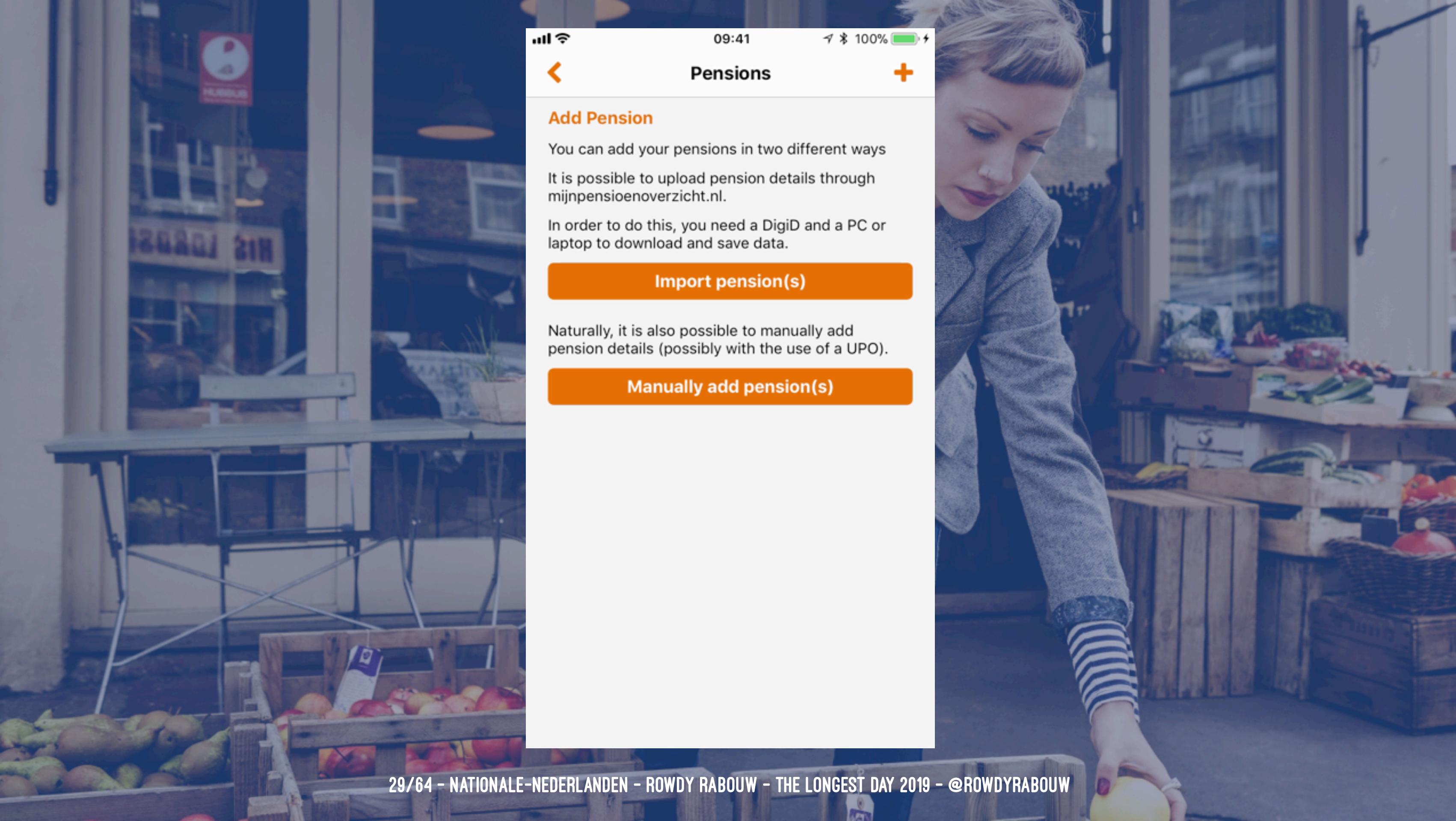
```
"BeleggenRendementPercentage": {  
    "type": "number",  
    "required": true,  
    "minimum": 0,  
    "maximum": 15,  
    "steps": 0.05,  
    "digits": true  
},  
"WerkurenHuidig": {  
    "type": "number",  
    "minimum": 0,  
    "maximum": 48  
}
```



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NATIVESCRIPT PLUGINS

- NATIVESCRIPT-BARCODESCANNER
 - NATIVESCRIPT-CAROUSEL
 - NATIVESCRIPT-TOAST
- NNATIVESCRIPT-UI-SIDEDRAWER
- NATIVESCRIPT-PLUGIN-FIREBASE



09:41 * 100%

Pensions

Add Pension

You can add your pensions in two different ways

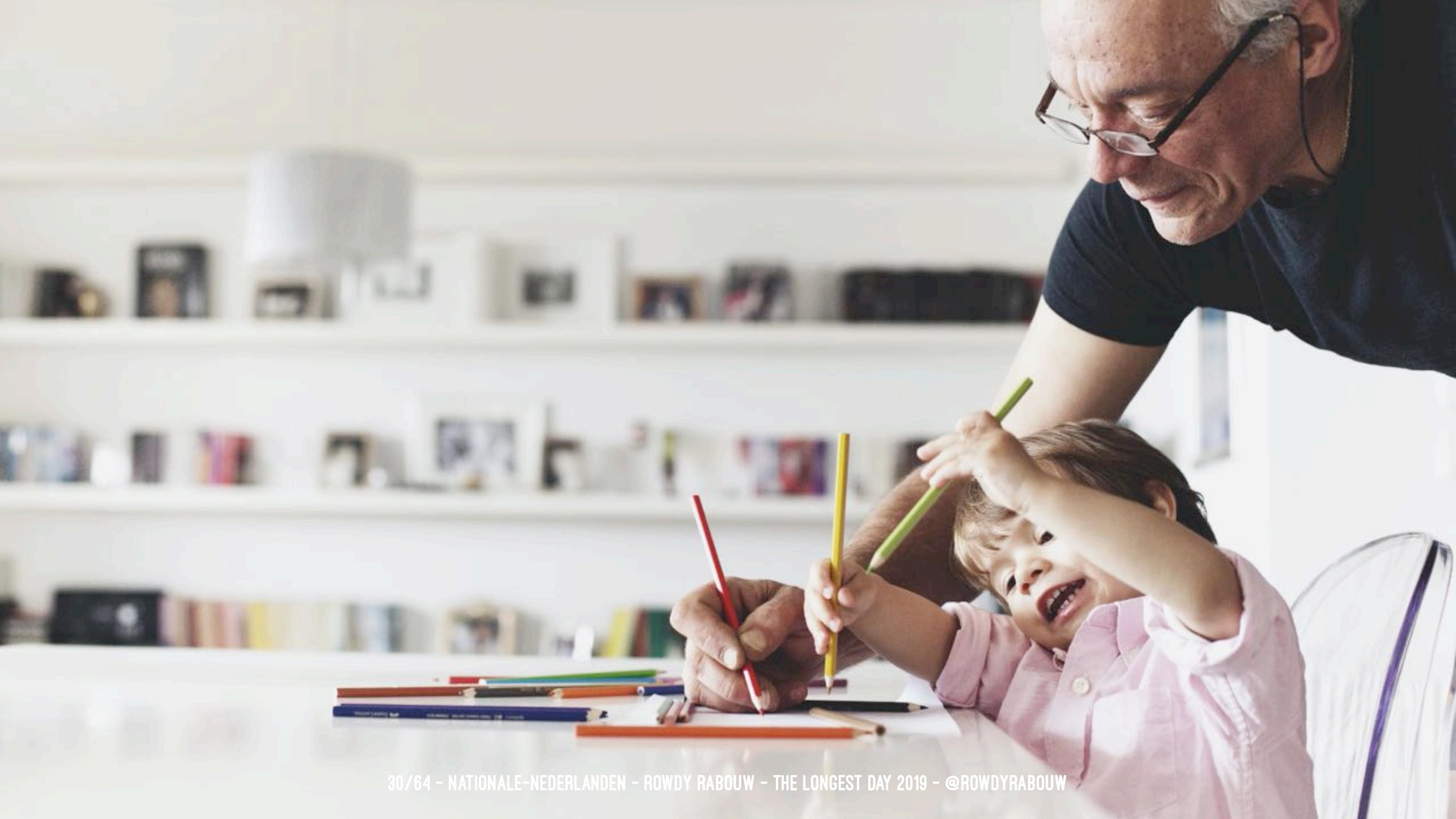
It is possible to upload pension details through mijnpensioenoverzicht.nl.

In order to do this, you need a DigiD and a PC or laptop to download and save data.

[Import pension\(s\)](#)

Naturally, it is also possible to manually add pension details (possibly with the use of a UPO).

[Manually add pension\(s\)](#)

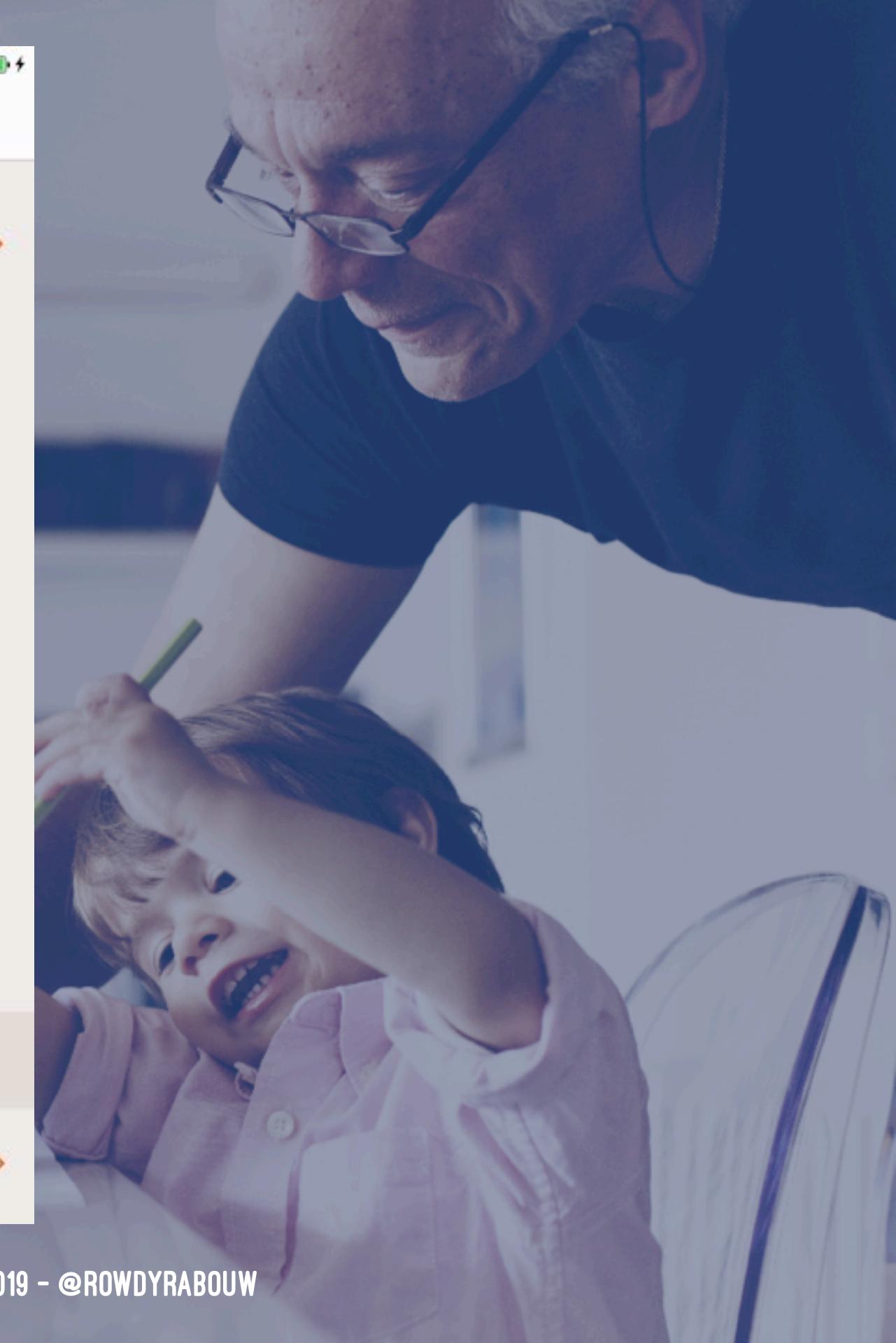
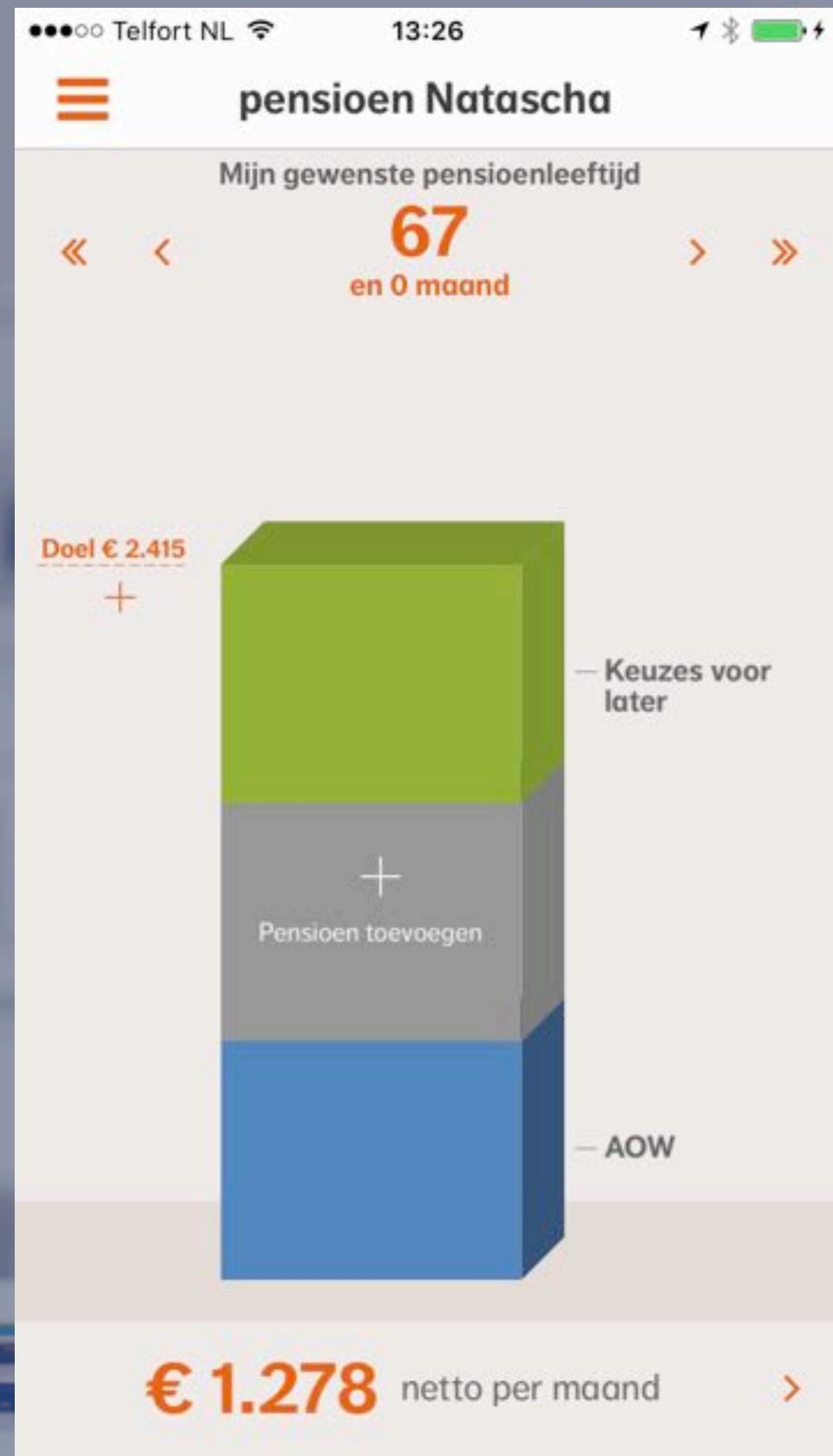


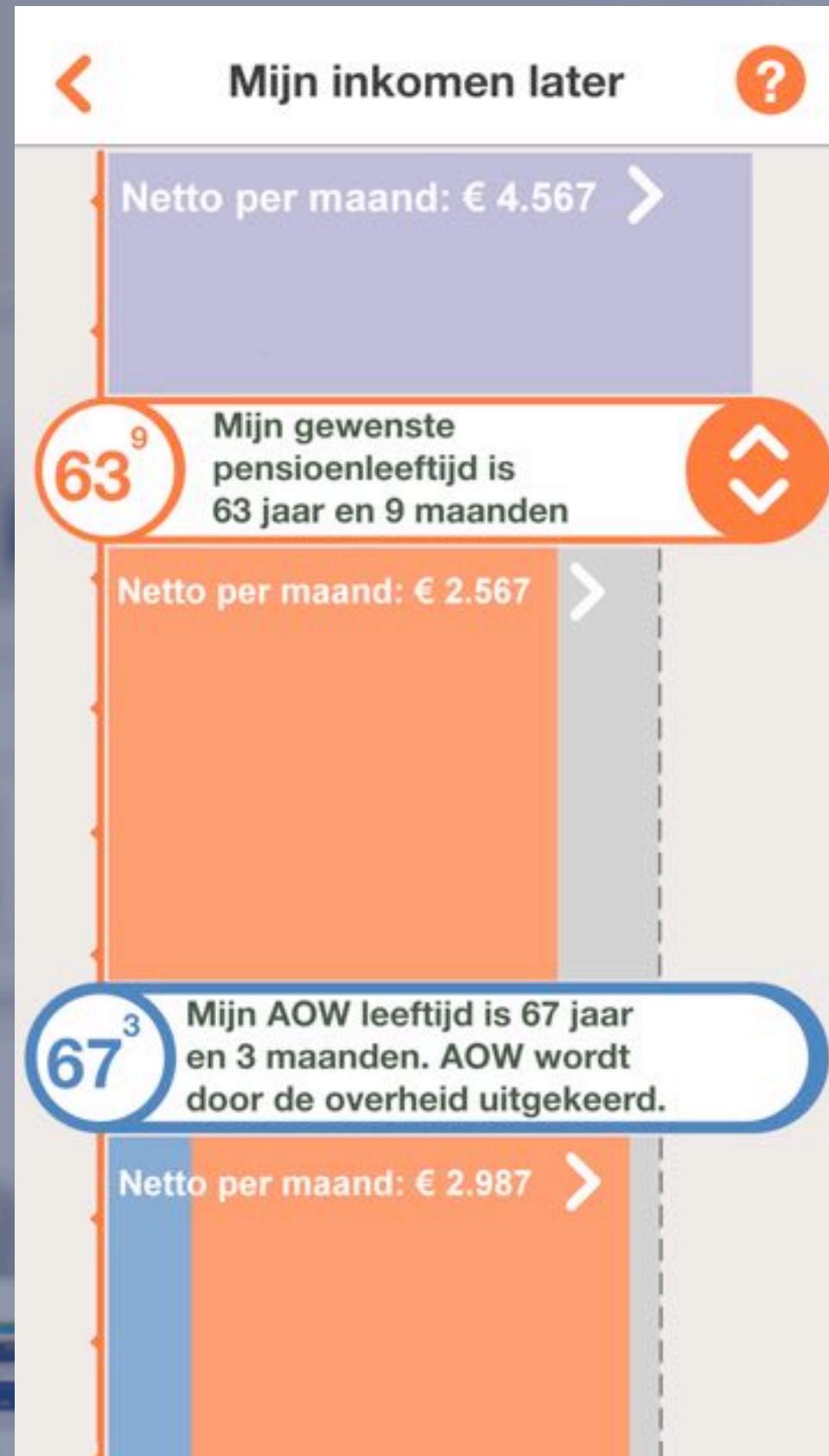
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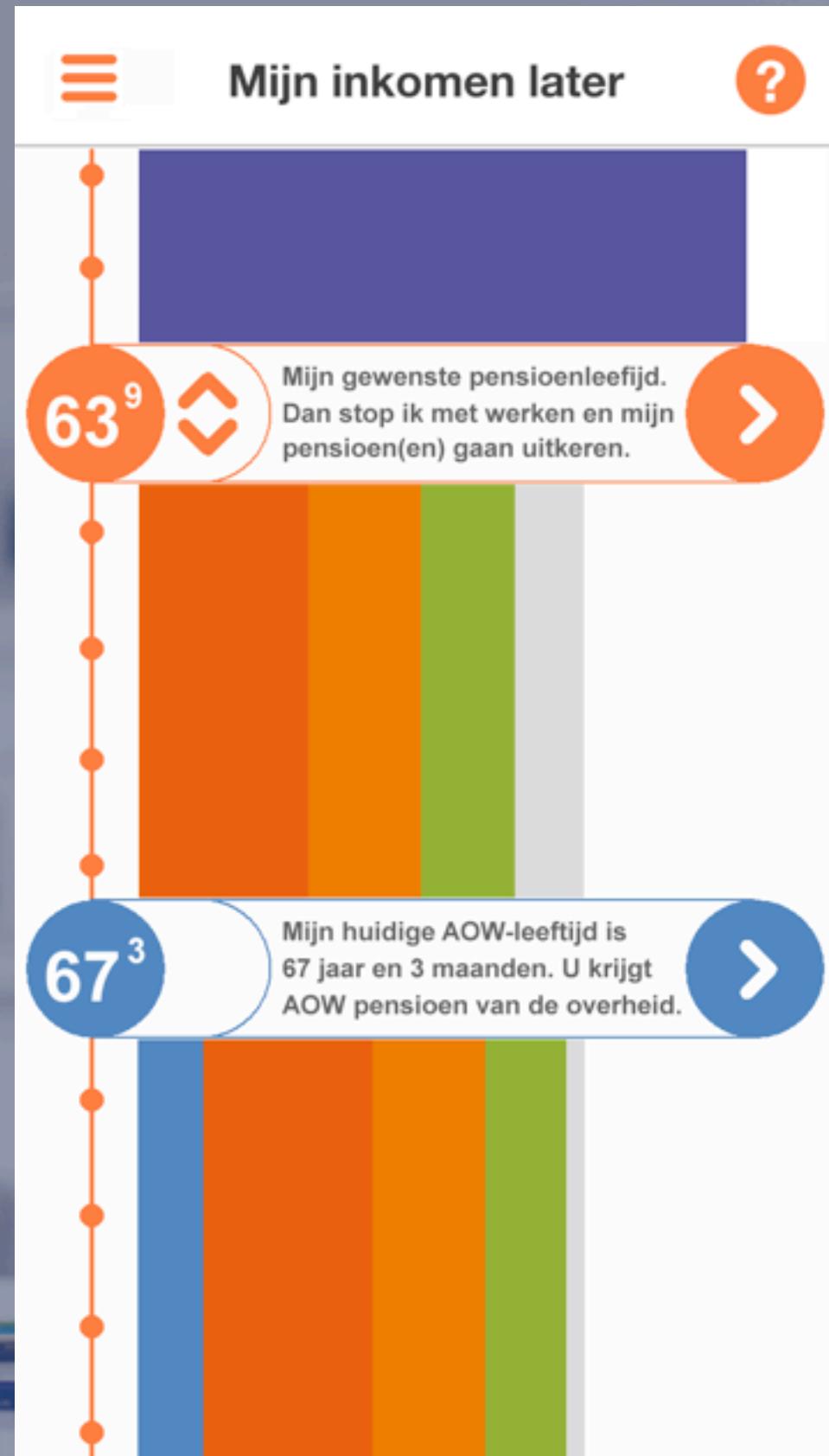


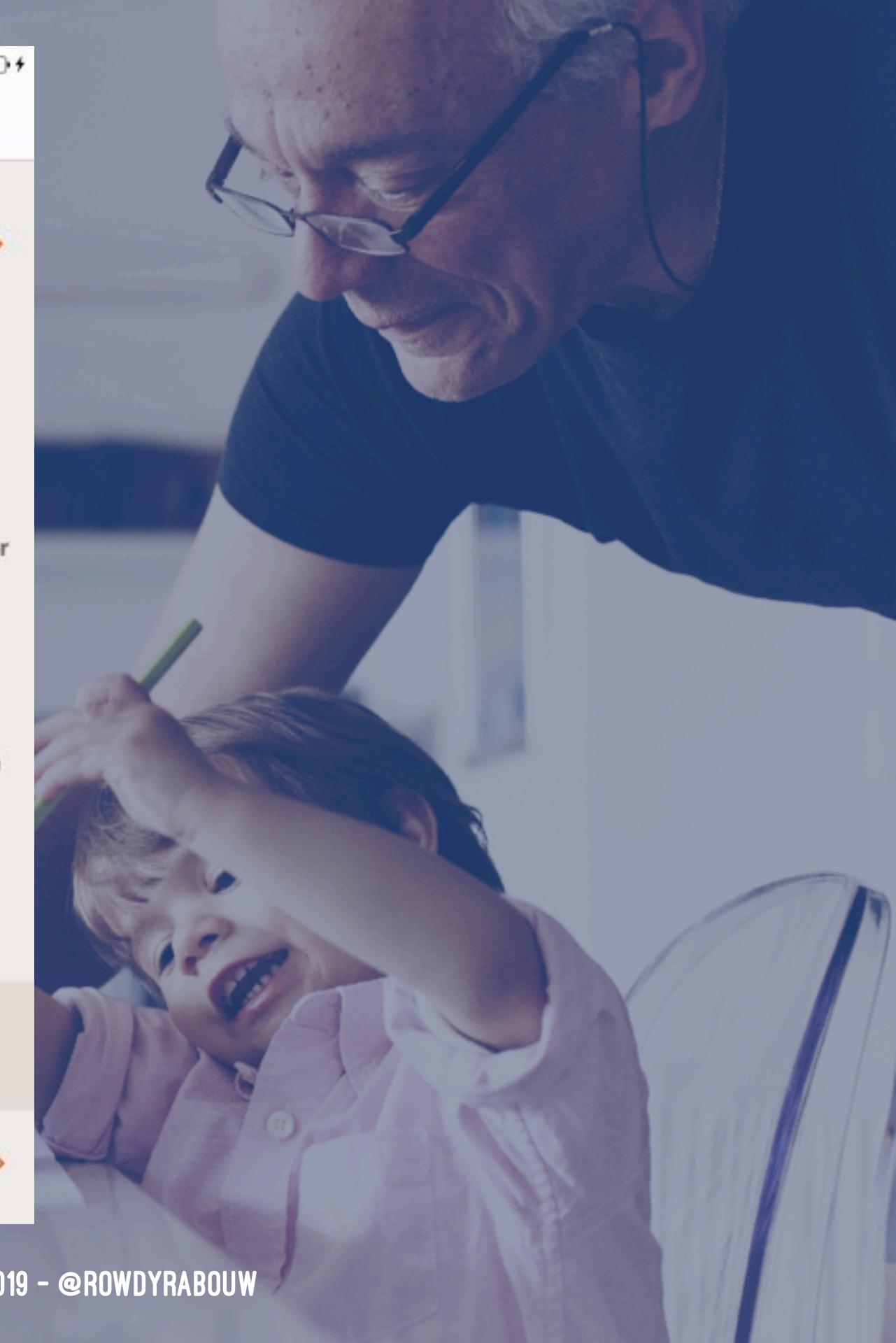
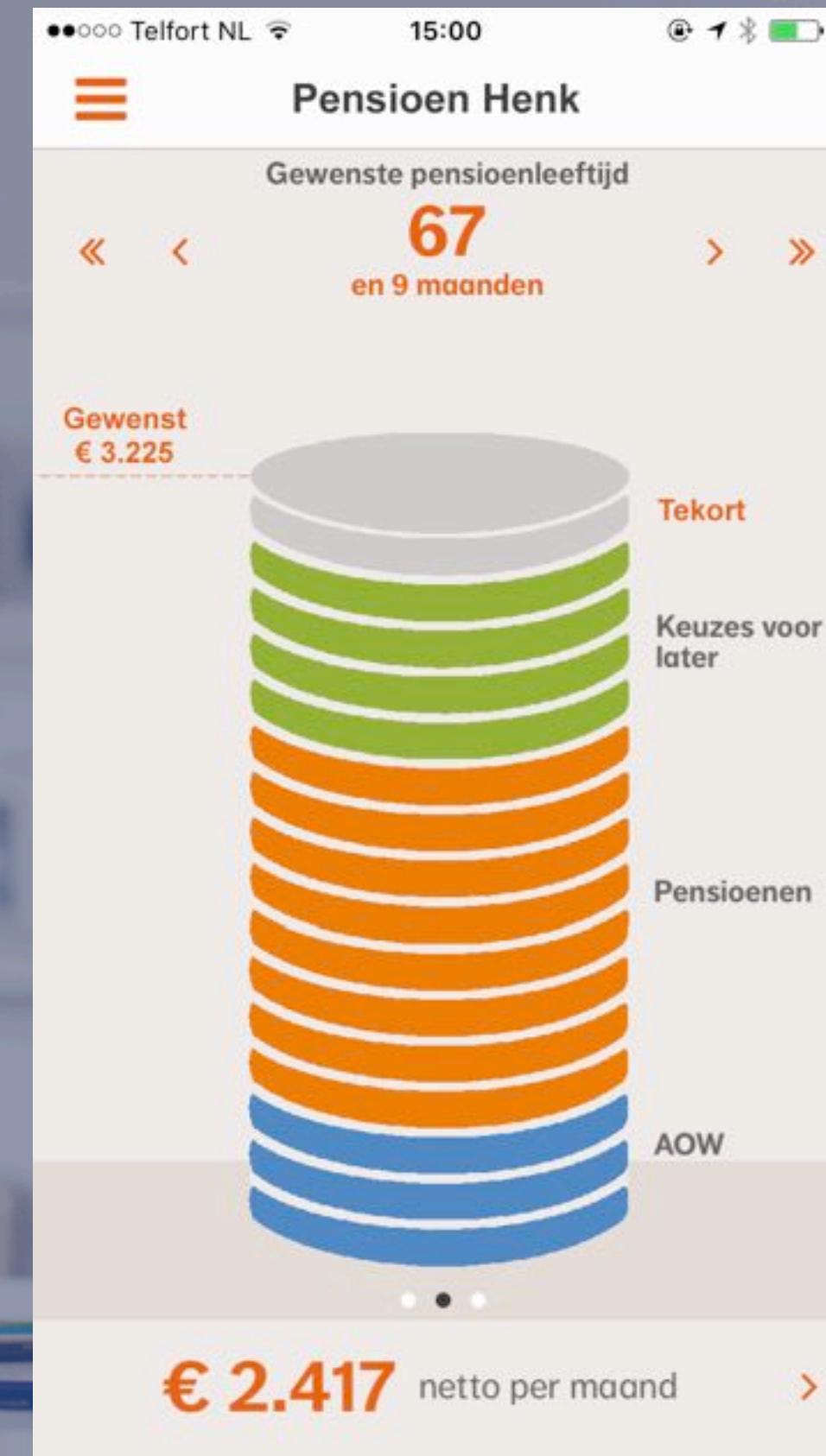
MONDRIAAN ?

PIEKENPIJP ?

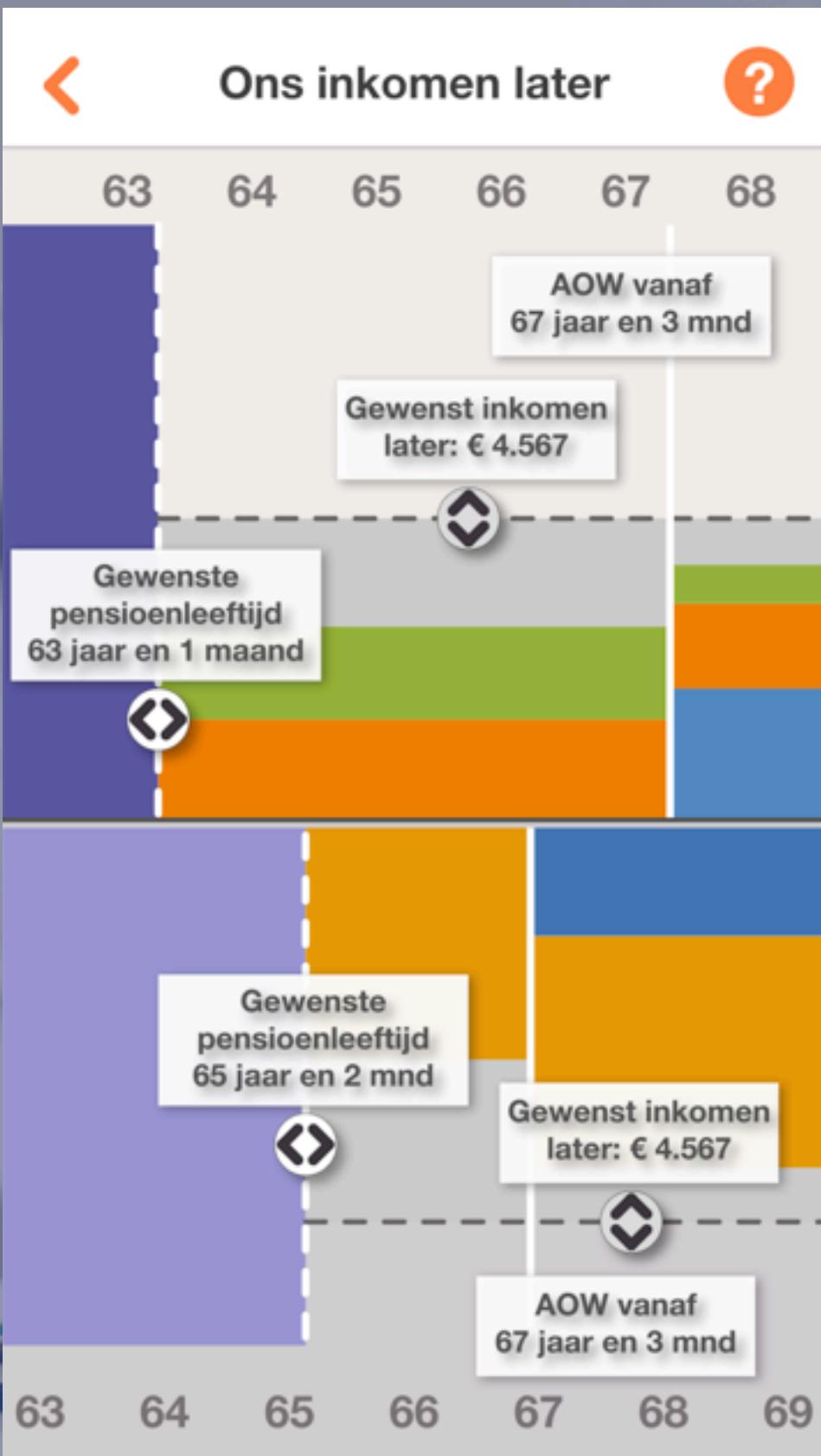


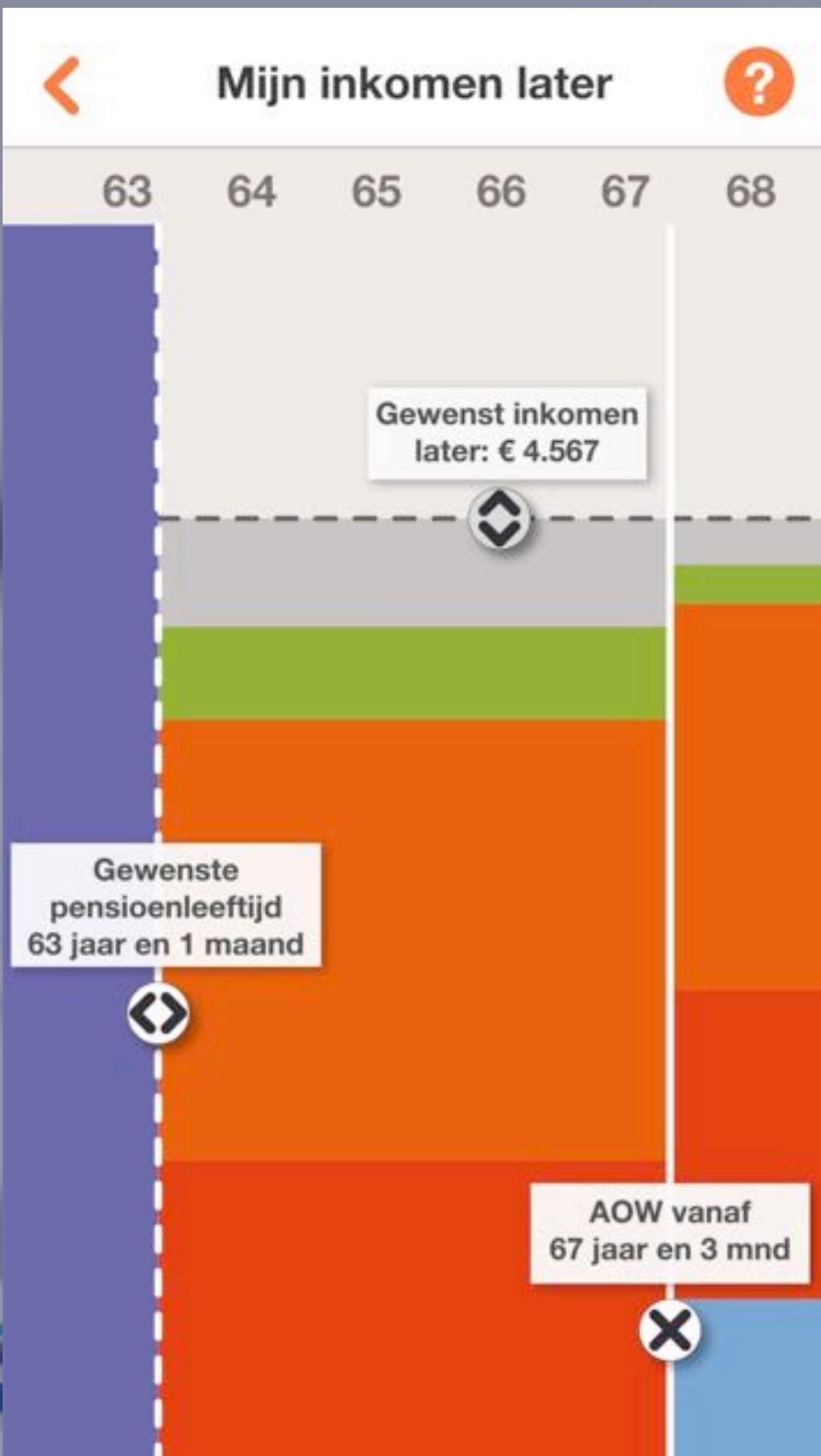


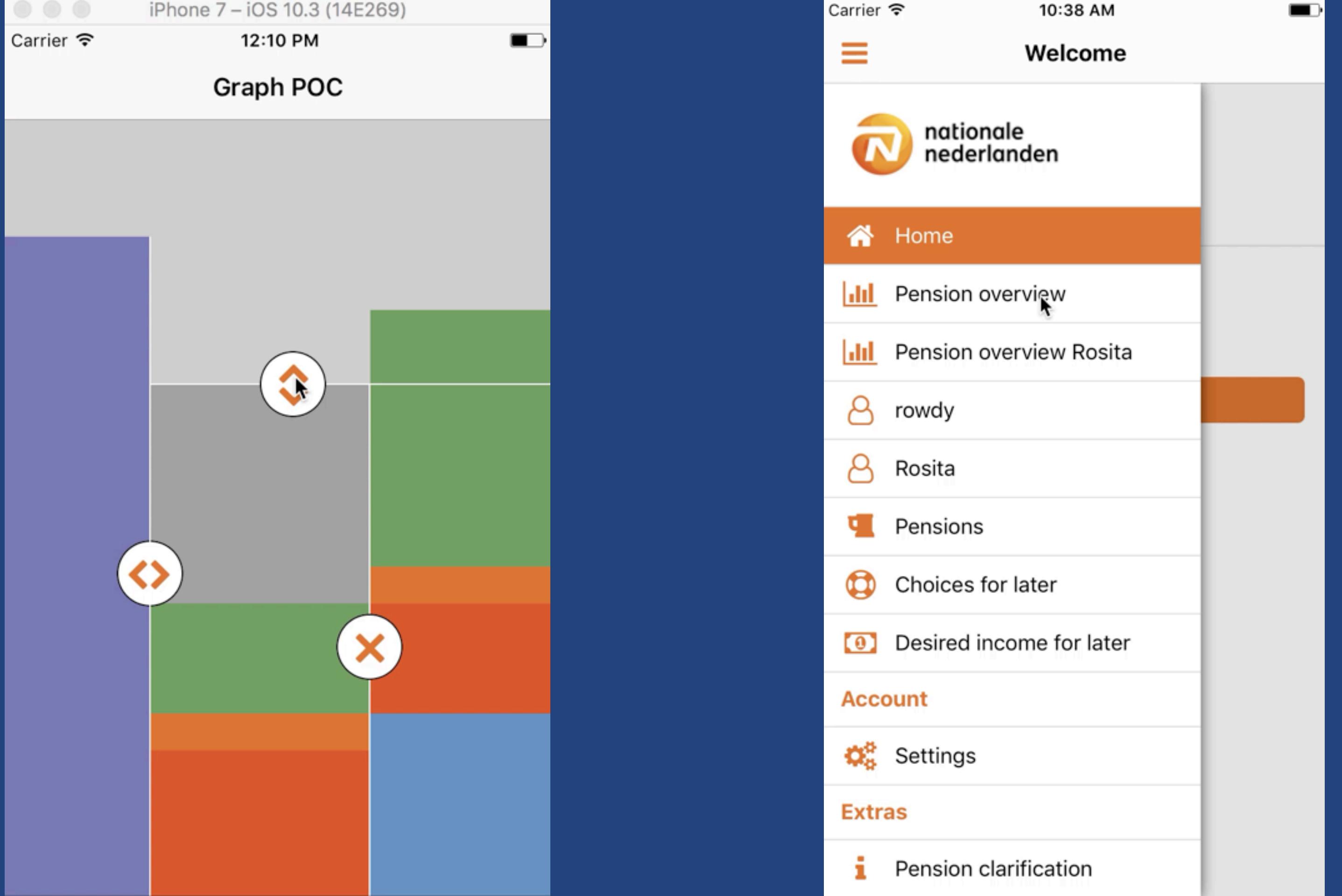


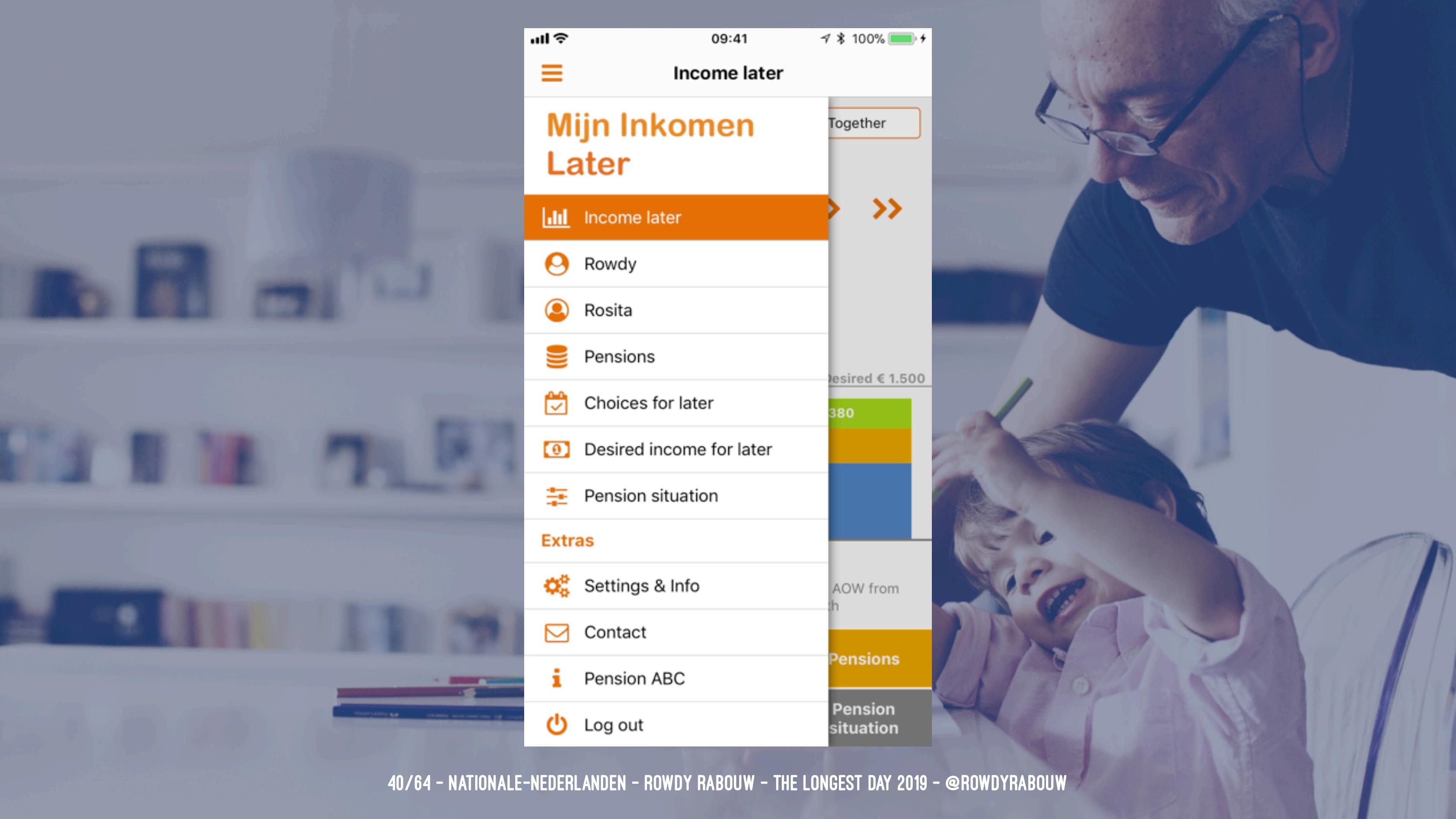












A smartphone screen displaying the "Income later" app interface. The top status bar shows signal strength, time (09:41), battery level (100%), and a green battery icon. The main title "Income later" is at the top right. Below it, the text "Mijn Inkomen Later" is displayed in orange. A navigation bar with an orange background contains the title and two arrows pointing right. To the right of the navigation bar is a small orange box labeled "Together". The main menu includes the following items:

- Income later (selected, highlighted in orange)
- Rowdy
- Rosita
- Pensions
- Choices for later
- Desired income for later
- Pension situation

Extras

- Settings & Info
- Contact
- Pension ABC
- Log out

On the right side of the screen, there is a vertical stack of documents or cards. From top to bottom, they show:

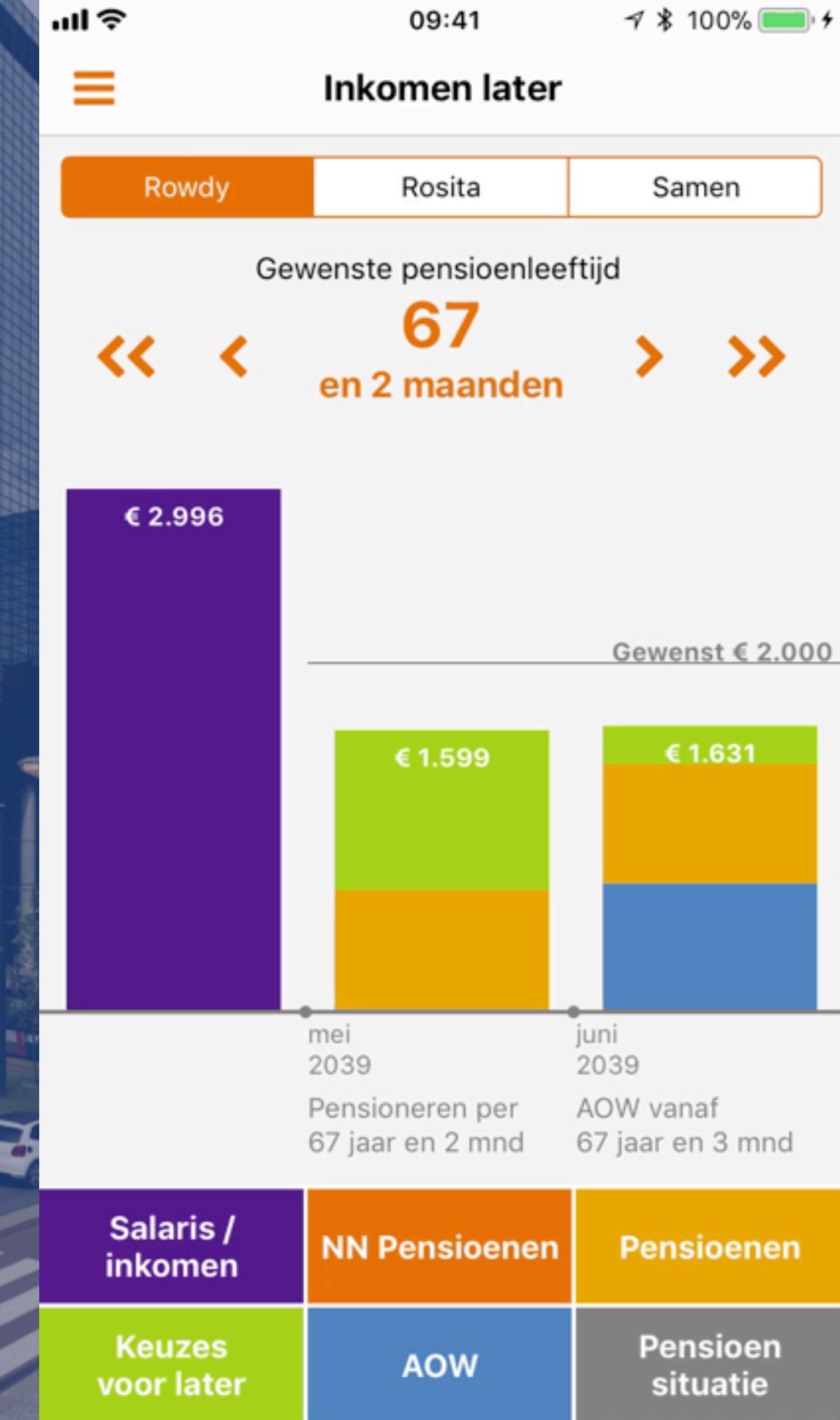
- desired € 1.500
- 380
- AOW from
- Pensions
- Pension situation

MULTILINGUAL WITH NGX-TRANSLATE

- INTERNATIONALIZATION LIBRARY FOR ANGULAR 2+
- DEFINE TRANSLATIONS IN DIFFERENT LANGUAGES
 - SWITCH BETWEEN THEM EASILY
- NO HARDCODED TEXT/LABELS – ALL IN ONE PLACE
- START DIRECTLY – EVEN WITH ONE LANGUAGE

NL.JSON

```
{  
  "GRAPH": {  
    "PAGETITLE": "Inkomen later",  
    "HDRTXT": "Gewenste pensioenleeftijd",  
    "BTN_01": "Salaris / inkomen",  
    "BTN_02": "NN Pensioenen",  
    "BTN_03": "Pensioenen",  
    "BTN_04": "Keuzes voor later",  
    "BTN_05": "AOW",  
    "BTN_06": "Pensioen situatie"  
  }  
}
```



EN.JSON

{

```
"GRAPH": {  
    "PAGETITLE": "Income later",  
    "HDRTXT": "Desired retirement age",  
    "BTN_01": "Salary / income",  
    "BTN_02": "NN Pensions",  
    "BTN_03": "Pensions",  
    "BTN_04": "Choices for later",  
    "BTN_05": "AOW",  
    "BTN_06": "Pension situation"  
}
```

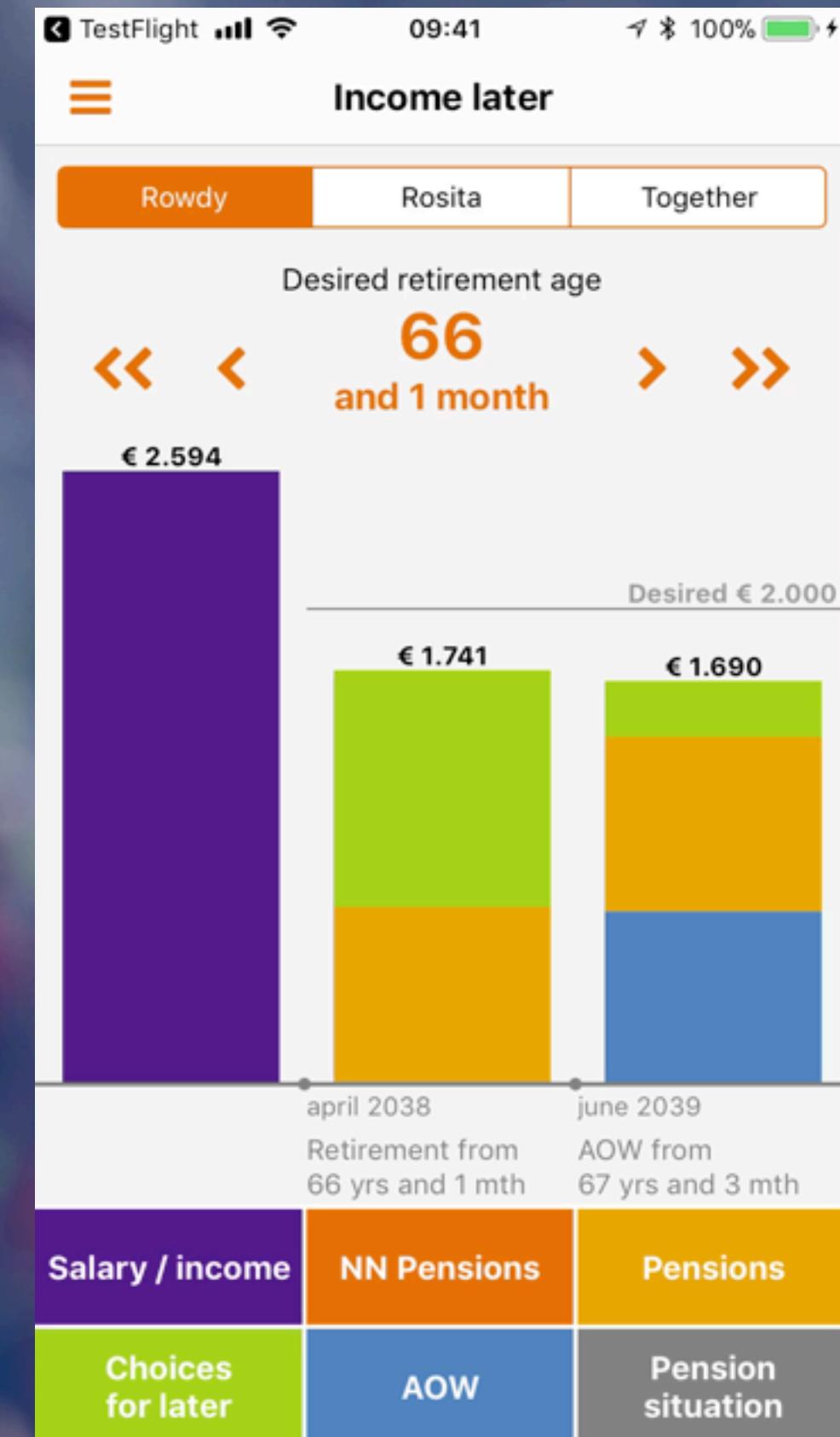




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A dynamic photograph of a woman with blonde hair, wearing a red short-sleeved shirt, running towards the camera with a joyful expression. She is holding a large bouquet of roses wrapped in clear plastic. Her race bib is visible, featuring the text "NN", "CINDY", "F8390", and ".ROTTERDAM 2015.". The background is blurred, suggesting motion, and the overall atmosphere is energetic and celebratory.

NOT ALL ROSES



NOT ALL ROSES: SLIDERS

```
<Slider  
    minValue="0"  
    maxValue="100"  
    value="40"  
    (valueChange)="onSliderValueChange($event)">  
</Slider>
```

NOT ALL ROSES: SLIDERS

```
<Slider  
    minValue="{{minSliderSparen}}"  
    maxValue="{{maxSliderSparen}}"  
    [(ngModel)]="extraSparenInlegPerMaand"  
    (valueChange)="onSparenSliderValueChange($event)">  
</Slider>
```

NOT ALL ROSES: SLIDERS

```
<Slider #sparenSlider  
minValue="{{minSliderSparen}}"  
maxValue="{{maxSliderSparen}}"  
[(ngModel)]="extraSparenInlegPerMaand">  
</Slider>
```

NOT ALL ROSES: SLIDERS

```
@ViewChild("sparenSlider") sparenSlider: ElementRef;  
  
ngOnInit() {  
    this.sparenSlider.nativeElement.addEventListener("valueChange",  
        (args: PropertyChangeData) => {  
            this.debouncerSparen.next(args);  
        });  
  
    this.debouncerSparen.debounceTime(150).subscribe(args => {  
        this.sparenSliderChanged(args);  
    });  
}
```

NOT ALL ROSES: SLIDERS

```
sparenSliderChanged(args: PropertyChangeData) {  
    this.extraSparenInlegPerMaand = Math.round(args.value);  
    this.removeAllEventListeners();  
    ....  
    // calculate and set all values for 5 sliders  
    ....  
    this._changeDetectorRef.detectChanges();  
    this.addAllEventListeners();  
}
```

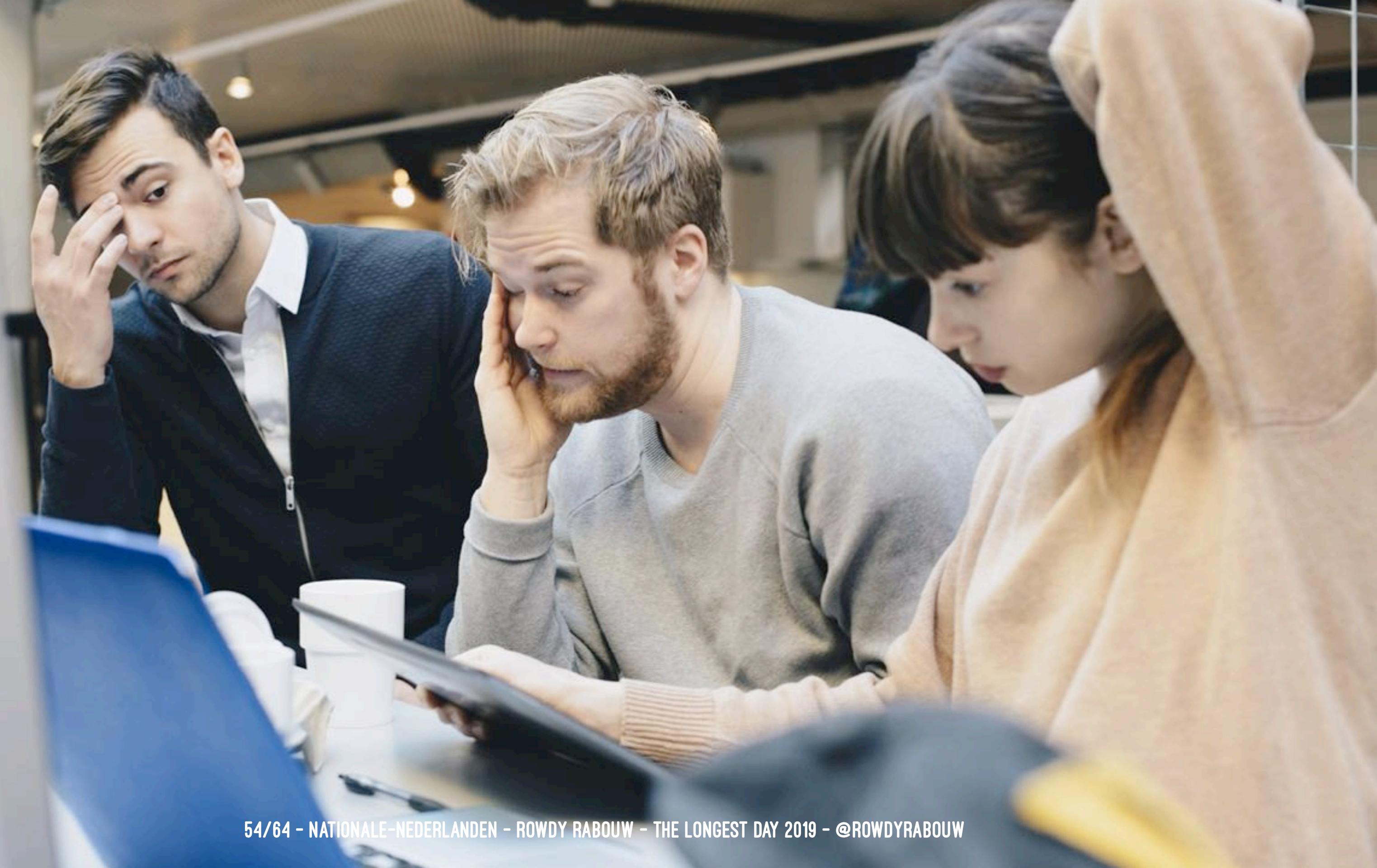


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NOT ALL ROSES: ANGULAR & PERFORMANCE

- LAZY LOADING
- WEBPACK & UGLIFY
- FASTER START-UP TIME (12 SECONDS → 3 SECONDS)
- SMALLER APP BUNDLE (IOS 114 MB → 42 MB)

AFV



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UPDATES

UPDATES

- NATIVESCRIPT CLI
- NATIVESCRIPT CORE MODULES
- XCODE
- PLUGINS

UPDATES: PLUGINS

PACKAGE.JSON

```
"dependencies": {  
    "nativescript-angular": "~4.4.1",  
    "nativescript-barcodescanner": "^2.7.0"  
}
```

SEMANTIC VERSIONING: MAJOR.MINOR.PATCH

UPDATES: PLUGINS

TILDE VS



`~8.0.1`

`>= 8.0.1 < 8.1.0`

`^3.2.0`

`>= 3.2.0 < 4.0.0`

UPDATES: PLUGINS

PACKAGE.JSON

```
"dependencies": {  
    "nativescript-angular": "8.0.1",  
    "nativescript-barcodescanner": "3.2.0"  
}
```

CODERELEASE.IO



2015

EXTERNAL PARTNER

NATIVE

IOS + ANDROID

OBJECTIVE-C + JAVA

NATIVE PERFORMANCE

UNHAPPY WITH THE PROGRESS

2016 - 2019

IN-HOUSE TEAM

NATIVESCRIPT

CROSS-PLATFORM

WEB TECHNOLOGIES

NATIVE PERFORMANCE



2015

EXTERNAL PARTNER

NATIVE

IOS + ANDROID

OBJECTIVE-C + JAVA

NATIVE PERFORMANCE

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2016 - 2019

IN-HOUSE TEAM

NATIVESCRIPT

CROSS-PLATFORM

WEB TECHNOLOGIES

NATIVE PERFORMANCE

HAPPY WITH **PROGRESS**

qazil





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THANK YOU AND ENJOY YOUR LUNCH!

