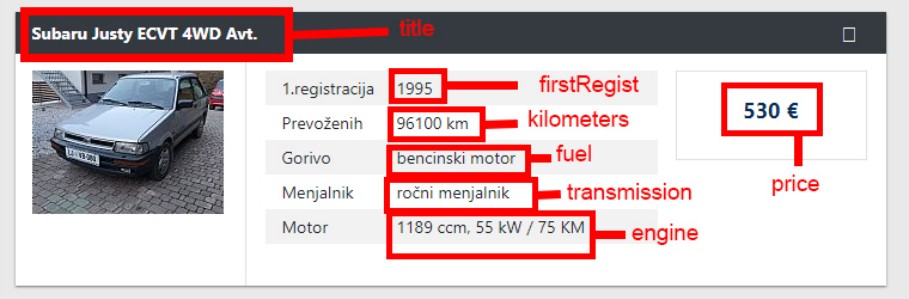
IEPS Poročilo 2 - Ekipa “Vipavska Burja”

Matjaž Rupnik, Blaž Ličen

April 2021

1 Izbrana stran

Za svoj primer smo si izbrali spletno stran: avto.net (seznam oglasov) Primer iz seznama in prikaz podatkovnih polj:



2 Implementacije

2.1 Seznam regularnih izrazov, za ekstrakcijo podatkov iz spletnih strani

2.1.1 rtvslo.si

```
<div class=\"author-name\">([^<]*)</div>

<div class=\"publish-meta\">([^/]*)</div>

<h1>([^<]*)</h1>

<div class=\"subtitle\">([^<]*)</div>

<p class=\"lead\">([^<]*)</p>

<article[^>]+?> (?=.)|(?=<p[^>]*>\s*(.*?)<\/p>)|(?=.) <\/article>
```

2.1.2 overstock.com

```
<a href=\"http:\/\/www\.overstock\.com\/cgi-bin\/d2\.cgi\?PAGE=PROFRAME&amp;PROD_ID=[0-9]+\"><b>([^<]*)<\/b><\

<td align=\"left\" nowrap=\"nowrap\"><s>([^<]*)

<span class=\"bigred\"><b>([^<]*)

<span class=\"littleorange\">([^<]*)<\/span>

<span class=\"normal\">([^<]*)<br>
```

2.1.3 avto.net

```
<div class=\"GO-Results-Naziv bg-dark px-3 py-2 font-weight-bold text-truncate text-whitetext-decoration-none\
<span>([^<]*)<\/span>

<td class=\"w-75 pl-3\">([^<]*)<\/td>

<td class=\"d-none d-md-block pl-3\">Prevoženih<\/td>[\n\r\s]+<td class=\"pl-3\">([^<]*)<\/td>

<td class=\"d-none d-md-block pl-3\">Gorivo<\/td>[\n\r\s]+<td class=\"pl-3\">([^<]*)<\/td>

<td class=\"d-none d-md-block pl-3\">Menjalnik<\/td>[\n\r\s]+<td class=\"pl-3 text-truncate\">([^<]*)

<td class=\"d-none d-md-block pl-3\">Motor<\/td>[\n\r\s]+<td class=\"pl-3 text-truncate\">([^<]*)

<div class=\"d-none d-sm-block col-auto px-sm-0 pb-sm-3 GO-Results-PriceLogo\">[\n\r\s]+<!--(?:.*?)-->[\n\r\s]
<!--(?:.*?)-->[\n\r\s]+<div class=\"GO-Results-Price mt-0 mt-sm-3\">[\n\r\s]+
<!--(?:.*?)-->[\n\r\s]+<!--(?:.*?)-->[\n\r\s]+<!--(?:.*?)-->[\n\r\s]+
<div class=\"GO-Results-Price-Mid\">[\n\r\s]+<div class=\"GO-Results-Price-TXT-Regular\">([^<]*)<\/div>
```

2.2 Seznam XPath izrazov, za ekstrakcijo podatkov iz spletnih strani

2.2.1 rtvslo.si

```
string(/html/body/div[@id="main-container"]/div[3]/div/div[1]/div[1]/div)

string(/html/body/div[@id="main-container"]/div[3]/div/div[1]/div[2])

string(/html/body/div[@id="main-container"]/div[3]/div/header/h1)

string(/html/body/div[@id="main-container"]/div[3]/div/header/div[2])

string(/html/body/div[@id="main-container"]/div[3]/div/header/p)

/html/body/div[@id="main-container"]/div[3]/div/div[2]/descendant::p/text()[not(ancestor::script)]
```

2.2.2 overstock.com

```
/html/body/table[2]/tbody/tr[1]/td[5]/table/tbody/tr[2]/td/table/tbody/tr/td/table/tbody/tr/td/a/b

/html/body/table[2]/tbody/tr[1]/td[5]/table/tbody/tr[2]/td/table/tbody/tr/td/table/tbody/tr/td/table/tbody/tr/
table/tbody/tr[1]/td[2]/s

/html/body/table[2]/tbody/tr[1]/td[5]/table/tbody/tr[2]/td/table/tbody/tr/td/table/tbody/tr/td/table/tbody/tr/
table/tbody/tr[1]/td[2]/s

/html/body/table[2]/tbody/tr[1]/td[5]/table/tbody/tr[2]/td/table/tbody/tr/td/table/tbody/tr/td/table/tbody/tr/
table/tbody/tr[3]/td[2]/span

/html/body/table[2]/tbody/tr[1]/td[5]/table/tbody/tr[2]/td/table/tbody/tr/td/table/tbody/tr/td/table/tbody/tr/
```

2.2.3 avto.net

```
/html/body/strong/div[1]/div[3]/div/div[5]/form/div/div[1]/span

/html/body/strong/div[1]/div[3]/div/div[5]/form/div/div[4]/div/table/tbody/tr[1]/td[2]

/html/body/strong/div[1]/div[3]/div/div[5]/form/div/div[4]/div/table/tbody/tr[2]/td[2]

/html/body/strong/div[1]/div[3]/div/div[5]/form/div/div[4]/div/table/tbody/tr[3]/td[2]

/html/body/strong/div[1]/div[3]/div/div[5]/form/div/div[4]/div/table/tbody/tr[4]/td[2]

/html/body/strong/div[1]/div[3]/div/div[5]/form/div/div[4]/div/table/tbody/tr[5]/td[2]

/html/body/strong/div[1]/div[3]/div/div[5]/form/div/div[contains(@class, "GO-Results-PriceLogo")]/div[1]/div[1
```

3 Implementacija avtomatske ekstrakcije

Za avtomatsko ekstrakcijo smo se odločili izdelati RoadRunner (like) algoritem. Z delom smo začeli, vendar nam naše izvedbe ni uspelo dokončati.

Algorithm 1: RoadRunner

```
Result: Ovojnica strani
Počisti vsebinsko nepotrebne elemente;
Razdeli strani v tabelo;
while konec strani do
    detekcija tag/string;
    if ujemanje tagov then
        rezultat += tag;
    else
        tag missmatch;
    end
    if ujemanje nizov then
        rezultat += niz;
    else
        niz missmatch;
    end
end
```