

Univerza v Ljubljani
Fakulteta *za računalništvo*
in informatiko



WEB INFORMATION EXTRACTION AND RETRIEVAL

Project 2

Structured data extraction

Author:

Erik Kristian JANEŽIČ

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1 Introduction

Goal of this project was to get familiar with principles for structured data extraction pairs of websites with similar content. We tested three different approaches for data extraction on each pair of sites, them being regular expressions, xpath and custom automated approach based on Webstemmer algorithm.

2 Description of custom pages

For our own web site example we chose a German site mobile.de which specializes in used car resale. Our data extraction approaches were tested on two pages with search results for two different car brands. Data fields of interest are shown on figure 1 and 2 below.

Location
Any [change](#)

Fuel Type
Any [change](#)

Power
Any [change](#)

Vehicle type
Any [change](#)

Transmission
Any [change](#)

Exterior Colour

☐ Metallic (1,968)

Approved Used Programme

☐ Ads with Approved Used Programme

Air conditioning

☒ Any

☐ No climatisation (55)

☐ Manual or automatic climatisation (3,164)

☐ Automatic air conditioning (2,550)

☐ Automatic climatisation, 2 zones (1,488)

☐ Automatic climatisation, 3 zones (183)

☐ Automatic climatisation, 4 zones (29)

Features

☐ Auxiliary heating (17,016)

☐ Bluetooth (115,981)


☐ CD player (90,073)

☐ Central locking (149,145)

☐ Electric heated seats (132,711)

☐ Electric seat adjustment (80,927)

☐ Electric side mirror (139,635)



Dodge RAM 1500 LARAMIE
3.6V6*4x4*LPG*Vollausstattung*

FR 01/2015, 88.691 km, 227 kW (309 Hp)
SUV / Off-road Vehicle / Pickup Truck, Petrol, Automatic transmission, HU 11/2021, 4/5 Doors

US-Cars Aschaffenburg GmbH ★★★★★ (69)
DE-63741 Aschaffenburg, Dealer


[Insurance](#), [Leasing](#)

[Contact](#) [Park](#)

€28,990

[Calculate financing](#)

Very good price



Dodge Charger SRT 8 Charger

FR 11/2009, 83.724 km, 318 kW (432 Hp)
Saloon, Accident-free, Petrol, Manual gearbox, HU 02/2021

✓ Glasschiebedach ✓ Rückfahrkamera ✓ Sitzheizung

[Online consulting](#) [Online contract](#) [Delivery possible](#) [Accessible online](#)
[Garage open](#)

Auto Becker, Inh. André Jongeling e.K. ★★★★★ (26)
DE-46414 Rhede, Dealer


[Insurance](#), [Leasing](#)

[Contact](#) [Park](#)

€21,490

[Calculate financing](#)

No rating



Dodge Durango 3,6 V6 4x4 Automatik Leder 7 Sitze Alu

FR 07/2012, 108.000 km, 216 kW (294 Hp)
SUV / Off-road Vehicle / Pickup Truck, Accident-free, Petrol, Automatic transmission, HU New, 4/5 Doors

✓ Finanzierung ✓ Inzahlungnahme ✓ Garantie

[Online consulting](#) [Online contract](#) [Delivery possible](#) [Garage open](#)

Trend Cars GmbH ★★★★★ (13)
DE-15344 Strausberg, Dealer

[Insurance](#), [Leasing](#)

[Contact](#) [Park](#)

€18,990

[Calculate financing](#)

No rating

Figure 1: Anotation of data fields example 1

Exterior Colour

☐ Metallic (112,848)

Approved Used Programme

☐ Ads with Approved Used Programme

Air conditioning

☒ Any

☐ No climatisation (2,817)

☐ Manual or automatic climatisation (158,578)

☐ Automatic air conditioning (115,566)

☐ Automatic climatisation, 2 zones (37,124)

☐ Automatic climatisation, 3 zones (5,624)

☐ Automatic climatisation, 4 zones (2,168)

Features

☐ Auxiliary heating (17,016)

☐ Bluetooth (115,981)


☐ CD player (90,073)

☐ Central locking (149,145)

☐ Electric heated seats (132,711)

☐ Electric seat adjustment (80,927)

☐ Electric side mirror (139,635)



Mercedes-Benz S 350 CGI BE L 4-Matic ILS/CAM/KEYLESS/SOUND

FR 05/2011, 109.963 km, 225 kW (306 Hp)
Saloon, Accident-free, Petrol, Automatic transmission, HU New, 4/5 Doors
ca. 8,2 l/100km (comb.), ca. 194 g CO₂/km (comb.)

[Online consulting](#) [Online contract](#) [Delivery possible](#) [Reservation possible](#)
[Accessible online](#) [Garage open](#)

KP-Fahrzeuge ★★★★★ (58)
DE-41564 Kaarst (bei Düsseldorf), Dealer


[Insurance](#), [Leasing](#)

[Contact](#) [Park](#)

€24,870

[Calculate financing](#)

Good price



Mercedes-Benz E 200 CGI 7G-AUTOM.+ELEGANCE+NAVI+HLS-XENON+SD+

FR 11/2011, 108.900 km, 135 kW (184 Hp)
Saloon, Accident-free, Petrol, Automatic transmission, HU 05/2021, 4/5 Doors
ca. 6,5 l/100km (comb.), ca. 152 g CO₂/km (comb.)

✓ Navigationssystem ✓ Bi-Xenon Scheinwerfer ✓ Einparkhilfe

[Insurance](#), [Leasing](#)

Autozentrale R. Kehm KG - Mercedes-Benz ★★★★★ (64)
DE-97616 Bad Neustadt, Dealer


[Contact](#) [Park](#)

€15,499

[Calculate financing](#)

Fair price

PAGE-1-ADVERTISEMENTS




Mercedes-Benz ML 350+4M+7G+AMG+Garantie+HARMAN+360°+HeadUp

€33,990

Very good price

FR 10/2014, 73.000 km, 190 kW (258 Hp)
SUV / Off-road Vehicle / Pickup Truck, Accident-free, Diesel, Automatic transmission, HU



Mercedes-Benz ML 350+4M+7G+AMG+Garantie+HARMAN+360°+HeadUp

€22,491

19,00% V

Very good price

FR 05/2014, 108.900 km, 190 kW (258 Hp)
SUV / Off-road Vehicle / Pickup Truck, Accident-free, Diesel, Automatic transmission, HU

Figure 2: Anotation of data fields example 2

3 Regular expressions based extraction

3.1 Regex Overstock

```
title: 'PROD_ID=[0-9]*"><b>(.*?)</b>'
list price: '<s>(\$[0-9\.,]*)</s>'
price: '<span class="bigred"><b>(\$[0-9,\.,]*)</b></span>'
saving: ' <td align="left" nowrap="nowrap"><span class="littleorange">(\
    \$[0-9,\.,]*) \ (.*?)</span>'
saving percent: ' <td align="left" nowrap="nowrap"><span class="
    littleorange">.*?\ ( ([%0-9\.,]*) )</span>'
content: ' <span class="normal">(.*?)<br>'
```

3.2 Regex RtvSlo

```
title: '<h1>(.*?)</h1>'
subtitle: '<div class="subtitle">(.*?)</div>'
author: '<div class="author-name">(.*?)</div>'
date: '<div class="author-timestamp">.*([0-9]+\.) *([A-a-z]*) *([0-9]+)
    *ob *([0-9]*\:[0-9]*)'
lead: '<p class="lead">(.*?)</p>'
content: '<p>(.*?)</p>|<figcaption itemprop="caption description">(?:<
    span class="icon-photo"></span>)?(.*?)</figcaption>'
```

3.3 Regex Mobilede

```
car_name: '<span class="h3 u-text-break-word">(.*?)</span>'
first_registration: (<div class="rbt-regMilPow"> *?FR
    *?([0-9]+?/[0-9]+?)|(new car) (?:[^\s])', re.IGNORECASE
price: '<span class="h3 u-block">([0-9,]+)'
kilometers: '([0-9\.,]*)&nbsp;(km)'
kilowats: '([0-9\.,]*)&nbsp;(kw)', re.IGNORECASE
horsepower: '([0-9\.,]*)&nbsp;(hp)', re.IGNORECASE
description: '<div class="rbt-regMilPow">(?:.*?)</div><div>(.*?)</div>
    ></div>'
```

4 XPath based extraction

4.1 XPath Overstock

```
"title": '/html/body/table[2]/tbody/tr[1]/td[5]/table/tbody/tr[2]/td/table/tbody/tr/td/table/tbody//tr/td[2]/a/b/text()',
"list price": lambda
    x: f"/html/body/table[2]/tbody/tr[1]/td[5]/table/tbody/tr[2]/td/table/tbody/tr/td/table/tbody/tr[@bgcolor][td[2]/a/b][{x}]/td[2]/table/tbody/tr/td[1]/table/tbody/tr[1]/td[2]/span/text()",
"price": lambda
    x: f"/html/body/table[2]/tbody/tr[1]/td[5]/table/tbody/tr[2]/td/table/tbody/tr/td/table/tbody/tr[@bgcolor][td[2]/a/b][{x}]/td[2]/table/tbody/tr/td[1]/table/tbody/tr[2]/td[2]/span/b/text()",
"saving": lambda
    x: f"/html/body/table[2]/tbody/tr[1]/td[5]/table/tbody/tr[2]/td/table/tbody/tr/td/table/tbody/tr[@bgcolor][td[2]/a/b][{x}]/td[2]/table/tbody/tr/td[1]/table/tbody/tr[3]/td[2]/span/text()",
"saving percent": lambda
    x: f"/html/body/table[2]/tbody/tr[1]/td[5]/table/tbody/tr[2]/td/table/tbody/tr/td/table/tbody/tr[@bgcolor][td[2]/a/b][{x}]/td[2]/table/tbody/tr/td[1]/table/tbody/tr[3]/td[2]/span/text()",
"content": lambda
    x: f"/html/body/table[2]/tbody/tr[1]/td[5]/table/tbody/tr[2]/td/table/tbody/tr/td/table/tbody/tr[@bgcolor][td[2]/a/b][{x}]/td[2]/table/tbody/tr/td[2]/span/text() "
```

4.2 XPath RtvSlo

```
"title": '//*[@id="main-container"]/div[3]/div/header/h1/text()',
"subtitle": '//*[@id="main-container"]/div[3]/div/header/div[2]/text()',
"author": '//*[@id="main-container"]/div[3]/div/div[1]/div[1]/div/text()',
"date": '//*[@id="main-container"]/div[3]/div/div[1]/div[2]/text()[1]',
"lead": '//*[@id="main-container"]/div[3]/div/header/p/text()',
"content": '//*[@id="main-container"]/div[3]/div/div[2]/div/figure/figcaption/text()|//*[@id="main-container"]/div[3]/div/div[2]/article//p/text()'
```

4.3 XPath Mobilede

```
"title": '/html/body//span[@class="h3 u-text-break-word"]/text()',
"regMilPow": lambda
    x: f'(/a[./span[@class="h3 u-text-break-word"]])[{x}]/div[@class="rbt-regMilPow"]/text()',
"price": lambda
```

```

x: f' (//a[.//span[@class="h3 u-text-break-word"]]) [{x}]/span[
    @class="h3 u-block"] /text() ',
"description": lambda
x: f' (//a[.//span[@class="h3 u-text-break-word"]]) [{x}]/div[
    @class="rbt-regMilPow"] /following-sibling::node() '

```

5 Automatic extraction

For automatic data extraction we used ideas from Webstemmer project and modified them a bit. Webstemmer uses sequence of html tags as a feature to compute layout similarities among different web pages. Since we already have pairs of similar web pages we don't need to compute similarities among them, but we can use the idea of a html tag sequence to optimally align two similar web pages. We implemented the Needleman-Wunsch algorithm for sequence alignment and used it to align html nodes of two similar web pages. Once aligned we filter pairs of aligned nodes based on their textual content, since data we are interested in is contained there. We decided to filter out all node pairs where any of the nodes in the aligned pair has "-", " " or None as its textual content or where the textual representations of the aligned nodes are equal. The later filter removes all html elements that represent constant html elements such as banner items and navigation links. Upon inspection we see that the aligned html nodes represent data items of interest in most cases.

We can use these remaining aligned nodes to construct a regular expression that will extract similar data items. Sadly we ran out of time to implemet this last part of the automated extractor, for this reason we provide the alignment of the data items as a result at the end of this section.

5.1 Pseudocode

- Generate html tree using lxml library
- Traverse the tree end generate list of html nodes while doing so. While traversing exclude meta,script,head and input tags from beeing expanded and inserted into the list. Also exclude html and body tags from being inserted in to the list. We made this decision because no data of interest exists in child elements of these tags.
- Find optimal alignment of two tag sequences using Needleman-Wunsch algorithm. When preforming the backtracking to find the optimal alignment we only take first found alignment as the result
- Filter pairs of tags where any of following conditions is met:
 - text content of both paired tags is equal. This indicates that this tag belongs to persistent elements of the website (navigation links, banner items, ...)
 - text content of either tag in the aligned pair is one of the following: None, "-" or " ". These represent tag alignments irrelevant for structured data detection
- We are left with tag alignments that are mostly relevant data items from two different pages of a web site

5.2 Results

5.2.1 Overstock

Site1: Jade
 Site2: Diamonds

 Site1: Jade - Bracelets
 Site2: Pins/Slides

 Site1: Jade - Earrings
 Site2: Solitaire Earrings/Pendants

 Site1: Jade - Pendants
 Site2: Solitaire Rings

 Site1: Jade - Rings
 Site2: Wedding/Anniversary Bands

 Site1: About Us
 Site2: Become An Affiliate

 Site1: Privacy & Security
 Site2: Business Purchases

 Site1: Terms & Conditions
 Site2: Have Products to Sell?

 Site1: Become An Affiliate
 Site2: Diamonds

 Site1: Business Purchases
 Site2: Markdowns

 Site1: Have Products to Sell?
 Site2: Next 15

 Site1: Jewelry, Watches & Gifts
 Site2: More Info...

 Site1: List Sorted By:
 Site2: You Save:

 Site1: Top Sellers
 Site2: Click here to purchase.

 Site1: Newest First
 Site2: More Info...

 Site1: 14-kt. Green Jade Hoops
 Site2: 14-kt. Gold Diamond Present Future Pendant (.25TW)

 Site1: \$90.00
 Site2: \$299.00

 Site1: \$46.99

Site2: \$149.99

Site1: \$43.01 (47%)

Site2: \$149.01 (49%)

Site1: Hoops of cool green jade rest between 14-karat yellow gold endpieces. The hoops graduate in thickness from 3 mm at the ends to 6 mm in the center, with approximately 29 mm overall diameter.

Site2: Designed with three large, sparkling diamonds to represent past, present, and future, this stunning pendant is set in gleaming 14-karat gold. It incorporates a total of nine diamonds (0.25 total carat weight, K color, I-2 to I-3 clarity).

Site1: 14-kt. Jade Doughnut Pendant

Site2: 14-kt. Diamond Solitaire Pendant (.33 TW)

Site1: \$150.00

Site2: \$1,019.99

Site1: \$48.99

Site2: \$319.99

Site1: \$101.01 (67%)

Site2: \$700.00 (68%)

Site1: The 25-mm disk hangs delicately from a 14-karat gold chain. The disk features a dramatic gold Chinese character in the center, accompanied by four stylized gold bees.

Site2: In this simple, yet elegant pendant, a round brilliant diamond (0.33 total carat weight, H-J color, I-1 to I-2 clarity) is prong-set in 14-karat white gold.

Site1: 14-kt. Charcoal Jade and Ruby Elephant Pendant

Site2: 14-kt. Diamond Solitaire Earrings (0.33 TW)

Site1: \$100.00

Site2: \$639.99

Site1: \$28.99

Site2: \$199.99

Site1: \$71.01 (71%)

Site2: \$440.00 (68%)

Site1: Carved of rich dark grey jade, this elephant pendant has 14-karat yellow gold applied to mark the feet, tusk, tail, and blanket. A 2-mm round faceted ruby in a gold bezel setting forms the eye. The pendant hangs from an 18-inch chain.

Site2: Dazzle your way into her heart, with these classic diamond solitaire earrings. Two brilliant-cut diamonds (0.33 total carat weight, G-H color, I-1 to I-2 clarity) are set in four prongs of 14-karat white gold.

Site1: 14-kt. Carved Lavender Jade Earrings
Site2: 14-kt. Diamond Cross Pendant (.06 TW)

Site1: \$80.00
Site2: \$305.00

Site1: \$39.99
Site2: \$119.99

Site1: \$40.01 (50%)
Site2: \$185.01 (60%)

Site1: Luscious 8-mm lavender jade balls, carved with intricate Asian style, dangle from a 14-karat yellow gold French hook.
Site2: Over a cleanly sculpted Roman cross of 14-karat white gold drapes a slender banner containing three bright prong-set round diamonds (0.06 total carat weight, H-I color, I clarity).

Site1: 14-kt. Jade Cross Pendant
Site2: 14-kt. Diamond Solitaire Stud Earrings (.50 TW)

Site1: \$150.00
Site2: \$999.99

Site1: \$49.99
Site2: \$359.99

Site1: \$100.01 (66%)
Site2: \$640.00 (64%)

Site1: Green jade and gold create this beautiful cross pendant. Cylindrical bars of green jade feature caps and center of 14-karat yellow gold.
Site2: Every jewelry collection needs a classic pair of diamond solitaire earrings. Set in 14-karat gold, these diamond stud earrings (0.50 total carat weight) have post backs with butterfly clasps.

Site1: 14-kt. Multicolored Jade Earrings
Site2: 14-kt. Diamond 7.5-8 mm Pearl Pendant

Site1: \$375.00
Site2: \$196.99

Site1: \$99.99
Site2: \$69.99

Site1: \$275.01 (73%)
Site2: \$127.00 (64%)

Site1: A delicate wrapping of 14-karat yellow gold wire holds six 6 x 4 pear shapes of jade in various shades: brilliant green, orange,

lavender, black, pale yellow, and white. The post earrings have butterfly backs.
Site2: Add a classic to your jewelry collection with this 14-karat gold, diamond, and pearl necklace. The 7.5-8mm cultured white pearl creates the focal point of the pendant, while a diamond (0.10 TW) adds sparkle.

Site1: 14-kt. Multicolored Jade Ring
Site2: 14-kt. Diamond Solitaire Earrings (.50 TW)

Site1: \$250.00
Site2: \$1,369.99

Site1: \$56.99
Site2: \$409.99

Site1: \$193.01 (77%)
Site2: \$960.00 (70%)

Site1: A delicate wrapping of 14-karat yellow gold wire holds six 6 x 4 ovals of jade in various shades: brilliant green, orange, lavender, black, pale yellow, and white. A narrow gold band divides to support the setting.
Site2: This earring set has two brilliant-cut diamonds (0.50 total carat weight, G-H color, I-1 to I-2 clarity) set in four prongs of 14-karat white gold.

Site1: 14-kt. Onyx and Ruby Elephant Pendant
Site2: 14-kt White Gold Diamond Band (0.50 TW)

Site1: \$100.00
Site2: \$1,635.00

Site1: \$35.99
Site2: \$609.99

Site1: \$64.01 (64%)
Site2: \$1,025.01 (62%)

Site1: Carved of rich black onyx, this elephant pendant has 14-karat yellow gold applied to mark the feet, tusk, tail, and blanket. A 2-mm round faceted ruby in a gold bezel setting forms the eye. The pendant hangs from an 18-inch chain.
Site2: Crafted of 14-karat white gold, this stylish ring features a bright row of 20 channel-set, princess-cut baguette diamonds. Treat her like royalty and save when you buy jewelry treasures at Overstock.com.

Site1: Discount
Site2: Quantity

Site1: Newest First

Site2: Markdowns

Site1: Price

Site2: First Page

Site1: Quantity

Site2: Previous 15

Site1: Markdowns

Site2: Next 15

Site1: 2003

Site2: 2003

5.2.2 RtvSlo

Site1: Avtomobilnost

Site2: Testi

Site1: Avtomobilnost

Site2: Testi

Site1: Volvo XC 40 D4 AWD momentum: suvereno med najboljše v razredu

Site2: Audi A6 50 TDI quattro: nemir v premijskem razredu

Site1: Test novega modela

Site2: Test nove generacije

Site1: XC 40 je najmanjši Volvov SUV, ki se oblikovno skoraj v celotni naslanja na oba veja predhodnika. e samo s tem so mu vrata do denarnic tistih kupcev, ki iejo izstopajoo, a hkrati visoko kultivirano in preieno dizajnersko govorico, na pol odprta.

Site2: To je novi audi A6. V razred najdražjih in najbolj premijskih rebcev je vnesel nemir, e preden je sploh zapeljal na parkirni prostor, rezerviran za izvrnega direktorja.

Site1: 25. januar 2019 ob 15:23

Site2: 28. december 2018 ob 08:51

Site1: XC40 se pohvali z robustno gradnjo in vedskim dizajnom

Site2: Zaradi videza se mu na avtocesti spotljivo umikajo

Site1: Kabina je prostorna in kakovostno izdelana

Site2: Cesto in promet skenira s kopico radarjev, kamer in tipal

Site1: Dizel z vrha ponudbe je zelo zmogljiv, a za mestno uporabo prerobusten

Site2: 50 TDI oznaue trilitrski turbodizel, podkrepljen z elektromotorjem

Site1: e posebej hvalimo tevalo, iznajdljivost in velikost razlinih odlagalnih prostorov ter iroke, vrste in zelo udobne sedee.

Intuitivno in enostavno logino je upravljanje z velikim vmesnikom, ki z vefunkcijskim zaslonom na dotik kraljuje na z roko lahko dostopnem mestu na sredinski armaturi. Razoaranj ne bo niti v velikosti in uporabnosti prtljanega prostora, ki s 460 litri prostornine sicer ni med vejimi v razredu, a se v uporabnikem smislu odkupi z dobro urejenostjo ter domiselnimi reitvami pregrajevanja.

Site2: Samo pogledjte njegovo masko to ogromno satovje z radarji na takem poloaju, da se ti na avtocesti tudi pri 120 km/h vsi spotljivo umikajo, saj so prepriani, da gre za Pahorjev ali arev avto. Seveda , novi A6 lahko cesto in promet skenira s kar petimi radarji, petimi kamerami, infrardeo kamero za noni vid, dvanajstimi ultrazvonnimi senzorji in laserskim italnikom lidarjem. V glavnem vojaka tehnologija v slubi varnosti za fante, ki smo radi gledali Top Gun, Bonda in druge moakarja s finimi igraami.

Site1: XC 40 je od tal odmaknjen konkretnih 21 cm, a sta vzmetenje in krmilni mehanizem tako nastavljena, da ponuja tudi v hitro odpeljanih ovinkih zelo dolgo nevtrarno in predvidljivo lego. V premeru preskuanega modela, ki je imel v paketu R design vzmetenje e nekoliko bolj trdo, se je to samo e bolj potrdilo, a je v tem primeru treba raunati na manj udobno vonjo ez razline asfaltne grbine. Podoben razmislek velja opraviti tudi pri izbiri motorja.

Site2: e vam pogled na Audihev spisek dodatne opreme ne odvzame volje do ivljenja, potem vsekakor toplo priporoamo nakup zranega vzmetenja , saj dobi z njim A6 ve razlinih in vozniko zelo uporabnih karakterjev.

Site1: Preskuani 2-litrski dizel s 190 KM predstavlja vrh ponudbe, ki z mojo, udobjem in tudi povpreno porabo navdui predvsem pri avtocestnih dolgotrogakih izzivih, v poasni mestni vonji ter pri pogostih postankih in speljevanjih pa deluje preve robusten.

Site2: Enako velja za seksi lui z inteligentno matrino osvetlitvijo, pa za portno podvozje in vsekakor za tirikolesno krmiljenje. S tem postane A6 med ovinki v obutku na volanu e veliko kraji in bolj agilen. Vse nateto smo preskuali v drubi agregata 50 TDI, ki je v resnici klasini trilitrski dizel, podkrepljen z elektromotorjem. Ja, ta audi je mehki hibrid z izjemnim navorom in dovolj moi kadar koli in kjer koli. Si pa mislimo, da bo najveji del trga zadovoljil e uinkovit dvolitrski mehki hibrid z mojo 150 kilovatov.

Site1: Foto: David avli
Site2: MMC RTV SLO

Site1: Foto: David avli
Site2: MMC RTV SLO

Site1: Foto: David avli
Site2: MMC RTV SLO

Site1: Foto: David avli
Site2: MMC RTV SLO

Site1: Foto: David avli

Site2: MMC RTV SLO

Site1: Foto: David avli

Site2: V notranjosti kraljujejo zasloni, prek katerih je mogoe upravljati praktino vse funkcije avtomobila. Foto: David avli

Site1: Foto: David avli

Site2: MMC RTV SLO

Site1: Foto: David avli

Site2: MMC RTV SLO

Site1: Foto: David avli

Site2: MMC RTV SLO

Site1: Foto: David avli

Site2: MMC RTV SLO

Site1: Foto: David avli

Site2: MMC RTV SLO

Site1: Foto: David avli

Site2: Med doplaili priporoamo zrano vzmetenje in tirikolesno krmiljenje. Foto: David avli

Site1: Foto: David avli

Site2: MMC RTV SLO

Site1: Foto: David avli

Site2: MMC RTV SLO

Site1: Foto: David avli

Site2: MMC RTV SLO

Site1: Foto: David avli

Site2: MMC RTV SLO

Site1: Foto: David avli

Site2: MMC RTV SLO

Site1: Foto: David avli

Site2: MMC RTV SLO

Site1: Foto: David avli

Site2: MMC RTV SLO

Site1: Foto: David avli

Site2: MMC RTV SLO

Site1: Foto: David avli

Site2: MMC RTV SLO

Site1: Foto: David avli

Site2: MMC RTV SLO

Site1: LJFW: "otor bi napolnili, pa e bi bil e 20 metrov dalji"

Site2: Ford kuga je z zamenjavo generacije postala tudi prikljuni
hibrid

Site1: Foto: No v Louvru - aperitiv pri Moni Lisi, veerja pri Miloki
Veneri

Site2: enske so pokodbam v prometnih nesreah izpostavljene bolj kot
moki

Site1: Ford kuga je z zamenjavo generacije postala tudi prikljuni
hibrid

Site2: Pripravite se na ofenzivo prikljunih hibridov

Site1: okoladno-malinova zebra torta

Site2: Bentley se je ob stoletnici spomnil blowerja, enega najbolj
ikonskih avtomobilov iz dirkake preteklosti

Site1: LJFW: Prvi veer je minil v znamenju izbora Fashion Scout SEE

Site2: Rekorderska steza na slani ravnici Bonneville potrebuje reitev

Site1: Test

Site2: liumuzina

Site1: volvo

Site2: test

Site1: XC40

Site2: TDI

Site1: enske so pokodbam v prometnih nesreah izpostavljene bolj kot
moki

Site2: Volvo XC 40 D4 AWD momentum: suvereno med najboljše v razredu

Site1: Razvoj avtomobilske varnosti

Site2: Test novega modela

Site1: Avtomobilnost

Site2: Testi

Site1: Pripravite se na ofenzivo prikljunih hibridov

Site2: Kia ceed 1.4 turbo LX edition: vozi z najboljšimi

Site1: Ekipa Avtomobilnosti na avtomobilskem salonu v enevi

Site2: Test nove generacije

Site1: Avtomobilnost

Site2: Testi

Site1: Bentley se je ob stoletnici spomnil blowerja, enega najbolj
ikonskih avtomobilov iz dirkake preteklosti
Site2: Mercedes-Benz CLS: Tisti, ki je svet obrnil na glavo

Site1: Obuditev legende
Site2: Test nove generacije

Site1: Avtomobilnost
Site2: Testi

Site1: Rekorderska steza na slani ravnici Bonneville potrebuje reitev
Site2: Maserati levante diesel: armer na velikih kolesih

Site1: Ogroena naravna znamenitost
Site2: Preizkus novega modela

Site1: (7)
Site2: (13)

5.2.3 Mobilede

Site1: Mercedes-Benz E200 CGI Avantgarde Aut. LED AAC NAVI SHZ
Site2: Dodge Challenger 3.6L Automatik

Site1: 23,450
Site2: 18,990

Site1: Fair price
Site2: No rating

Site1: FR 11/2014, 78.831km, 135kW(184Hp)
Site2: FR 07/2009, 105.400km, 186kW(253Hp)

Site1: Saloon, Petrol, Automatic transmission, HU New, 4/5 Doors
Site2: Sports Car / Coupe, Petrol, Automatic transmission, HU 12/2021,
2/3 Doors

Site1: Online consulting
Site2: West-Garage Heinz Buchenroth GmbH Toy.Vertr.hdl.

Site1: Autoland AG Niederlassung Stralsund
Site2: 14

Site1: DE-18437 Stralsund, Dealer
Site2: DE-71636 Ludwigsburg, Dealer

Site1: 28
Site2: 30

Site1: Mercedes-Benz C180 T 7G Aut. Avantgarde LED NAVI LEDER KAMERA

Site2: Dodge Charger DAYTONA

Site1: 21,950

Site2: 22,990

Site1: Increased price

Site2: No rating

Site1: FR 10/2014, 64.987km, 115kW(156Hp)

Site2: FR 07/2013, 71.000km, 274kW(373Hp)

Site1: Estate Car, Petrol, Automatic transmission, HU New, 4/5 Doors

Site2: Saloon, Petrol, Automatic transmission, HU New, 4/5 Doors

Site1: 2-Zonen-Klimaautomatik

Site2: Beats by Dr.Dre

Site1: Navigationssystem

Site2: Rckfahrkamera

Site1: Sitzheizung

Site2: Sport Bremsanlage

Site1: Autoland AG NL Naumburg

Site2: ABL Autowert Bergisch Land GmbH

Site1: 3

Site2: 42

Site1: DE-06618 Naumburg OT Schnburg, Dealer

Site2: DE-51429 Bergisch Gladbach, Dealer

Site1: 29

Site2: 11

Site1: Mercedes-Benz S 500 CGI BE L PANORAMA/ASSISTENZ/ENTERTAINMENT

Site2: Dodge Nitro 4.0 4x4 R/T

Site1: 24,870

Site2: 14,400

Site1: Saloon, Petrol, Automatic transmission, HU New, 4/5 Doors

Site2: FR 12/2011, 94.680km, 130kW(177Hp)

Site1: KP-Fahrzeuge

Site2: Kgler GmbH

Site1: 58

Site2: 21

Site1: DE-41564 Kaarst (bei Dsseldorf), Dealer

Site2: DE-61169 Friedberg, Dealer

Site1: 30

Site2: 25

Site1: Mercedes-Benz GLK 350/300 AMG 4MATIC 7-G TRONIC LEDER LED XENO

Site2: Dodge Charger SE Automatik Unfallfrei Carfax

Site1: 22,500

Site2: 19,00% VAT

Site1: Good price

Site2: No rating

Site1: FR 01/2013, 55.000km, 185kW(252Hp)

Site2: FR 12/2014, 94.118km, 218kW(296Hp)

Site1: SUV / Off-road Vehicle / Pickup Truck,

Site2: Saloon,

Site1: Delivery possible

Site2: Online contract

Site1: Garage open

Site2: Reservation possible

Site1: Open again

Site2: Accessible online

Site1: Mercedes-Benz Fahrzeuge bei Red Baron Automobile

Site2: Trox Car Company GmbH & Co. KG

Site1: 23

Site2: 33

Site1: DE-12557 Berlin, Dealer

Site2: DE-47506 Neukirchen-Vluyn, Dealer

Site1: 29

Site2: 10

Site1: Open again

Site2: Dodge Challenger 5.7l HEMI

Site1: jh-automobile

Site2: 23,500

Site1: DE-30855 Langenhagen, Dealer

Site2: DE-85435 Erding, Private Seller

Site1: 25

Site2: 7

Site1: Mercedes-Benz A200 Urban AAC BI-XENON NAVI PANO LEDER SHZ TEMP
 Site2: Dodge Durango CREW, 4X4, Leder, Radar, el Heckkl, TV neu

 Site1: 19,00% VAT
 Site2: 23,900

 Site1: DE-18437 Stralsund, Dealer
 Site2: DE-04299 Leipzig, Private Seller

 Site1: 20
 Site2: 30

 Site1: Mercedes-Benz C 180 CGI Avantgarde 7G*NAVI*AHK*SPUR
 Site2: Dodge RAM *RAM *1500 QUAD CAB* 5.7l HEMI V8*

 Site1: 18,990
 Site2: 25,865

 Site1: Fair price
 Site2: Good price

 Site1: FR 09/2014, 89.741km, 115kW(156Hp)
 Site2: FR 06/2014, 92.000km, 295kW(401Hp)

 Site1: Saloon,
 Site2: SUV / Off-road Vehicle / Pickup Truck,

 Site1: Raulin Automobile
 Site2: AutoBazar Osso

 Site1: 15
 Site2: 102

 Site1: DE-49124 Georgsmarienhütte, Dealer
 Site2: DE-47623 Kevelaer, Dealer

 Site1: 30
 Site2: 12

 Site1: Mercedes-Benz GL 500 AMG 4M 7-G Grand Edition Head-up Keyless
 Site2: Dodge Challenger 3.6i, Parking, GlassRoof, Leather

 Site1: 29,999
 Site2: 18,990

 Site1: No rating
 Site2: Very good price

 Site1: FR 12/2012, 76.000km, 285kW(387Hp)
 Site2: FR 05/2014, 111.000km, 227kW(309Hp)

 Site1: SUV / Off-road Vehicle / Pickup Truck,

Site2: Sports Car / Coupe,

Site1: Mercedes-Benz Fahrzeuge bei Red Baron Automobile
Site2: VMOBILE.LV SIA

Site1: 23
Site2: 4

Site1: DE-12557 Berlin, Dealer
Site2: LV-1082 Riga, Dealer

Site1: 22
Site2: 17

Site1: Mercedes-Benz B 180 BlueEFFICIENCY
Site2: Dodge Challenger 6,1 HEMI V8 SRT8 GSD AT Navi PDC 20"

Site1: 11,150
Site2: 19,00% VAT

Site1: 10,850
Site2: Calculate financing

Site1: Very good price
Site2: Good price

Site1: FR 11/2012, 91.431km, 90kW(122Hp)
Site2: FR 05/2010, 114.000km, 317kW(431Hp)

Site1: Saloon,
Site2: Sports Car / Coupe,

Site1: Becker MAP PILOT
Site2: Galsschiebedach

Site1: Klimaanlage
Site2: 20" LM Black

Site1: Sitzheizung
Site2: EU Navigation

Site1: Online contract
Site2: Online consulting

Site1: Delivery possible
Site2: Online contract

Site1: Reservation possible
Site2: Delivery possible

Site1: Accessible online
Site2: Reservation possible

Site1: Garage open
Site2: Accessible online

Site1: Open again
Site2: Garage open

Site1: Sterne-Handel - K.Manikas & H.Langefeld GbR
Site2: R.S. Autohaus exklusiv GmbH - Jaguar Land Rover Vertragshndler

Site1: 13
Site2: 15

Site1: 28
Site2: 26

Site1: Mercedes-Benz GL 500 AMG 4MATIC 7-G KEYLESS TV BELFTUNG 7-SIT
Site2: Dodge RAM 1500 Laramie 5.7 Hemi 4x4 Crew Cab.

Site1: 25,999
Site2: 24,900

Site1: No rating
Site2: Good price

Site1: FR 07/2012, 124.000km, 285kW(387Hp)
Site2: FR 07/2013, 113.554km, 295kW(401Hp)

Site1: SUV / Off-road Vehicle / Pickup Truck,
Site2: SUV / Off-road Vehicle / Pickup Truck, Petrol, Automatic
transmission, HU 03/2022, 4/5 Doors

Site1: Mercedes-Benz Fahrzeuge bei Red Baron Automobile
Site2: Uwe Kleinen KFZ Makler

Site1: 23
Site2: 129

Site1: DE-12557 Berlin, Dealer
Site2: DE-47918 Tnisvorst, Dealer

Site1: 15
Site2: 11

Site1: Mercedes-Benz CLA 200 SB Urban Bixenon Navi PTS LM 2016
Site2: Dodge Challenger 5.7*LEDER*SCHALTGETRIEBE*GEPFLEGT

Site1: 19,900
Site2: 23,880

Site1: Sterncardirekt UG (Haftungsbeschrnkt)
Site2: Autohalle Hollenstedt

Site1: 50

Site2: 78

Site1: DE-68623 Lampertheim, Dealer

Site2: DE-21279 Hollenstedt, Dealer

Site1: 19

Site2: 30

Site1: Mercedes-Benz E 200 CGI AUTOMATIK*1.HAND*NAVI*AHK*SHZ* BlueEff

Site2: Dodge Grand Caravan GT Carfax Unfallfrei Flexfuel

Site1: 16,990

Site2: 19,00% VAT

Site1: Very good price

Site2: No rating

Site1: FR 02/2013, 69.857km, 135kW(184Hp)

Site2: FR 01/2016, 87.800km, 211kW(287Hp)

Site1: Saloon,

Site2: Van / Minibus,

Site1: Raulin Automobile

Site2: Trox Car Company GmbH & Co. KG

Site1: 15

Site2: 33

Site1: DE-49124 Georgsmarienhütte, Dealer

Site2: DE-47506 Neukirchen-Vluyn, Dealer

Site1: 18

Site2: 12

Site1: Mercedes-Benz CLS 350 CDI Shooting Brake LEDER AIRMATIC LED NA

Site2: Dodge DURANGO LIMITED 3.6, LPG, 7seats, Cam, Beats

Site1: 24,890

Site2: 24,990

Site1: 23,980

Site2: Calculate financing

Site1: Volkswagen Zentrum Dresden GmbH & Co. KG

Site2: VMOBILE.LV SIA

Site1: 67

Site2: 4

Site1: 28

Site2: 19

Site1: Mercedes-Benz C180 Aut. Avantgarde LED NAVI LEDER ASSISTENTEN

Site2: Dodge Grand Caravan 3.6Ltr.V6*Automatik*LPG Gasanlage

Site1: 22,450

Site2: 20,900

Site1: Autoland AG NL Halle

Site2: US-Cars Aschaffenburg GmbH

Site1: 11

Site2: 69

Site1: DE-06122 Halle, Dealer

Site2: DE-63741 Aschaffenburg, Dealer

Site1: 30

Site2: 20

Site1: Mercedes-Benz E 350 T CDI Avantgarde 4-Matic 7G AMG Sport+Navi

Site2: Dodge Challenger Scat Pack

Site1: 22,989

Site2: 21,700

Site1: Fair price

Site2: Very good price

Site1: FR 09/2013, 114.185km, 185kW(252Hp)

Site2: FR 07/2016, 91.557km, 227kW(309Hp)

Site1: Estate Car, Diesel, Automatic transmission, HU 08/2021, 4/5
Doors

Site2: Sports Car / Coupe, Petrol, Automatic transmission, HU New, 2/3
Doors

Site1: Euro 6

Site2: Bluetooth

Site1: Glasschiebehebedach

Site2: Automatik

Site1: LED Scheinwerfer

Site2: Fahrspa garantiert!

Site1: Online contract

Site2: Online consulting

Site1: Delivery possible

Site2: Online contract

Site1: Reservation possible
Site2: Delivery possible

Site1: Kamux Auto GmbH
Site2: Autoankaufbrandenburg.de

Site1: 219
Site2: 28

Site1: DE-22529 Hamburg, Dealer
Site2: DE-15711 Knigs Wusterhausen OT Zeesen, Dealer

Site1: 24
Site2: 14

Site1: Mercedes-Benz C 250 CDI 4MATIC T AVANTGARDE LEDER NAVI XENON
Site2: Dodge RAM 1500 HEMI 5,7 BIG HORN

Site1: 15,500
Site2: 17,990

Site1: Mercedes-Benz Fahrzeuge bei Red Baron Automobile
Site2: Autoland Bayer

Site1: 23
Site2: 3

Site1: DE-12557 Berlin, Dealer
Site2: DE-81243 Mnchen, Dealer

Site1: 28
Site2: 16

Site1: Mercedes-Benz C-Klasse Lim. C 63 AMG Performance KW 2.Hand
Site2: Dodge Durango, Navi, Kamera, 7Sitzer

Site1: 28,900
Site2: 19,990

Site1: Saloon, Petrol, Automatic transmission, HU New, 4/5 Doors
Site2: No rating

Site1: KFZ-Handel Aichinger
Site2: Patolla & Ark GbR

Site1: 41
Site2: 43

Site1: DE-92685 Flo, Dealer
Site2: DE-12347 Berlin, Dealer
