

# GRENT

Opleidingsonderdeel: DMS Development

Meyers Andries

# DOSSIER



arteveldehogeschool  
LID VAN DE ASSOCIATIE UNIVERSITEIT GENT

# INHOUD

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# 1. DISCOVER

# BRIEFING

# BRIEFING

## DE OPRACHT

De probleemstelling voor het opleidingsonderdeel CMS Development luidde als volgt: Hoe kan een CMS-gebaseerd softwaresysteem het delen van voertuigen faciliteren?

In een individuele, wordt een Drupal-backoffice ontwikkeld voor het beheer van voertuigen, locaties, verhuren, ... Deze worden beheerd door bevoegden met toegang tot het backoffice systeem. Voor hen moet een gebruiksvriendelijke omgeving opgesteld worden waarin zij op een gemakkelijke manier de verschillende voertuigen, etc. kunnen creëren, bewerken en opvolgen.

Hiervoor steunt de applicatie op Drupal voor de back-end. Voor de front-end wordt gebruik gemaakt van VueJS Progressive Web App.

Binnen een initiële termijn van 5 maanden wordt de applicatie ontwikkeld. De opleveringsdatum voor examenkans 1 is 8 Januari 2018.

Voor examenkans 2 ligt de opleveringsdatum vast op 16 augustus 2018.

## **2. DEFINE**

# **ANALYSE**

# ANALYSE

## VAN DE OPRACHT

Grent is een applicatie waar gebruikers op een eenvoudige manier voertuigen kunnen huren om zich te verplaatsen binnen Gent. Een gebruiksvriendelijke frontoffice laat bezoekers toe voertuigen te huren op een locatie die hen het best past. Alle wagens kunnen gratis parkeren binnen Gent.

Het ontwikkelingsproces voor de applicatie volgt de Agile ontwikkelingsmethode. Elke periode worden de zaken herbekeken en opnieuw aangepast. Daarboven wordt extra functionaliteit toegevoegd bovenop de core.

### Functionele vereisten

#### VOERTUIG

##### 1. Voertuig huren

De gebruiker moet in staat zijn om een voertuigen te huren. Hierbij worden kan hij per locatie kiezen tussen een aantal voertuigen. Hij wijst het voertuig aan dat hem het meest aanstaat. Na bevestiging wordt de auto ontgrendeld en zal de gebruiker een aangepast tarief worden aangerekend.

##### 2. Voertuig inleveren

Wanneer de gebruiker zijn rit wil beëindigen moet hij het parkeren binnen een van de stations. Na controle zal het berekende bedrag van de rit van zijn saldo afgetrokken worden.

##### 3. CRUD

Via Drupal kunnen geautoriseerde gebruikers voertuigen bewerken.

# ANALYSE

## VAN DE OPRACHT

### GEBRUIKER

#### 1.Login

Binnen het systeem kan er op slechts één manier worden ingelogd: met een gebruikersnaam en bijhorend wachtwoord.

#### 2.User Management

Geautoriseerde gebruikers kunnen via een overzicht de gebruikers zien die zijn geregistreerd binnen het systeem

#### 3.Role Management

Geautoriseerde gebruikers kunnen via een overzicht de rollen zien die bij elke gebruiker van toepassing zijn. Deze kunnen ook aangepast worden.

### Niet-functionele vereisten

De applicatie wordt op een gebruiksvriendelijke manier ontwikkeld, zodat het voor iedereen duidelijk is hoe ze moeten navigeren en waar ze data kunnen ingeven. De lay-out is verzorgd en geeft een aangename indruk. Het systeem is beveiligd, zodat personen die niet geautoriseerd zijn geen toegang hebben tot de applicatie.

### TECHNISCHE SPECIFICATIES

#### 1.Server side

- PHP 7.X
- Twig

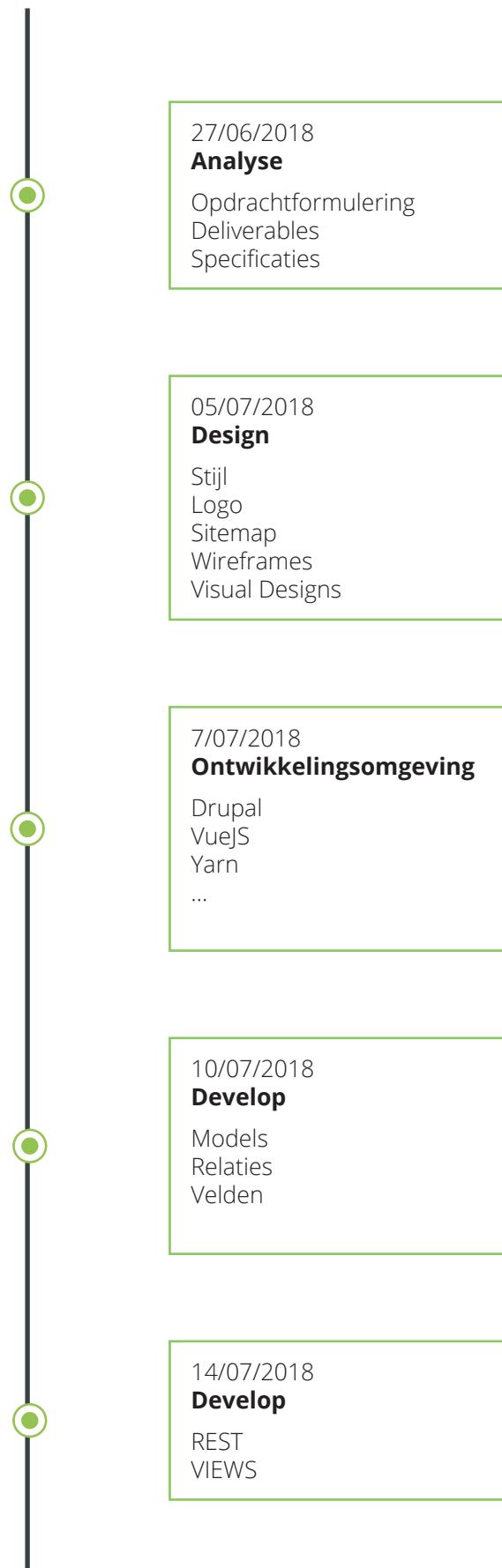
#### 2.Client side

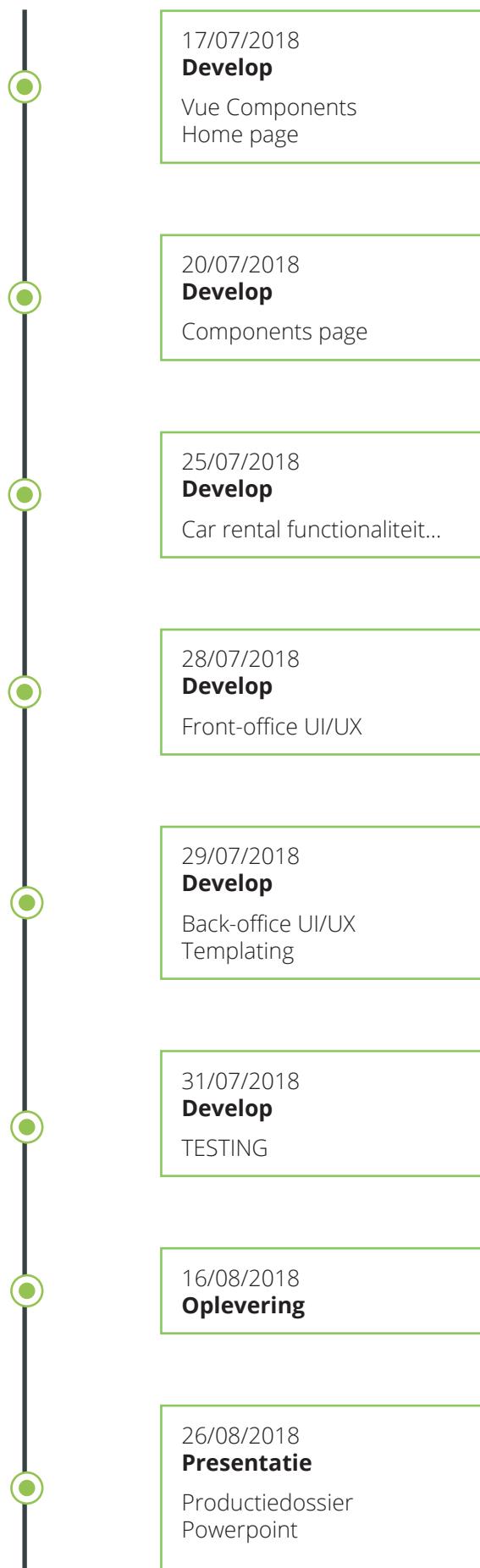
- HTML 5
- Sass
- JavaScript
- VueJS
- Axios

#### 3. Ontwikkelomgeving

- WAMP
- Yarn
- Powershell

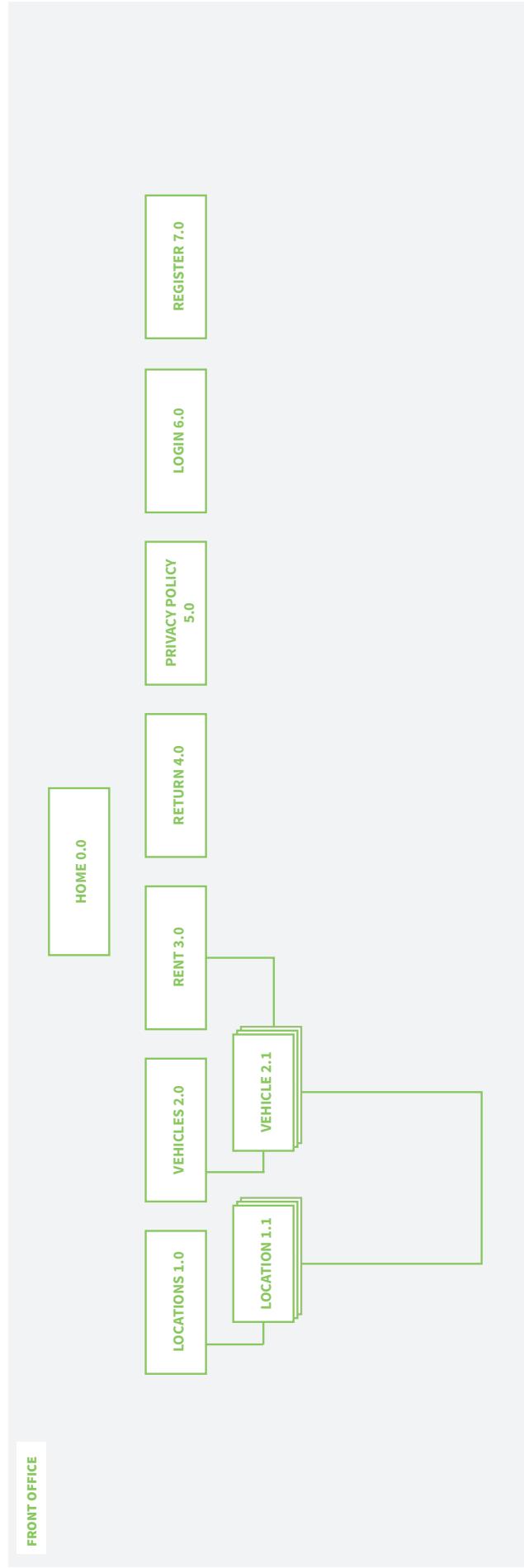
# PLANNING





# **3. DESIGN**

# SITEMAP



# WIREFRAMES

# FRONT-OFFICE

**greent**

☰

# DE NIEUWE MANIER OM JETE VERPLAATSEN IN GENT

Registreer

Jouw keuze, jouw vrijheid

**1**  
Lorem ipsum dolor sit amet,  
ectetur  
Lorem ipsum dolor sit amet, ectetur ipiscing elit.  
Morbi leo enim, congue sed ullamcorper at,  
interdum sit met lectus.

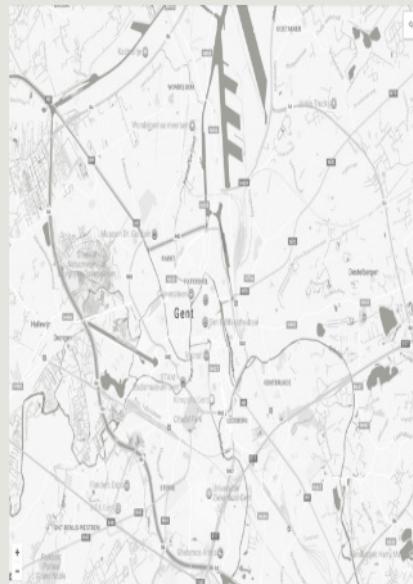
**2**  
Lorem ipsum dolor sit amet,  
ectetur  
Lorem ipsum dolor sit amet, ectetur ipiscing elit.  
Morbi leo enim, congue sed ullamcorper at,  
interdum sit met lectus.

**3**  
Lorem ipsum dolor sit amet,  
ectetur  
Lorem ipsum dolor sit amet, ectetur ipiscing elit.  
Morbi leo enim, congue sed ullamcorper at,  
interdum sit met lectus.

**4**  
Lorem ipsum dolor sit amet,  
ectetur

**5**  
Lorem ipsum dolor sit amet,  
ectetur  
Lorem ipsum dolor sit amet, ectetur ipiscing elit.  
Morbi leo enim, congue sed ullamcorper at,  
interdum sit met lectus.

## X Stations verspreid over Gent



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The wireframe illustrates the Grent app's user interface. At the top left is the 'Grent' logo. A large 'X' icon is overlaid on the main content area. The top right features a menu icon (three horizontal lines). The main content area is divided into two sections: 'Locaties' (Locations) on the left and 'Wagens' (Cars) on the right.

**Locaties:**

- Locatie 500 m

**Wagens:**

- Wagen  
1-ABC-123  
1500 cc  
€ 50/uur

At the bottom of each section is a dark grey footer bar containing the text '© 2017 Arteveldehogeschool'.





The image displays two side-by-side wireframe designs for a user interface, likely for a mobile application or website. Both designs feature a header with the word "Grent" and a menu icon (three horizontal lines). The left wireframe represents a registration form, containing four input fields labeled "E-MAILADRES", "NAAM", "WACHTWOORD", and "WACHTWOORD" (repeated), followed by a large dark grey button labeled "REGISTREER". The right wireframe represents a login form, containing two input fields labeled "GEBRUIKERSNAAM" and "WACHTWOORD", followed by a large dark grey button labeled "AANMELDEN". Both wireframes have a footer with the text "© 2017 Arteveldehogeschool".

E-MAILADRES

NAAM

WACHTWOORD

WACHTWOORD

REGISTREER

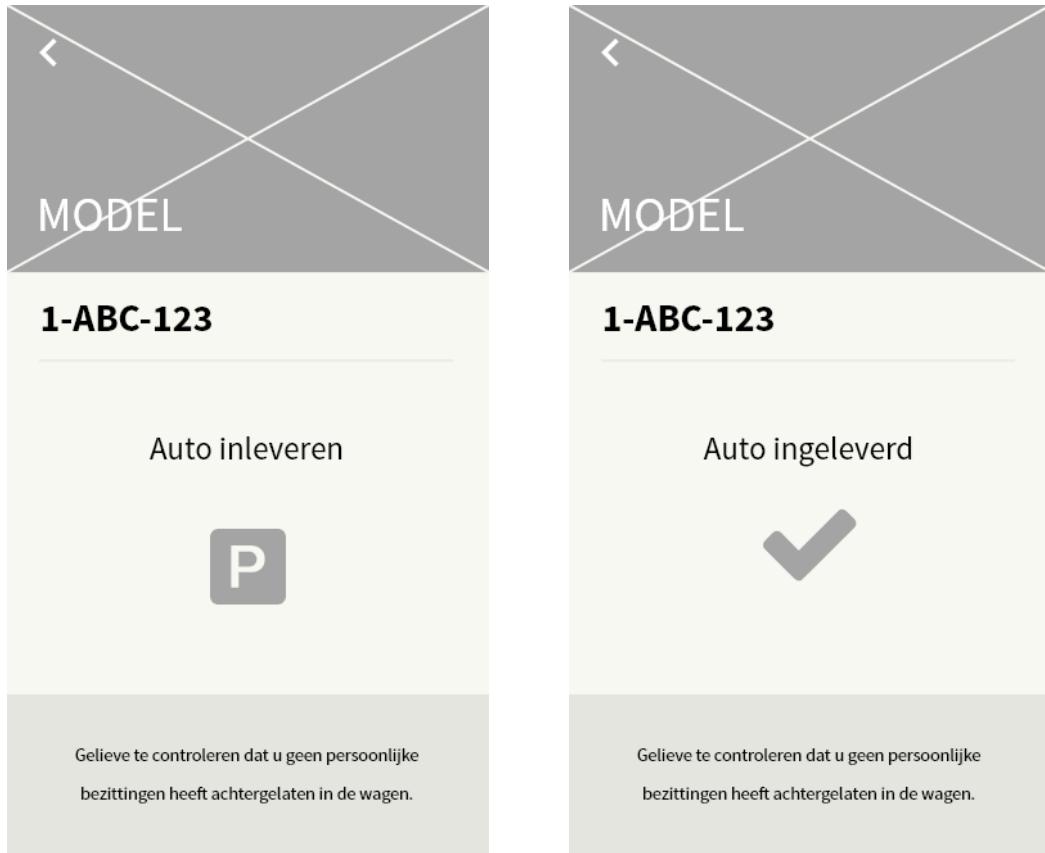
GEBRUIKERSNAAM

WACHTWOORD

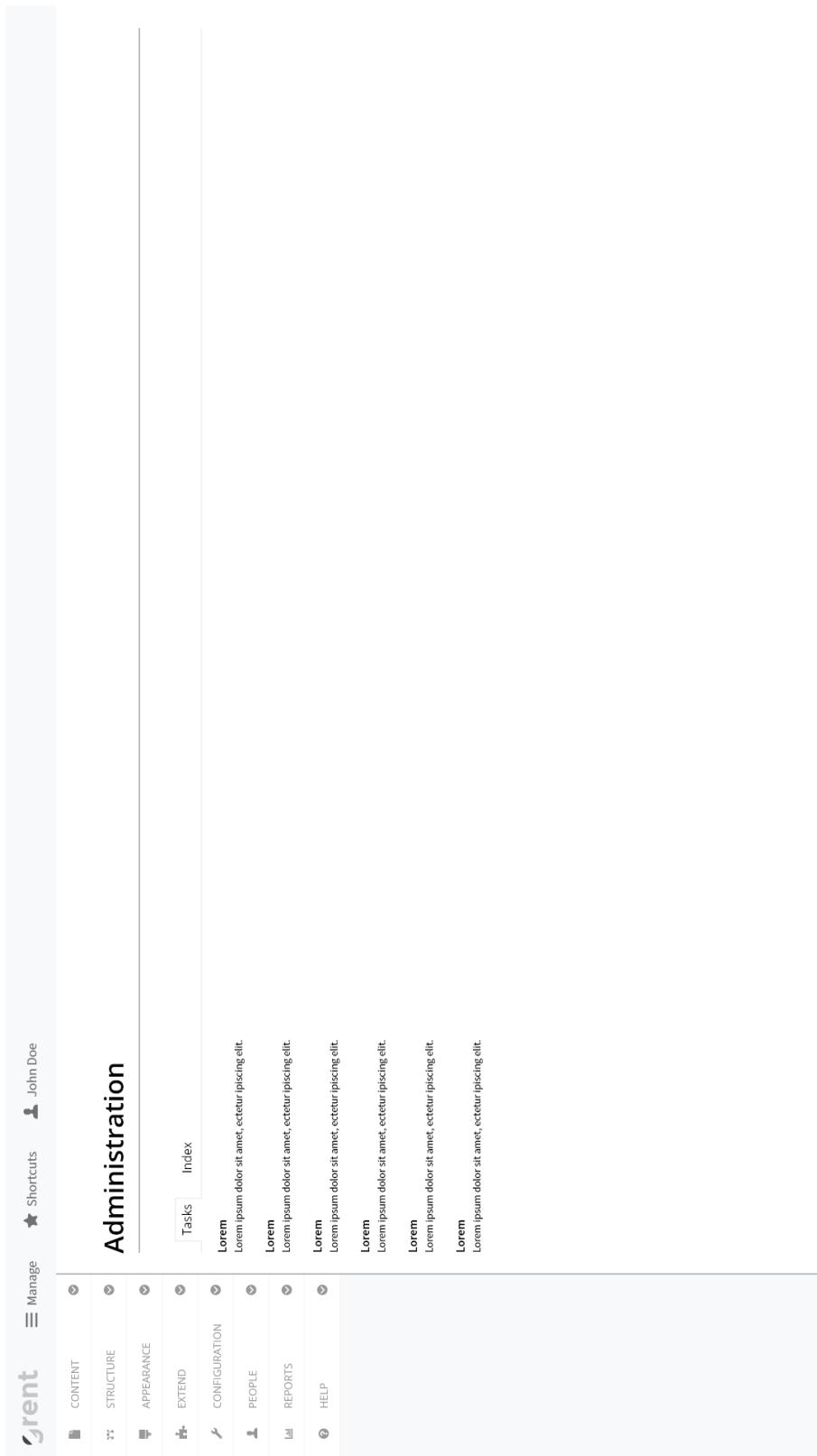
AANMELDEN

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© 2017 Arteveldehogeschool



# **BACK-OFFICE**

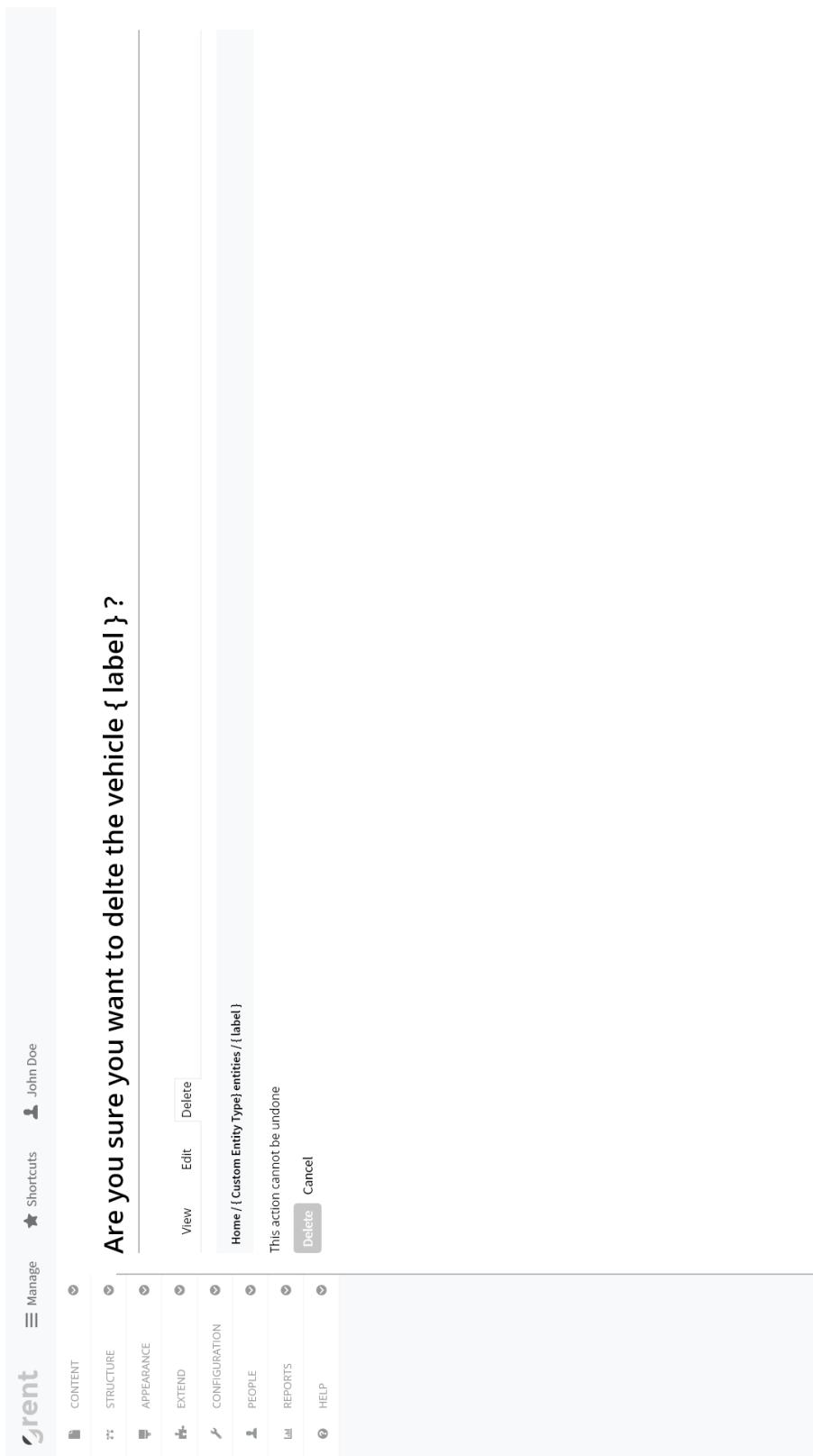


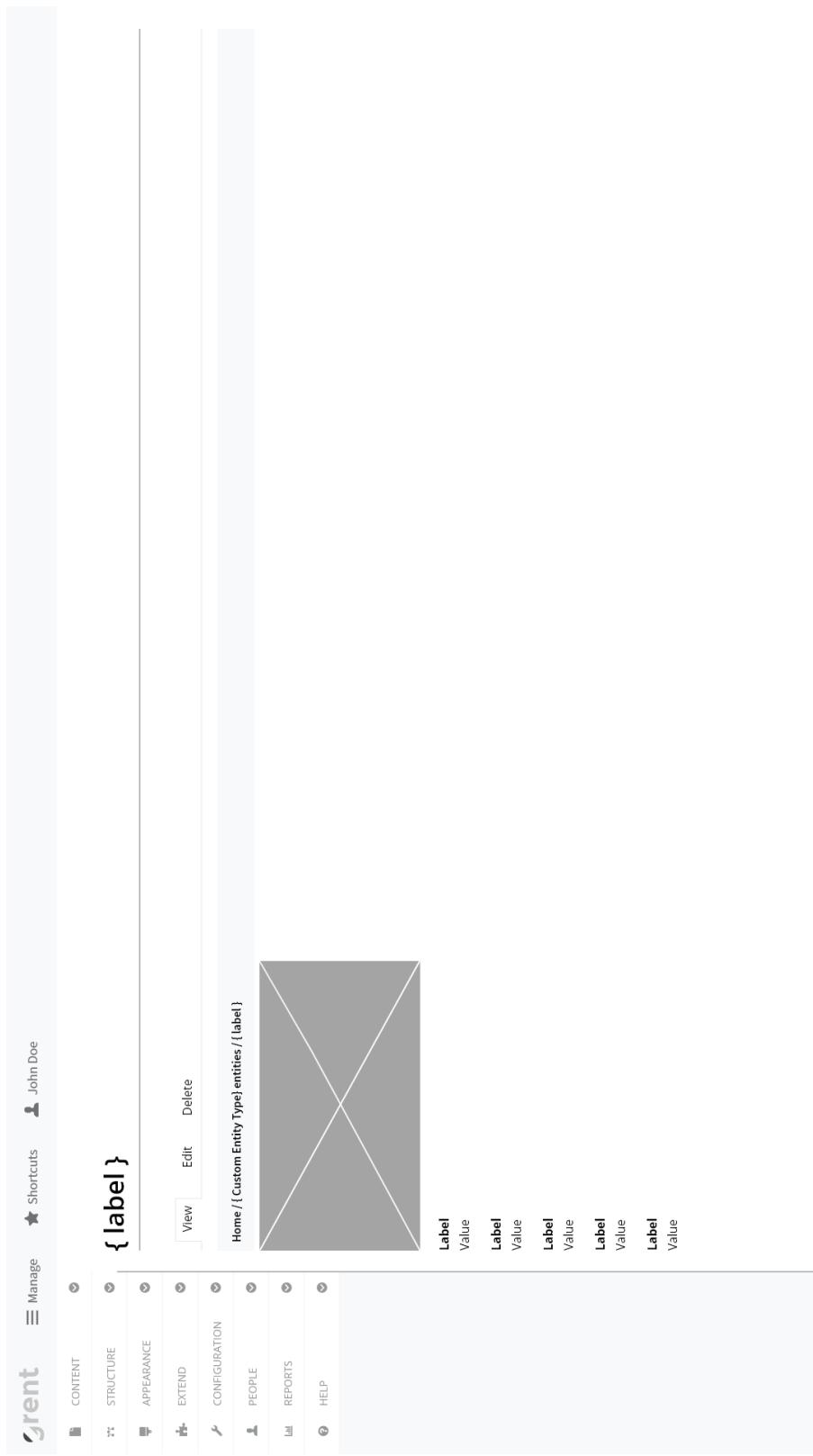
The wireframe illustrates a user interface for managing custom entity types. At the top, there's a navigation bar with the Grent logo, a 'Manage' button, a 'Shortcuts' button, and a user profile for 'John Doe'. Below the navigation is a sidebar containing links for 'CONTENT', 'STRUCTURE', 'APPEARANCE', 'EXTEND', 'CONFIGURATION', and 'PEOPLE'. A 'REPORTS' link is also present under the 'CONTENT' section. On the far right of the sidebar is a 'HELP' button. The main content area features a title '{Custom Entity Type} entities' followed by a table. The table has two columns: 'Field' and 'Operations'. There are eight rows in the table, each representing a field with its value and an 'Edit' button.

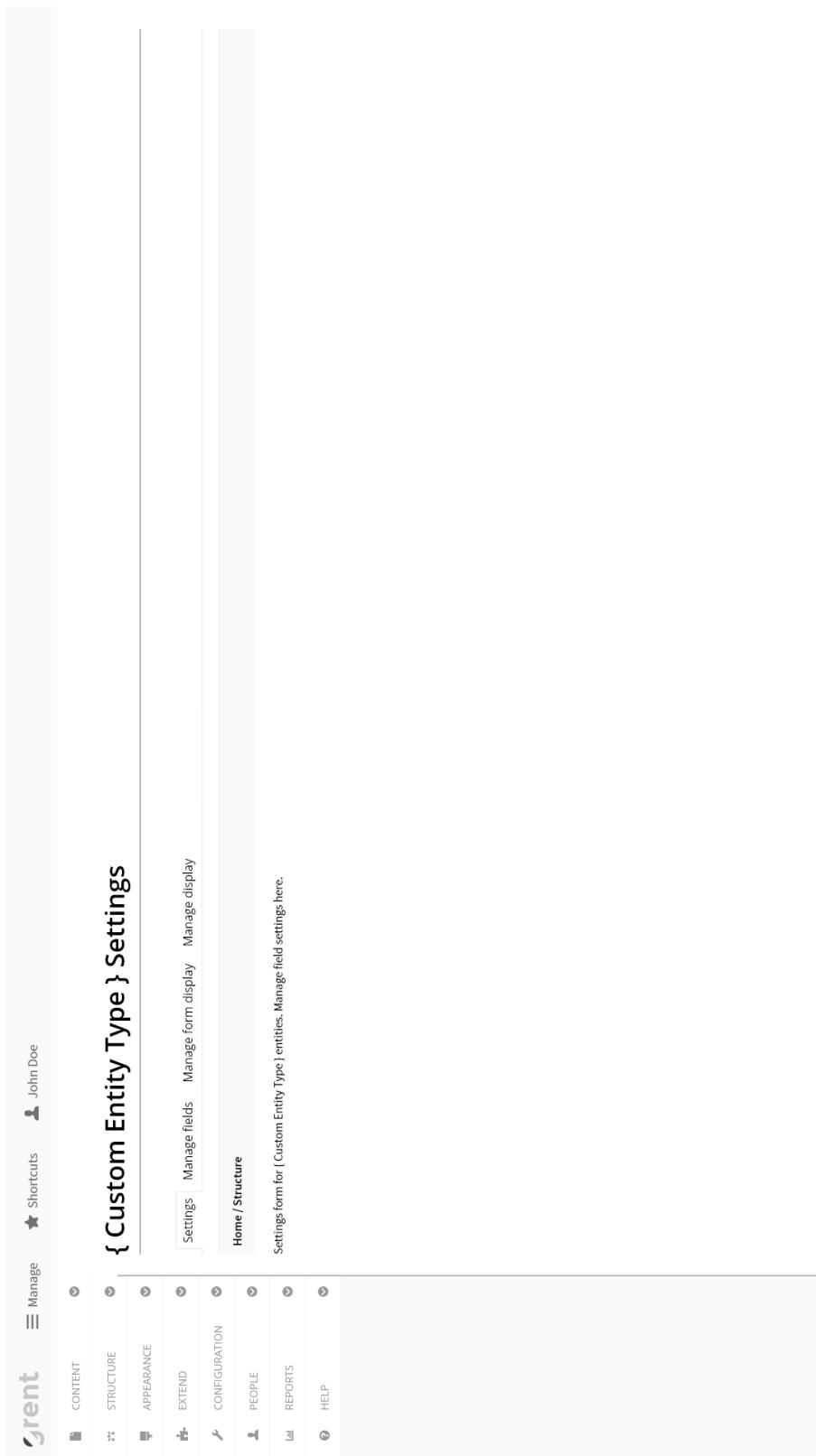
Field	Operations
REPORTS	Value 1 Edit ▶
CONFIGURATION	Value 1 Edit ▶
PEOPLE	Value 1 Edit ▶
EXTEND	Value 1 Edit ▶
STRUCTURE	Value 1 Edit ▶
CONTENT	Value 1 Edit ▶
HELP	Value 1 Edit ▶

The wireframe illustrates the Greent application interface for adding a custom entity type. The top navigation bar includes links for 'CONTENT', 'STRUCTURE', 'APPEARANCE', 'EXTEND', 'CONFIGURATION', 'PEOPLE', 'REPORTS', 'HELP', and 'Shortcuts'. A user profile for 'John Doe' is also present. The main title is 'Add { Custom Entity Type }'. Below the title, a breadcrumb trail shows 'Home / { Custom Entity Type } entities'. The form consists of several input fields: 'Text Field' (with placeholder 'Text Field 1'), 'Text Field 2' (with placeholder 'Text Field 2'), 'Select' (with placeholder 'Select'), and 'Select 2' (with placeholder 'Select 2'). Each select field has three options: 'Option 1', 'Option 2', and 'Option 3'. A note '- Select a value -' is displayed next to the second select field. At the bottom right are 'Save' and 'Cancel' buttons.

The wireframe illustrates the 'Edit { Custom Entity Type }' screen within the Greent application. The top navigation bar includes links for 'Manage', 'Shortcuts', and a user profile for 'John Doe'. The left sidebar contains links for 'CONTENT', 'STRUCTURE', 'APPEARANCE', 'EXTEND', 'CONFIGURATION', 'PEOPLE', 'REPORTS', and 'HELP'. The main content area features a breadcrumb trail: 'Home / { Custom Entity Type } entities / { label }'. Below this, there are two 'Text Field' components, each with a 'View' and 'Edit' button. A 'Select' component is shown with the message '- Select a value -' and a 'Save' button. A 'Select 2' component is also present. At the bottom, there are icons for 'Checkbox', 'Label', 'Radio button', and 'Label'.







The wireframe illustrates the Greent application interface. At the top left is the Greent logo. To its right are navigation links: Manage, Shortcuts, and a user profile for John Doe. Below these are several horizontal menu items: CONTENT, STRUCTURE, APPEARANCE, EXTEND, CONFIGURATION, PEOPLE, and REPORTS. A HELP link is also present. On the far right of the header is a search bar.

The main content area features a title "Manage fields". Below it is a breadcrumb trail: Home / Structure / {Custom Entity Type} Settings. A "Create New" button labeled "+ Add field" is located here.

The central part of the interface is a table with the following columns:

LABEL	MACHINE NAME	FIELD TYPE	OPERATIONS
	Value	Field type	Edit ▾
	Value	Field type	Edit ▾
	Value	Field type	Edit ▾
	Value	Field type	Edit ▾
	Value	Field type	Edit ▾
	Value	Field type	Edit ▾
	Value	Field type	Edit ▾
	Value	Field type	Edit ▾
	Value	Field type	Edit ▾

The wireframe illustrates the Grent application's interface, specifically the 'Manage fields' screen. The top navigation bar includes 'Grent' (with a logo), 'Manage' (with a star icon), 'Shortcuts' (with a person icon), and a user profile for 'John Doe'. Below the navigation is a horizontal menu with icons for 'CONTENT', 'STRUCTURE', 'APPEARANCE', 'EXTEND', 'CONFIGURATION', 'PEOPLE', 'REPORTS', and 'HELP'. The main content area is titled 'Manage fields' and contains two tabs: 'Settings' and 'Manage fields'. The 'Manage fields' tab is selected, showing a table with columns 'FIELD' and 'WIDGET'. The table lists eight field entries, each with a gear icon for settings, a dropdown menu labeled '- Select a value -', and a 'Details' button. The fields are: 1. Lorem ipsum (Text input) 2. Lorem ipsum (Text input) 3. Lorem ipsum (Text input) 4. Lorem ipsum (Text input) 5. Lorem ipsum (Text input) 6. Lorem ipsum (Text input) 7. Lorem ipsum (Text input) 8. Lorem ipsum (Text input). The bottom navigation bar includes 'Home / Structure / {Custom Entity Type} Settings'.

FIELD	WIDGET
>Lorem ipsum	- Select a value -
>Lorem ipsum	- Select a value -
>Lorem ipsum	- Select a value -
>Lorem ipsum	- Select a value -
>Lorem ipsum	- Select a value -
>Lorem ipsum	- Select a value -
>Lorem ipsum	- Select a value -
>Lorem ipsum	- Select a value -

# VISUAL DESIGNS

# FRONT OFFICE



## Jouw keuze, jouw vrijheid

1

Lorem ipsum dolor sit amet,  
ectetur

Lorem ipsum dolor sit amet, ectetur ipiscing elit.  
Morbi leo enim, congue sed ullamcorper at,  
interdum sit met lectus.

2

Lorem ipsum dolor sit amet,  
ectetur

Lorem ipsum dolor sit amet, ectetur ipiscing elit.  
Morbi leo enim, congue sed ullamcorper at,  
interdum sit met lectus.

3

Lorem ipsum dolor sit amet,  
ectetur

Lorem ipsum dolor sit amet, ectetur ipiscing elit.  
Morbi leo enim, congue sed ullamcorper at,  
interdum sit met lectus.

4

Lorem ipsum dolor sit amet,  
ectetur

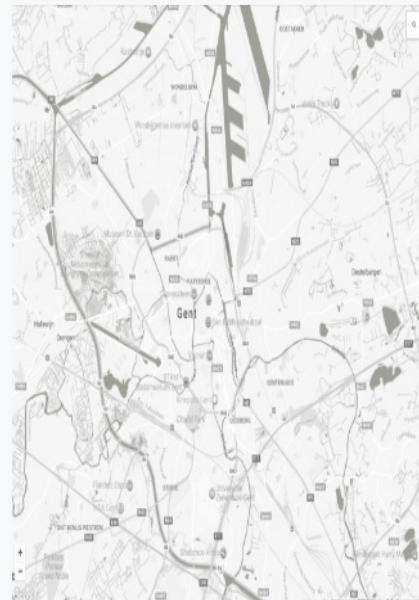
Lorem ipsum dolor sit amet, ectetur ipiscing elit.  
Morbi leo enim, congue sed ullamcorper at,  
interdum sit met lectus.

5

Lorem ipsum dolor sit amet,  
ectetur

Lorem ipsum dolor sit amet, ectetur ipiscing elit.  
Morbi leo enim, congue sed ullamcorper at,  
interdum sit met lectus.

## X Stations verspreid over Gent



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## Locaties

Locatie	500 m

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## Wagens

	Wagen 1-ABC-123 1500 cc	€ 50 / uur
	Wagen 1-ABC-123 1500 cc	€ 50 / uur
	Wagen 1-ABC-123 1500 cc	€ 50 / uur
	Wagen 1-ABC-123 1500 cc	€ 50 / uur
	Wagen 1-ABC-123 1500 cc	€ 50 / uur

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**1-ABC-123**

Locatie ✓ Beschikbaar

### Kenmerken

**Motor:** 1500 cc

**Type:** Sedan

**Kilometerstand:** 99 999 km

**Bouwjaar :** 2000

**€ 50.00 / dag**

**HUUR**

**1-ABC-123**Locatie ✓ Beschikbaar

Auto ontgrendelen



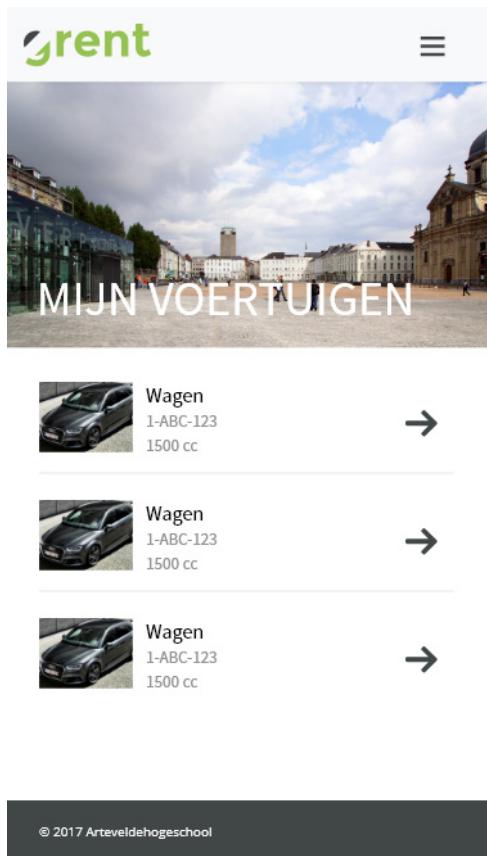
Door de wagen te ontgrendelen accepteert u de  
Algemene voorwaarden en zal u het bedrag van  
€50.00 / 24 uur van uw saldo gehaald worden.

**1-ABC-123**Locatie ✓ Beschikbaar

Auto ontgrendeld



Door de wagen te ontgrendelen accepteert u de  
Algemene voorwaarden en zal u het bedrag van  
€50.00 / 24 uur van uw saldo gehaald worden.



The image shows a mobile application interface for 'Greent' car rental. At the top left is the 'Greent' logo in green. At the top right are three horizontal menu lines. Below the header is a large photograph of a city square with a church and a modern glass building. Overlaid on the bottom left of the photo is the text 'MIJN VOERTUIGEN'. The main content area displays three identical car listing cards, each featuring a small image of a dark-colored hatchback on the left. To the right of the image, the word 'Wagen' is centered, followed by the license plate '1-ABC-123' and the engine size '1500 cc'. A thin horizontal line separates this from the next card. Each card ends with a grey arrow pointing to the right on its right side. At the very bottom of the screen is a dark grey footer bar containing the copyright text '© 2017 Arteveldehogeschool'.



**1-ABC-123**

Auto inleveren



Gelieve te controleren dat u geen persoonlijke bezittingen heeft achtergelaten in de wagen.



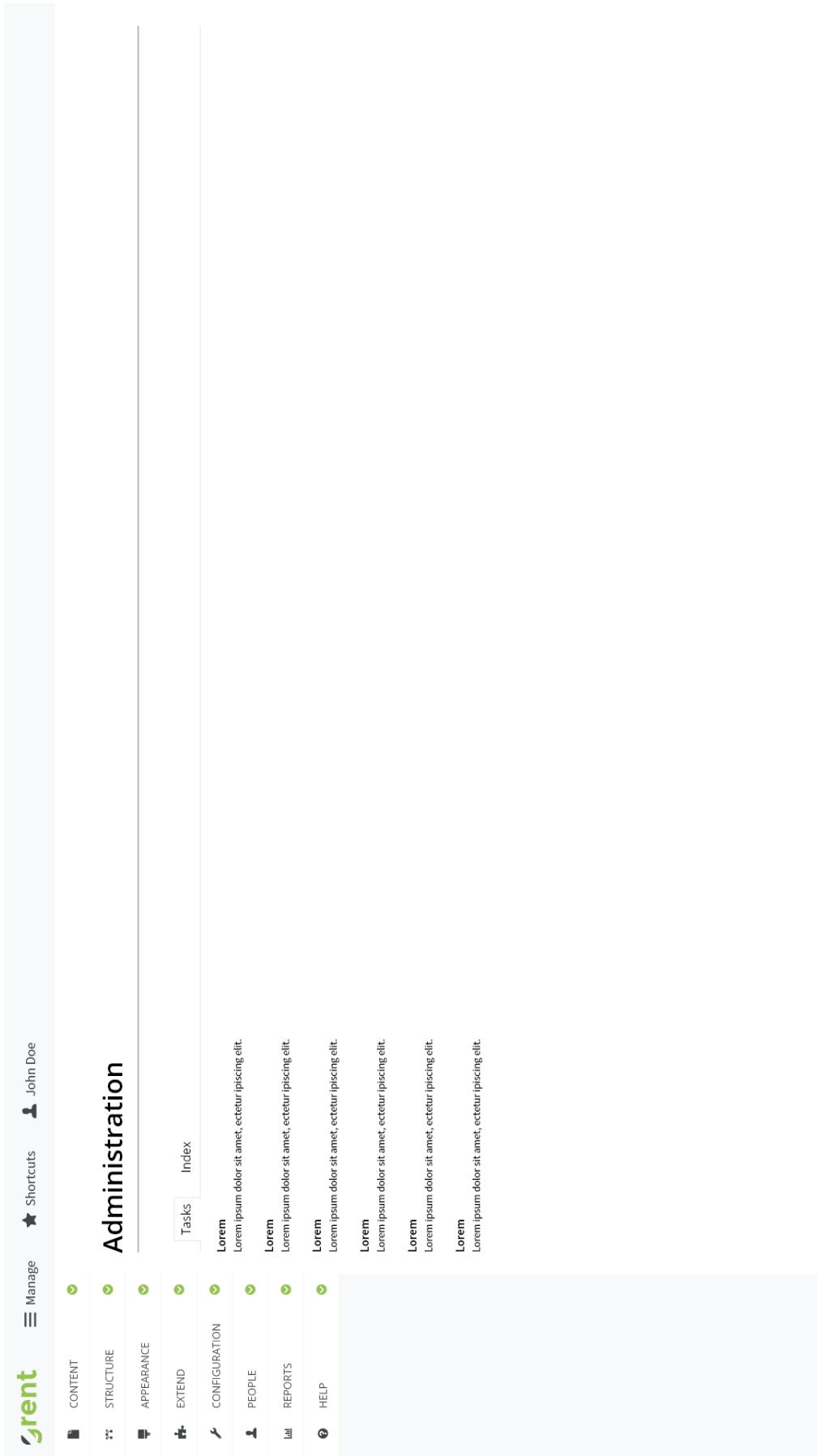
**1-ABC-123**

Auto ingeleverd



Gelieve te controleren dat u geen persoonlijke bezittingen heeft achtergelaten in de wagen.

# BACK OFFICE



The wireframe illustrates a user interface for a 'Grent' application. The top navigation bar includes links for 'CONTENT', 'STRUCTURE', 'APPEARANCE', 'EXTEND', 'CONFIGURATION', 'PEOPLE', 'REPORTS', and 'HELP'. The top right corner shows 'Shortcuts' and a user profile for 'John Doe'. The sidebar on the left contains sections for 'Manage' (with a star icon), 'Shortcuts', and 'John Doe'. The main content area features a header 'Custom Entity Type } entities' and a sub-header '+ Add entity'. Below this, there is a table with columns for 'Field' and 'Value'. Each row in the table has an 'Edit' button with a green arrow icon.

Field	Value
ID	1
REPORTS	1
HELP	1
PEOPLE	1
CONFIGURATION	1
CONTENT	1
STRUCTURE	1
APPEARANCE	1
EXTEND	1
Custom Entity Type	1

The wireframe shows a navigation bar at the top with the 'rent' logo, 'Manage', 'Shortcuts', and a user icon 'John Doe'. Below the navigation is a sidebar with links: CONTENT, STRUCTURE, APPEARANCE, EXTEND, CONFIGURATION, PEOPLE, REPORTS, and HELP. The main content area has a title 'Edit { Custom Entity Type }'. It includes a breadcrumb 'Home / { Custom Entity Type } entities / { label }'. There are two 'Text Field' input fields. Below them is a 'Select' field with the value 'Option' and a dropdown menu showing 'Option', 'Option', 'Option', and 'Option'. A second 'Select' field is labeled 'Select 2' with a dropdown menu showing '- Select a value -'. To the right of these fields are 'Checkbox' and 'Radio button' components. At the bottom right are 'Save' and 'Delete' buttons.

rent

☰ Manage

★ Shortcuts

👤 John Doe

CONTENT

STRUCTURE

APPEARANCE

EXTEND

CONFIGURATION

PEOPLE

REPORTS

HELP

Edit

View

Edit

Delete

Edit { Custom Entity Type }

Home / { Custom Entity Type } entities / { label }

Text Field

Text Field 2

Select

Option

Option

Option

Option

Select 2

- Select a value -

Checkbox

✓ Label

Radio button

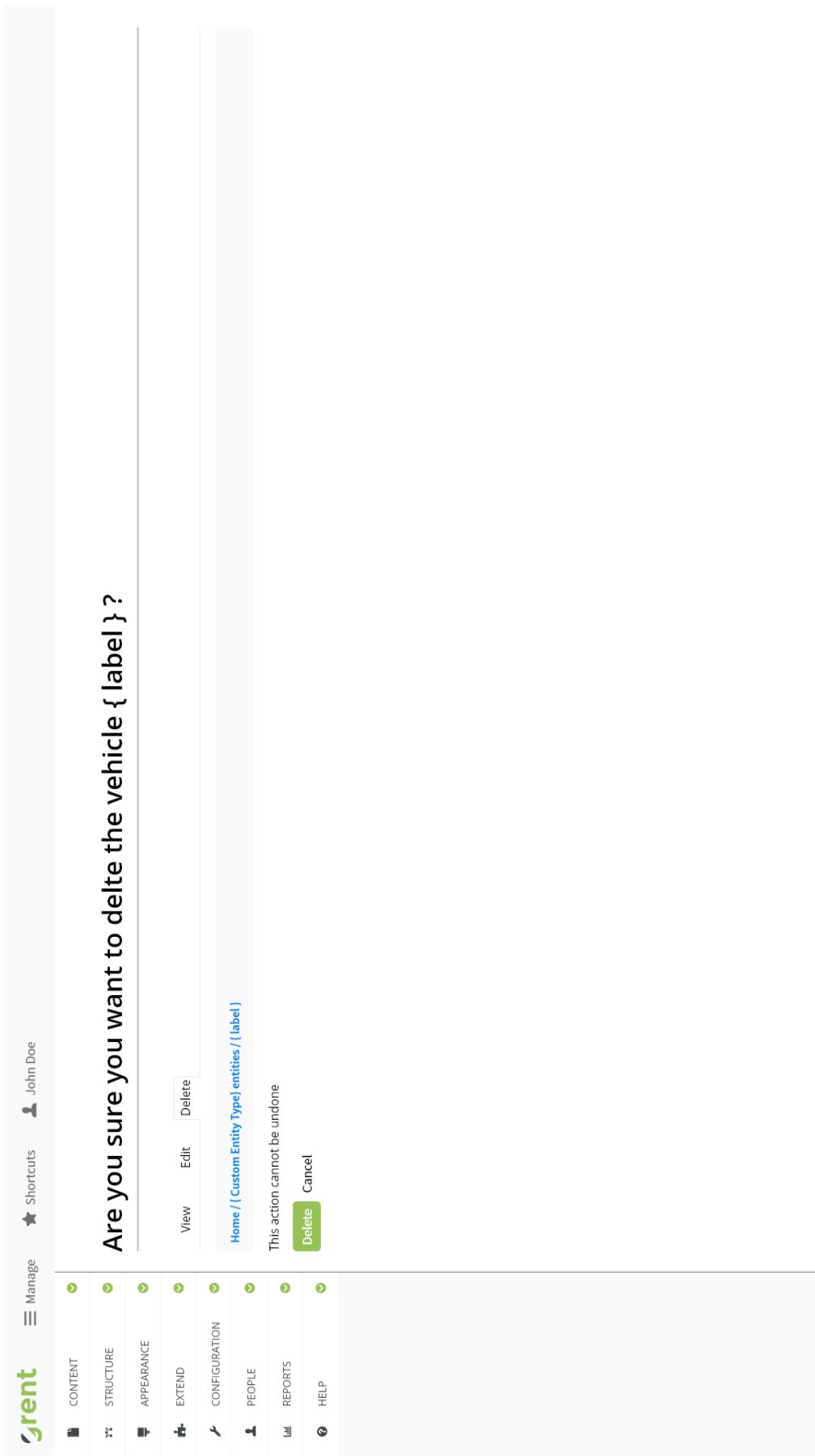
Label

Label

Label

Save

Delete



The wireframe illustrates a user interface for a service named "Grent".

**Header:** The header features the "Grent" logo on the left and a top navigation bar with links for "Manage", "Shortcuts", and a user profile icon "John Doe".

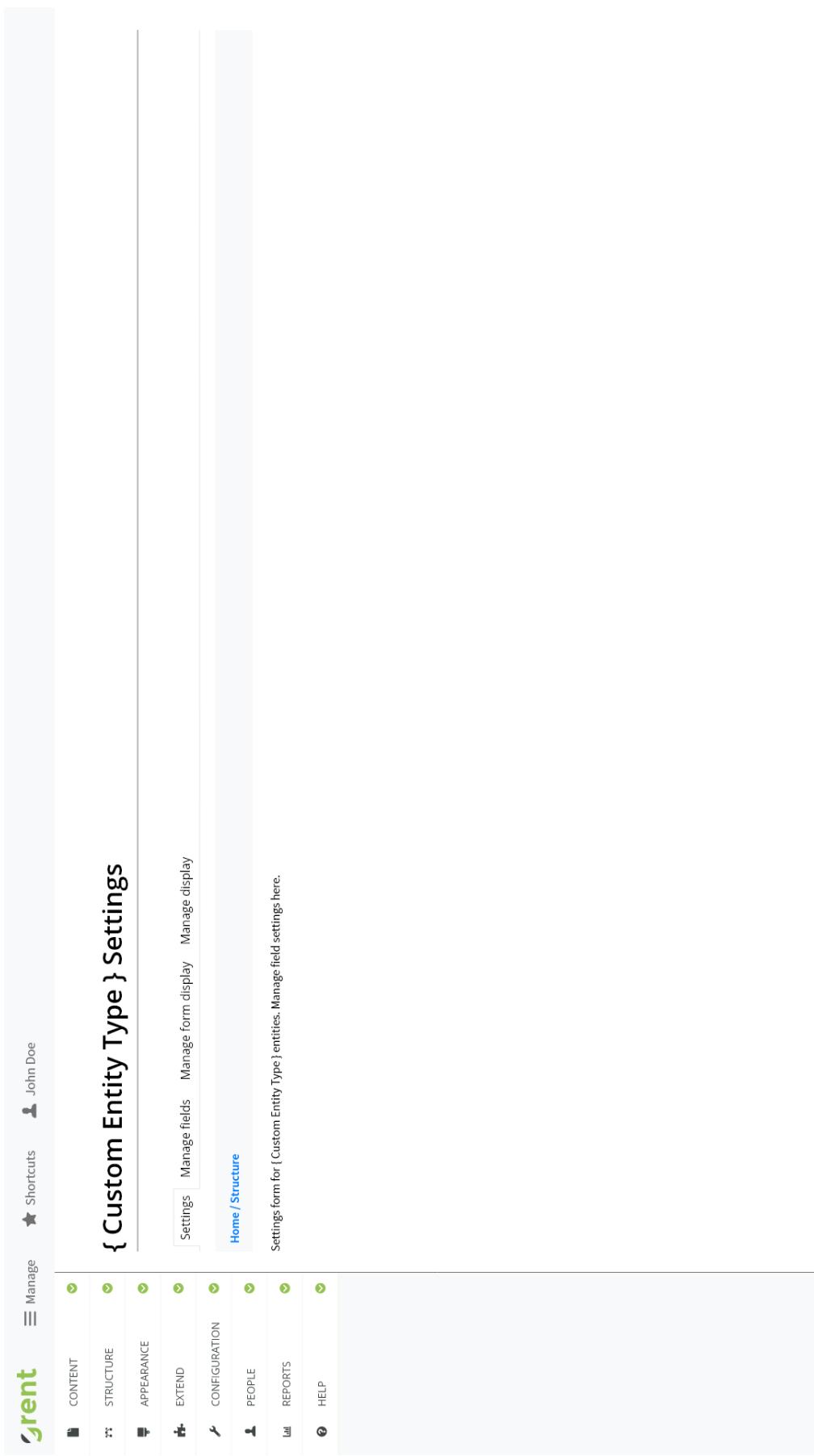
**Left Sidebar:** A vertical sidebar contains several menu items with icons and arrows:

- CONTENT
- STRUCTURE
- APPEARANCE
- EXTEND
- CONFIGURATION
- PEOPLE
- REPORTS
- HELP

**Main Content Area:** The main content area displays a large image of a dark-colored Volkswagen Passat sedan parked on a cobblestone street.

**Bottom Navigation Bar:** A horizontal bar at the bottom of the page includes the "Grent" logo, a search bar placeholder "Search", and several navigation links:

- Home / {Custom Entity Type} entities / {label}
- Label Value



The wireframe illustrates the 'Manage fields' screen within the Grent application. The interface includes a top navigation bar with the Grent logo, user profile, and navigation links for Content, Structure, Appearance, Extend, Configuration, People, Reports, and Help. Below the navigation is a secondary header titled 'Manage fields' with sub-links for Settings, Manage fields, Manage form display, and Manage display.

The main content area features a table with three columns: 'LABEL', 'MACHINE NAME', and 'FIELD TYPE'. The 'FIELD TYPE' column contains several 'Field type' entries with 'Edit' buttons. A green button labeled '+ Add field' is positioned at the bottom left of the table.

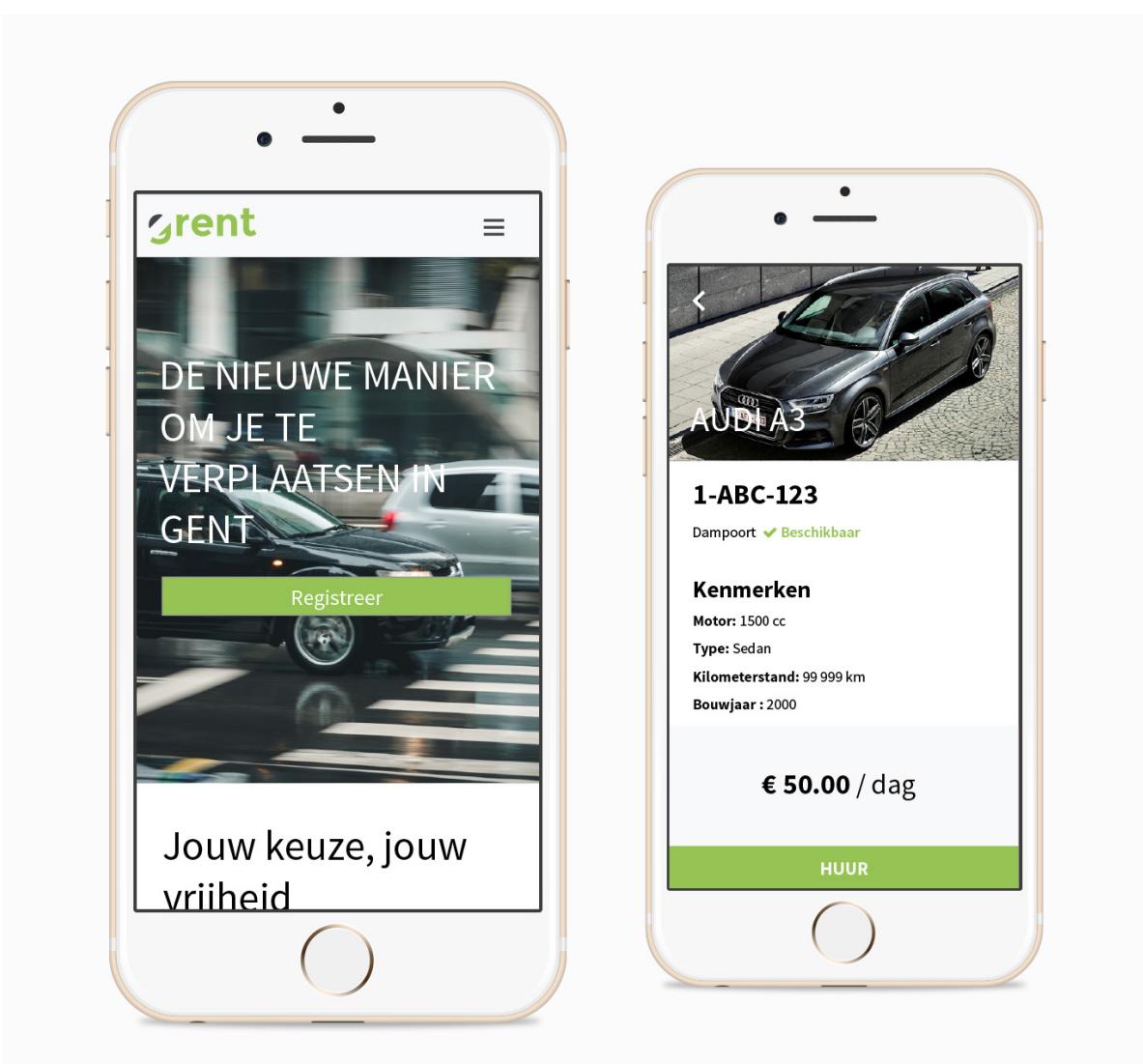
LABEL	MACHINE NAME	FIELD TYPE
>Lorem ipsum	Value	Field type
>Lorem ipsum	Value	Field type
>Lorem ipsum	Value	Field type
>Lorem ipsum	Value	Field type
>Lorem ipsum	Value	Field type
>Lorem ipsum	Value	Field type
>Lorem ipsum	Value	Field type
>Lorem ipsum	Value	Field type

The wireframe illustrates the Grent application's interface for managing fields. At the top, there is a navigation bar with the Grent logo, a 'Manage' button, a 'Shortcuts' button, and a user profile for 'John Doe'. Below the navigation bar, a sidebar contains links for Content, Structure, Appearance, Extend, Configuration, People, Reports, Help, and a general Settings section.

The main content area is titled 'Manage fields'. It includes a 'FIELD' tab and a 'WIDGET' tab. Under the FIELD tab, there are 12 items, each consisting of a small icon, the text 'Lorem ipsum', and a dropdown menu labeled '- Select a value -'. Each item also has a 'Details' link and a gear icon. Under the WIDGET tab, there are 12 similar items, each with a dropdown menu labeled '- Select a value -', a 'Details' link, and a gear icon.

Below the main content area, there is a breadcrumb navigation path: Home / Structure / [Custom Entity Type] Settings.

# MOCKUP



# **4. DEVELOPMENT**

# CODE SNIPPETS

# FRONT OFFICE

~\src\App.vue

```

<template>
  <div id="app">
    <nav class="navbar navbar-light navbar-expand-md bg-light fixed-top">
      <div class="container">
        <router-link to="/">
          
        </router-link>
        <button class="navbar-toggler" type="button" data-toggle="collapse" data-target="#navbarsExampleDefault" aria-controls="navbarsExampleDefault" aria-expanded="false" aria-label="Toggle navigation">
          <span class="navbar-toggler-icon"></span>
        </button>
        <div class="collapse navbar-collapse" id="navbarsExampleDefault">
          <ul class="navbar-nav ml-auto">
            <router-link v-if="isAuthorized" class="nav-item" tag="li" to="{ name: 'Locations' }>
              <a class="nav-link" Wagen huren/>
            </router-link>
            <router-link v-if="isAuthorized" class="nav-item" tag="li" to="user/vehicles">
              <a class="nav-link" Wagen inleveren/>
            </router-link>
            <li v-if="!isAuthorized" class="nav-item dropdown">
              <a class="nav-link dropdown-toggle" id="authDropdown" data-toggle="dropdown" aria-haspopup="true" aria-expanded="false">{{ auth.name }}</a>
              <div class="dropdown-menu" aria-labelledby="authDropdown">
                <router-link class="nav-item" tag="li" to="logout">
                  <a class="nav-link" Afmelden/>
                </router-link>
              </div>
            </li>
            <router-link v-if="!isAuthorized" class="nav-item" tag="li" to="Login">
              <a class="nav-link" Aanmelden/>
            </router-link>
            <router-link v-if="!isAuthorized" class="nav-item" tag="li" to="Register">
              <a class="nav-link" Register/>
            </router-link>
          </ul>
        </div>
      </div>
    <main>
      <router-view></router-view>
    </main>
    <!-- Footer -->
    <div class="container-fluid text-center text-md-left">
      <!-- Grid row -->
      <div class="row">
        <!-- Grid column -->
        <div class="col-12" style="background-color: #f2f2f2; padding: 10px; margin-bottom: 10px;">
          ...
        </div>
      </div>
    </div>
  </div>
</template>
<script>
  ...
</script>
<style>
  ...
</style>

```

In 124, Col 1 (01 selected) Spaces:2 UTF-8 LF Vue Prettier

~\src\components\Home.vue

```

<template>
  <div class="home h-100">
    <div class="header">
      <div class="overlay">
        </div>
    </div>
    <div class="container">
      <div class="row">
        <div class="col-1-8 text-left text-light">
          <h1 class="mb-5 text-uppercase">Dé nieuwe manier om je te verplaatsen in Gent</h1>
        </div>
        <div class="col-md-10 col-lg-8 col-xl-7 mx-auto">
          <button type="submit" class="btn btn-block btn-lg btn-success rounded-0">Registreer nu!</button>
        </div>
      </div>
    </div>
    <div class="mt-3">
      <section class="pl-2 pr-2" id="info">
        <div class="container">
          <div class="row text-left">
            <div class="col-12">
              <h4>Ga naar het dichtbijzijnde station:</h4>
              <p class="text-secondary text-left">Selecteer uit 6 verschillende stations verdeeld over Gent.</p>
            </div>
          </div>
          <div class="row text-left">
            <div class="col-12">
              <h4>Kies je wagen:</h4>
              <p class="text-secondary text-left">Kies uit meer dan 30 milieuvriendelijke wagens</p>
            </div>
          </div>
          <div class="row text-left">
            <div class="col-12">
              ...
            </div>
          </div>
        </div>
      </section>
    </div>
  </div>
</template>
<script>
  ...
</script>
<style>
  ...
</style>

```

In 99, Col 5 Spaces:2 UTF-8 LF Vue Prettier

~\src\router\index.js

```

index.js - grent - Visual Studio Code
File Edit Selection View Go Debug Tasks Help
OPEN EDITORS index.js
EXPLORER
ReturnCarVue src\com...
JS index.js src\router
GRENT
build
config
node_modules
src
assets
components
Home.vue
LeafletMap.vue
Location.vue
Locations.vue
Login.vue
Logout.vue
MyVehicles.vue
Register.vue
RentCar.vue
ReturnCar.vue
Vehicle.vue
router
JS index.js
styles
# app.css
App.vue
JS main.js
static
.babelrc
.editorconfig
.eslintrcignore
.eslintrcjs
.gitignore
.postcssrcjs
index.html
package.json
README.md
yarn.lock
In 22, Col 20  Spaces: 2  UTF-8  LF  JavaScript  Prettier

```

```

import Vue from 'vue'
import Router from 'vue-router'
import Home from '@/components/Home'
import Register from '@/components/Register'
import Login from '@/components/Login'
import Logout from '@/components/Logout'
import Location from '@/components/location'
import Locations from '@/components/locations'
import Vehicle from '@/components/Vehicle'
import RentCar from '@/components/RentCar'
import ReturnCar from '@/components/ReturnCar'
import MyVehicles from '@/components/MyVehicles'
import { middleware } from 'vue-router-middleware'

Vue.use(Router)

export default new Router({
  mode: 'history',
  routes: [
    {
      path: '/',
      name: 'Home',
      component: Home
    },
    {
      path: '/register',
      name: 'Register',
      component: Register
    },
    {
      path: '/login',
      name: 'Login',
      component: Login
    },
    ...middleware('require-auth', [
      {
        path: '/logout',
        name: 'Logout',
        component: Logout
      },
      {
        path: '/locations',
        name: 'Locations',
        component: Locations
      },
      {
        path: '/locations/:id',
        name: 'Location',
        component: Location
      }
    ])
  ]
})

```

~\src\main.js

```

main.js - grent - Visual Studio Code
File Edit Selection View Go Debug Tasks Help
OPEN EDITORS main.js
EXPLORER
ReturnCarVue src\com...
JS main.js src\router
GRENT
build
config
node_modules
src
assets
components
Home.vue
LeafletMap.vue
Location.vue
Locations.vue
Login.vue
Logout.vue
MyVehicles.vue
Register.vue
RentCar.vue
ReturnCar.vue
Vehicle.vue
router
JS index.js
styles
# app.css
App.vue
JS main.js
static
.babelrc
.editorconfig
.eslintrcignore
.eslintrcjs
.gitignore
.postcssrcjs
index.html
package.json
README.md
yarn.lock
In 7, Col 1  Spaces: 2  UTF-8  LF  JavaScript  Prettier

```

```

// The Vue build version to load with the 'import' command
// (runtime-only or standalone) has been set in webpack.base.conf with an alias.
import Vue from 'vue'
import App from './App'
import router from './router'
import RouterMiddleware, {createMiddleware} from 'vue-router-middleware'

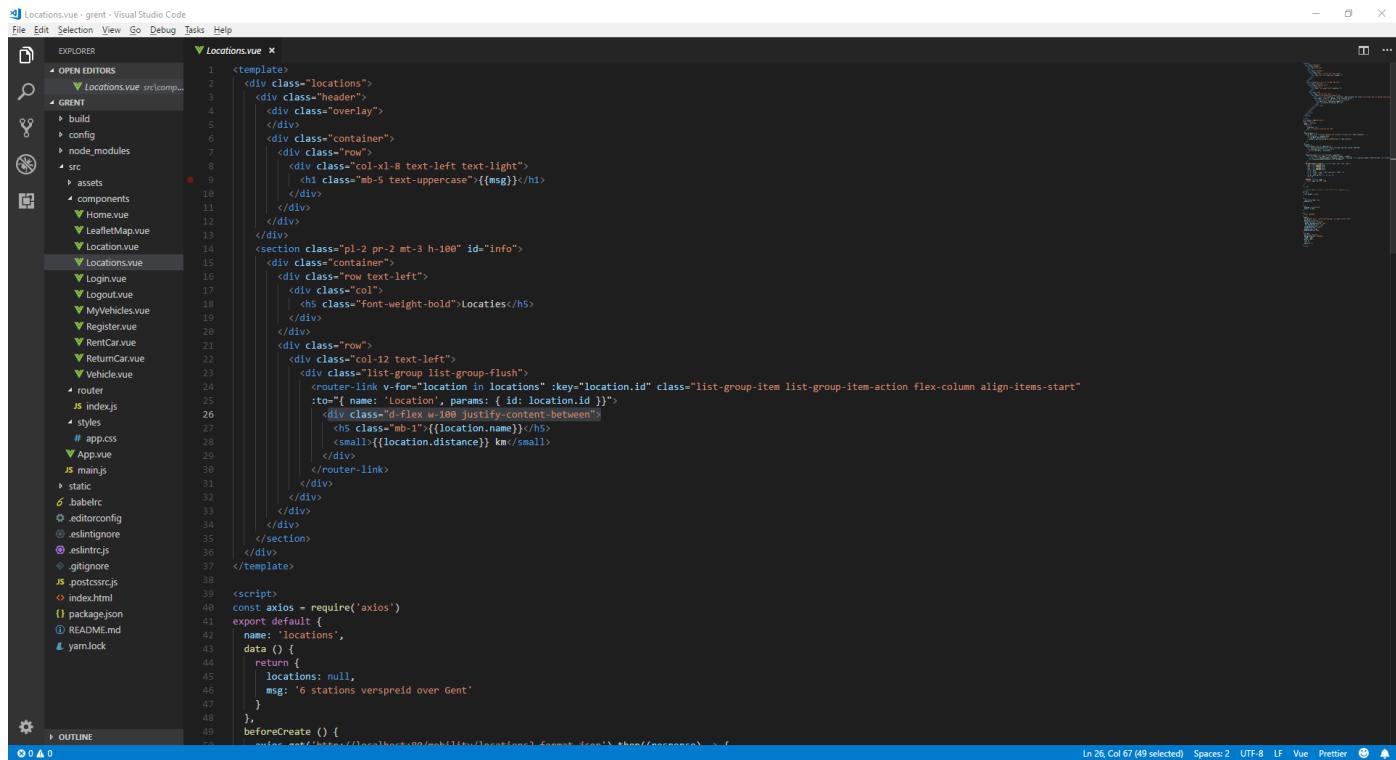
Vue.config.productionTip = false

createMiddleware('require-auth', (args, to, from, next) => {
  if (localStorage.getItem('auth')) {
    next()
  } else {
    next('/Login')
  }
})

Vue.use(RouterMiddleware, {router})
/* eslint-disable no-new */
new Vue({
  el: '#app',
  router,
  template: '<App/>',
  components: { App }
})

```

## ~\src\components\Locations.vue



```

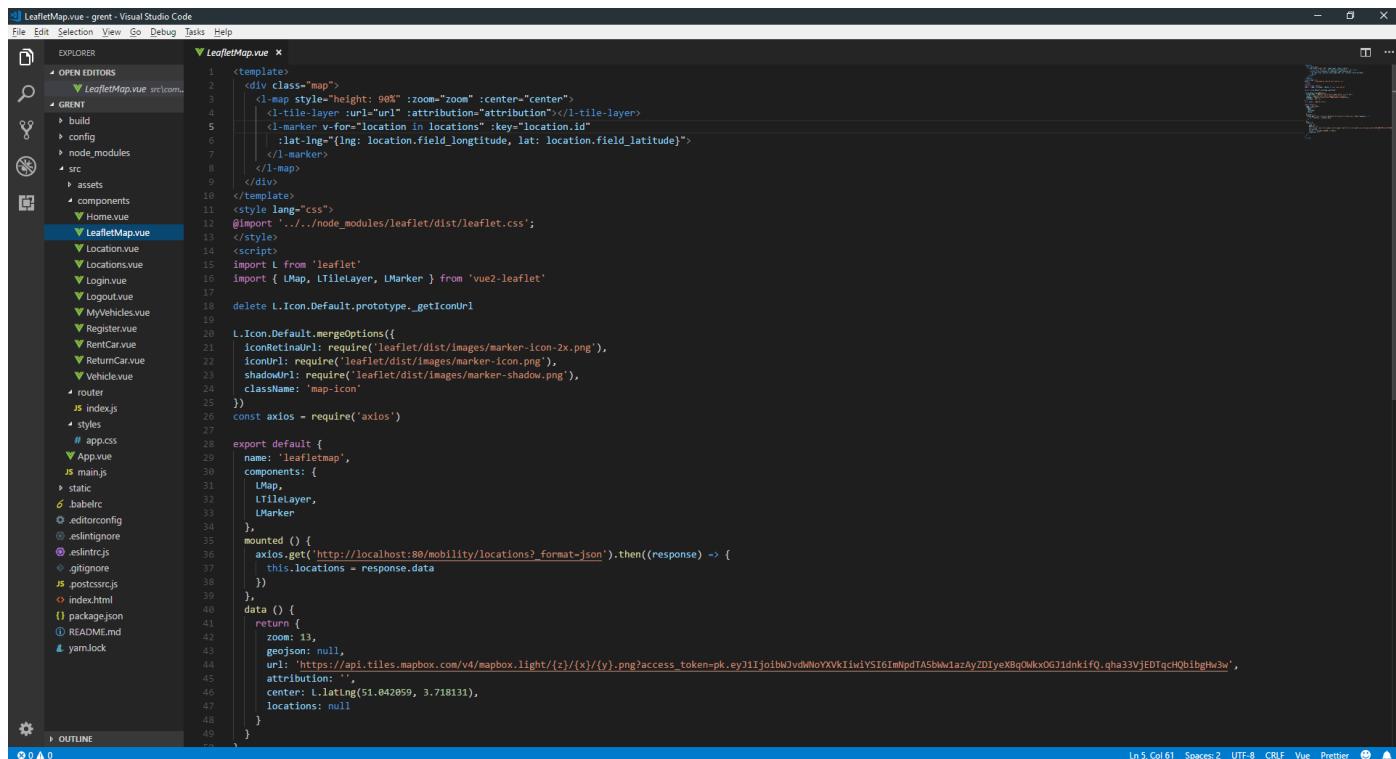
<template>
  <div class="locations">
    <div class="header">
      <div class="overlay"></div>
    </div>
    <div class="container">
      <div class="row">
        <div class="col-8 text-left text-light">
          <h1 class="mb-5 text-uppercase">{msg}</h1>
        </div>
      </div>
    </div>
    <section class="pl-2 pr-2 mt-3 h-100" id="info">
      <div class="container">
        <div class="row text-left">
          <div class="col">
            <h5 class="font-weight-bold">Locaties</h5>
          </div>
        </div>
        <div class="row">
          <div class="col-12 text-left">
            <div class="list-group list-group-flush">
              <router-link v-for="location in locations" :key="location.id" class="list-group-item list-group-item-action flex-column align-items-start" :to="{ name: 'location', params: { id: location.id } }">
                <div class="d-flex w-100 justify-content-between">
                  <h5 class="mb-1">{location.name}</h5>
                  <small>{location.distance} km</small>
                </div>
              </router-link>
            </div>
          </div>
        </div>
      </div>
    </section>
  </div>
</template>

<script>
const axios = require('axios')
export default {
  name: 'locations',
  data () {
    return {
      locations: null,
      msg: '6 stations verspreid over Gent',
    }
  },
  beforeCreate () {
    axios.get('http://localhost:80/mobility/locations?format=json').then((response) => {
      this.locations = response.data
    })
  }
}
</script>

```

Ln 26, Col 67 (49 selected) Spaces:2 UTF-8 LF Vue Prettier

## ~\src\components\LeafletMap.vue



```

<template>
  <div class="map">
    <l-map style="height: 90%" :zoom="zoom" :center="center">
      <l-title-layer url="url" :attribution="attribution"></l-title-layer>
      <l-marker v-for="location in locations" :key="location.id" :lat-lng="[{ing: location.field_longitude, lat: location.field_latitude}]">
        </l-marker>
    </l-map>
  </div>
</template>

<style lang="css">
@import '../../../../../node_modules/leaflet/dist/leaflet.css';
</style>
<script>
import L from 'leaflet'
import { LMap, LTitleLayer, LMarker } from 'vue2-leaflet'

delete L.Icon.Default.prototype._getIconUrl

L.Icon.Default.mergeOptions({
  iconRetinaUrl: require('leaflet/dist/images/icon-2x.png'),
  iconUrl: require('leaflet/dist/images/icon.png'),
  shadowUrl: require('leaflet/dist/images/icon-shadow.png'),
  className: 'map-icon'
})

const axios = require('axios')

export default {
  name: 'leafletmap',
  components: {
    LMap,
    LTitleLayer,
    LMarker
  },
  mounted () {
    axios.get('http://localhost:80/mobility/locations?format=json').then((response) => {
      this.locations = response.data
    })
  },
  data () {
    return {
      zoom: 13,
      geojson: null,
      url: 'https://api.tiles.mapbox.com/v4/mapbox.light/{z}/{x}/{y}.png?access_token=pk.eyJ1joibWJvdWN0YXkIiw1YS16ImNpdTA5bw1azAyZDIyeX8q0WkXOGJ1dnkifQ.qha33VjEDTqchQb1bgHw3w',
      attribution: '',
      center: L.latLng(51.042059, 3.718131),
      locations: null
    }
  }
}
</script>

```

Ln 5, Col 61 Spaces:2 UTF-8 CRLF Vue Prettier

# **BACK OFFICE**

~\modules\custom\mobility\mobility.module

The screenshot shows the Visual Studio Code interface with the file 'mobility.module' open in the editor. The code implements several Drupal hooks:

```

1 <?php
2 /**
3  * @File
4  * Contains mobility.module.
5 */
6
7 use Drupal\Core\Routing\RouteMatchInterface;
8 use Drupal\Field\Entity\FieldStorageConfig;
9 use Drupal\Core\Url;
10
11 /**
12  * Implements hook_help().
13 */
14 function mobility_help($route_name, RouteMatchInterface $route_match) {
15   switch ($route_name) {
16     case 'help.page.mobility':
17       $output = '';
18       $output .= '<h3>' . t('About') . '</h3>';
19       $output .= '<p>' . t('Mobility module') . '</p>';
20       return $output;
21     default:
22   }
23 }
24
25 /**
26  * Implements hook_theme().
27 */
28 function mobility_theme() {
29   return [
30     'mobility' -> [
31       'render element' -> 'children',
32     ],
33   ];
34 }
35
36 /**
37  * Implements hook_menu_local_tasks_alter().
38 */
39 function mobility_menu_local_tasks_alter(&$data, $route_name) {
40   if(isset($data['tabs']) && count($data['tabs']) > 0){
41     foreach ($data['tabs'][0] as $key -> $value){
42       $data['tabs'][0][$key]['#link']['localized_options']['attributes'] = array('class' -> 'nav-link');
43     };
44   }
45 }
46
47 }

```

~\modules\custom\mobility\src\VehicleListBuilder.php

The screenshot shows the Visual Studio Code interface with the file 'VehicleListBuilder.php' open in the editor. This class extends 'EntityListBuilder' and defines methods for building headers and rows for vehicle entities.

```

1 <?php
2
3 namespace Drupal\mobility;
4
5 use Drupal\Core\Entity\EntityInterface;
6 use Drupal\Core\Entity\EntityListBuilder;
7 use Drupal\Core\Link;
8
9 /**
10  * Defines a class to build a listing of Vehicle entities.
11 *
12 * @ingroup mobility
13 */
14 class VehicleListBuilder extends EntityListBuilder {
15
16 /**
17  * {@inheritDoc}
18 */
19 public function buildHeader() {
20   $header['license_plate'] = $this->t('License Plate');
21   $header['field_location'] = $this->t('Location');
22   return $header + parent::buildHeader();
23 }
24
25 /**
26  * {@inheritDoc}
27 */
28 public function buildRow(EntityInterface $entity) {
29   /* @var $entity \Drupal\mobility\Entity\Vehicle */
30   $row['license_plate'] = Link::createFromRoute(
31     $entity->getLicensePlate(),
32     'entity.vehicle.edit_form',
33     ['vehicle' -> $entity->id()]
34   );
35   $row['field_location'] = $entity->getLocation();
36   return $row + parent::buildRow($entity);
37 }
38
39 }
40
41

```

~\themes\custom\grent\templates\layout\page.html.twig

```

page.html.twig - htdocs - Visual Studio Code
File Edit Selection View Go Debug Tasks Help
EXPLORER OPEN EDITORS page.html.twig themes\custom\grent...
HTDOCS
core modules node_modules profiles sites
+ themes
  + custom
    + grent
      + css
      + images
      + js
      + lib
      + sass
    + templates
      + admin
      + block
      + content
      + content-edit
      + dataset
      + field
      + form
      + layout
        book-export.html.twig
        html.html.twig
        maintenance-page.html.twig
        page.html.twig
        region.html.twig
      + misc
      + navigation
      + user
      + views
    ! grentInfo.yml
    ! grentLibraries.yml
    ! grent.theme
 README.txt
vendor .csslintrc .editorconfig .eslintignore
OUTLINE
38 * - page.footer: Items for the footer region.
39 * - page.breadcrumb: Items for the breadcrumb region.
40 *
41 * @see template_preprocess_page()
42 * @see html.html.twig
43 */
44 #
45 <div class="container-fluid">
46   <header role="banner">
47     | {{ page.header }}
48   </header>
49   {{ page.pre_content }}
50   {{ page.breadcrumb }}
51
52   <main role="main">
53     <div class="visually-hidden"><a id="main-content" tabindex="-1"></a></div>
54     | {{ page.highlighted }}
55     | % if page.help %
56       <div class="help">
57         | {{ page.help }}
58       </div>
59     | % endif %
60     | {{ page.content }}
61   </main>
62
63   | % if page.footer %
64     <footer role="contentinfo">
65       | {{ page.footer }}
66     </footer>
67   | % endif %
68
69 </div> (# ./layout-container #)
70
71
72

```

Ln 31, Col 33 Spaces: 2 UTF-8 LF HTML (Twig)

~\themes\custom\grent\templates\navigation\toolbar.html.twig

```

toolbar.html.twig - htdocs - Visual Studio Code
File Edit Selection View Go Debug Tasks Help
EXPLORER OPEN EDITORS toolbar.html.twig themes\custom\grent...
HTDOCS
views-ui-views-listing-table...
block content content-edit dataset field layout misc
navigation
  book-all-books-block.html...
  book-navigation.html.twig
  book-tree.html.twig
  breadcrumb.html.twig
  links.html.twig
  menu-local-action.html.twig
  menu-local-task.html.twig
  menu-local-tasks.html.twig
  menu.html.twig
  page.html.twig
  toolbar.html.twig
  vertical-tabs.html.twig
user views views-exposed-form.html.twig
  views-mini-pager.html.twig
  views-view-grid.html.twig
  views-view-grouping.html.twig
  views-view-list.html.twig
  views-view-mapping-test.html...
  views-view-open.html.twig
  views-view-row-opml.html...
  views-view-row-rss.html.twig
  views-view-rss.html.twig
  views-view-summary-unform...
  views-view-summary.html.twig
  views-view-table.html.twig
  views-view-unformatted.htm...
  views-view.html.twig
toolbar.html.twig
vertical-tabs.html.twig
views-exposed-form.html.twig
views-mini-pager.html.twig
views-view-grid.html.twig
views-view-grouping.html.twig
views-view-list.html.twig
views-view-mapping-test.html...
views-view-open.html.twig
views-view-row-opml.html...
views-view-row-rss.html.twig
views-view-rss.html.twig
views-view-summary-unform...
views-view-summary.html.twig
views-view-table.html.twig
views-view-unformatted.htm...
views-view.html.twig
OUTLINE
4 * Theme override for the administrative toolbar.
5 *
6 * Available variables:
7 * - attributes: HTML attributes for the wrapper.
8 * - toolbar_attributes: HTML attributes to apply to the toolbar.
9 * - toolbar_heading: The heading or label for the toolbar.
10 * - tabs: List of tabs for the toolbar.
11 * - attributes: HTML attributes for the tab container.
12 * - link: Link or button for the menu tab.
13 * - trays: Toolbar tray list, each associated with a tab. Each tray in trays
14 * - contains:
15 * - attributes: HTML attributes to apply to the tray.
16 * - label: The tray's label.
17 * - links: The tray menu links.
18 * - remainder: Any non-tray, non-tab elements left to be rendered.
19 *
20 * @see template_preprocess_toolbar()
21 */
22 #
23
24 <div{{ attributes.addClass('toolbar') }}>
25   <nav{{ toolbar_attributes.addClass('toolbar-bar navbar-light') }}>
26     <h2 class="visually-hidden">{{ toolbar_heading }}</h2>
27     <a class="navbar-brand d-inline float-left pl-2 pr-2" href="#">
28       
29       Admin
30     </a>
31     | % for key, tab in tabs %
32       | % set tray = trays[key] %
33       <div{{ tab.attributes.addClass('toolbar-tab') }}>
34         | { tab.link }
35         | % spaceless %
36         <div{{ tray.attributes }}>
37           | % if tray.label %
38             <nav class="toolbar-lining clearfix" role="navigation" aria-label="{{ tray.label }}">
39               | <h3 class="toolbar-tray-name visually-hidden">{{ tray.label }}</h3>
40             | % else %
41               | <nav class="toolbar-lining clearfix" role="navigation">
42                 | % endif %
43                 | {{ tray.links }}
44               | </nav>
45             | % endfor %
46             | % endspaceless %
47           </div>
48         | % endfor %
49       </div>
50       | {{ remainder }}
51     </div>
52

```

Ln 1, Col 1 Spaces: 2 UTF-8 LF HTML (Twig)

# **SCHERM- AFBEELDINGEN**

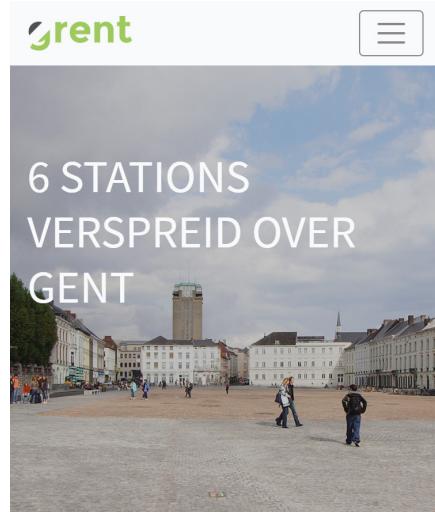
# **FRONT OFFICE**

Home page



Jouw keuze, jouw vrijheid

Locations page



#### Locaties

Dampoort	25.70 km
Ghelamco Arena	25.86 km
Zuid	26.27 km

Location detail page



#### Wagens

Audi A3 1-EHF-434 1.600cc	€85.00 / uur
---------------------------------	--------------

Vehicle page



1-GKG-191

Zuid Beschikbaar

#### Kenmerken

**Motor:** 1.400cc

**Type:** Hatchback

**Kilometerstand:** 56.000km

**Bouwjaar:** 2009

€60.00 / dag

Huur wagen

My Vehicles page



Audi A3  
1-ABC-123



Return Vehicle page



1-ABC-123

Auto inleveren



Gelieve te controleren dat u **geen persoonlijke bezittingen** heeft achtergelaten in de wagen. Na inlevering zal deze vergrendeld worden en heeft u geen toegang meer tot het voertuig.

# **BACK OFFICE**

## Home page

The screenshot shows the Grent Admin interface. The left sidebar has a tree view with 'CONTENT' expanded, showing 'STRUCTURE' (selected), 'APPEARANCE', 'EXTEND', 'CONFIGURATION', 'PEOPLE', 'REPORTS', and 'HELP'. The main content area is titled 'Administration' and contains a 'Content' section with a link to 'Index'.

## Vehicle List

The screenshot shows the 'Vehicle entities' list page. The left sidebar under 'STRUCTURE' includes 'BLOCK LAYOUT', 'COMMENT TYPES', 'CONTACT FORMS', 'CONTENT TYPES', 'DISPLAY MODES', 'LOCATION SETTINGS', 'MANUFACTURER SETTINGS', 'MENUS', 'MODEL SETTINGS', 'TAXONOMY', 'VEHICLE RENTAL SETTINGS', 'VEHICLE SETTINGS', 'VIEWS', 'LOCATION LIST', 'MANUFACTURER LIST', and 'MODEL LIST'. The main content area shows a table of vehicle entities:

LICENSE PLATE	LOCATION	OPERATIONS
1-GKG-191	Zuid	<button>Edit</button>
1-ABC-123	Dok Noord	<button>Edit</button>
1-RSV-042	Sint-Pietersplein	<button>Edit</button>
1-EHF-434	Dok Noord	<button>Edit</button>
1-DGP-425	Vrijdagmarkt	<button>Edit</button>
1-ORP-945	Kouter	<button>Edit</button>
1-PRD-948	Zuid	<button>Edit</button>
1-IRW-121	Sint-Pietersstation	<button>Edit</button>

## Add Vehicle

The screenshot shows the 'Add vehicle' form page. The left sidebar under 'STRUCTURE' includes 'BLOCK LAYOUT', 'COMMENT TYPES', 'CONTACT FORMS', 'CONTENT TYPES', 'DISPLAY MODES', 'LOCATION SETTINGS', 'MANUFACTURER SETTINGS', 'MENUS', 'MODEL SETTINGS', 'TAXONOMY', 'VEHICLE RENTAL SETTINGS', 'VEHICLE SETTINGS', and 'VIEWS'. The main content area shows the following form fields:

- License Plate**: A text input field.
- Publishing status**: A checkbox labeled 'A boolean indicating whether the Vehicle is published.'
- Authored by**: A dropdown menu showing 'cmsdev-user (1)'.
- Engine size**: A text input field with 'cc' below it, described as 'Size of the car engine. In cc.'
- Mileage**: A text input field with '0 km' below it.
- Model**: A dropdown menu.

## Edit Vehicle

**Edit 1-GKG-191**

**License Plate**  
1-GKG-191  
The registered license plate of the vehicle.

**Publishing status**  
A boolean indicating whether the Vehicle is published.

**Authored by**  
cmsdev-user (1)

**Engine size**  
1400  
cc  
Size of the car engine. In cc.

**Mileage**  
56000

## Manage Vehicle fields

**Manage fields**

LABEL	MACHINE NAME	FIELD TYPE	OPERATIONS
Engine size	field_engine_size	Number (integer)	Edit
Is Available	field_is_available	Boolean	Edit
Location	field_location	Entity reference	Edit
Mileage	field_mileage	Number (float)	Edit
Model	field_model	Entity reference	Edit
Type	field_vehicle_type	Entity reference	Edit

## Manage Vehicle form display

**Manage form display**

FIELD	WIDGET	
License Plate	Textfield	Texfield size: 60
Authored by	Autocomplete	Autocomplete matching: Contains Texfield size: 60 No placeholder
Engine size	Number field	No placeholder
Mileage	Number field	No placeholder
Model	Autocomplete	Autocomplete matching: Contains Texfield size: 60 No placeholder
Type	Select list	
Location	Select list	
Is Available	Single on/off checkbox	Use field label: Yes

# **5. REFERENTIELIJST**

# REFERENTIES

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# **6. BIJLAGES**

# **UUR- BESTEDING**

**DELIVERABLE**

**TITEL** GREN  
OMSCHRIJVING Opdracht voor CMS Development

203

Deadline: 16-8-2017

VERLOOP	Datum	Teamlid	Aantal uur	TEAM andmeye		AANTAL UUR	PRINT 203 A4	DIGITAAL <ontwikkelen>
				TEAM andmeye	AANTAL UUR			
1	20-6-2018	andmeye	2	Inspiratie	2			
2	21-6-2018	andmeye	4	Inspiratie	4			
3	21-6-2018	andmeye	3	Ideaboard	3			
4	23-6-2018	andmeye	4	Moodboard	4			
5	24-6-2018	andmeye	2	Personas	2			
6	24-6-2018	andmeye	2	Design	2			
7	24-6-2018	andmeye	2	Sitemap	2			
8	25-6-2018	andmeye	6	Style Tiles	6			
9	25-6-2018	andmeye	8	Wireframes	8			
10	26-6-2018	andmeye	10	Wireframes	10			
11	27-6-2018	andmeye	6	Wireframes	6			
12	28-6-2018	andmeye	4	Wireframes	4			
13	28-6-2018	andmeye	8	Visual Designs	8			
14	2-7-2018	andmeye	6	Visual Designs	6			
15	3-7-2018	andmeye	4	Visual Designs	4			
16	4-7-2018	andmeye	4	Databasediagram opstellen	4			
17	4-7-2018	andmeye	6	Modellen aanmaken	6			
18	5-7-2018	andmeye	2	Models aanmaken	2			
19	10-7-2018	andmeye	6	Vuels	6			
20	11-7-2018	andmeye	2	Front-Office	2			
21	12-7-2018	andmeye	4	Front-Office	4			
22	12-7-2018	andmeye	2	Front-Office	2			
23	12-7-2018	andmeye	2	Front-Office	2			
24	12-7-2018	andmeye	2	Front-Office	2			
25	13-7-2018	andmeye	4	Front-Office	4			
26	14-7-2018	andmeye	2	Front-Office	2			
27	15-7-2018	andmeye	6	Front-Office	6			
28	16-7-2018	andmeye	1	Front-Office	1			
29	17-7-2018	andmeye	6	Front-Office	6			
30	18-7-2018	andmeye	6	Front-Office	6			
31	19-7-2018	andmeye	1	Front-Office	1			
32	22-7-2018	andmeye	3	Front-Office	3			
33	23-7-2018	andmeye	10	Front-Office	10			
34	23-7-2018	andmeye	4	Front-Office	4			
35	24-7-2018	andmeye	7	Front-Office	7			
36	25-7-2018	andmeye	1	Drupal Theming	1			

DELIVERABLE		TITEL GRENt OMSCHRIJVING Opdracht voor CMS Development		TEAM andmeye	AANTAL UUR 203	PRINT A4	DIGITAAL <ontwikkelflur>
VERLOOP	Datum	Teamlid	Aantal uur	Actie			
38	24-7-2018	andmeye	7	Front-Office			
39	25-7-2018	andmeye	1	Drupal Theming			
41	27-5-2018	andmeye	2	Drupal Theming			
43	28-7-2018	andmeye	2	Drupal Theming			
44	29-7-2018	andmeye	2	Drupal Theming			
45	30-7-2018	andmeye	6	Drupal Theming			
46	31-7-2018	andmeye	2	Drupal Theming			
47	1-8-2018	andmeye	7	Drupal Theming			
48	2-8-2018	andmeye	2	Drupal Theming			
59	3-8-2018	andmeye	8	Dossier opmaken, teksten schrijven, pdf's maken, verdere aanpassingen doen			
60	4-8-2018	andmeye	6	Dossier aanpassen			
61	5-8-2018	andmeye	2	Dossier aanpassen			
62	6-8-2018	andmeye	2	Dossier vervolledigen			
63	7-8-2018	andmeye	12	Dossier vervolledigen			