

Introduction to Web Scraping with R

Summary



Simon Munzert | IPSDS

Level Up!

Skills

HTML Nerdery



Regex Magic



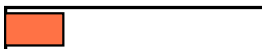
XPath Mastery



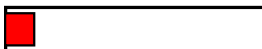
Selenium Wizardry



Ethical Awareness



API Brilliancy



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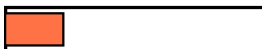
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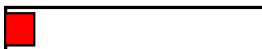
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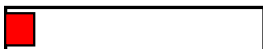
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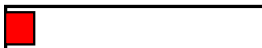
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Bonus skill: robots.txt Veteran



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- recognize JavaScript in the wild.
- know how to work with Selenium to gather information from Ajax-generated websites.
- got an overview of legal and ethical issues around web scraping
- got an overview of practices that help establish a server-friendly workflow

R packages encountered

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- the `stringr` package for string manipulation with regular expressions
- the `xml2` package for working with XML/HTML files
- the `rvest` package for downloading and manipulating HTML files
- the `RSelenium` package to connect to the Selenium API and scrape dynamic webpages

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- Study the Terms of Use / Terms of Service of your favorite websites.
- Check out some of the following online resources:
 - <http://www.seleniumhq.org/> – the entire world of Selenium
 - <http://decisionsandr.blogspot.de/2014/04/play-2048-using-r.html> – an R script that uses **RSelenium** to let R automatically play the browser game 2048
 - <https://gijn.org/2015/08/12/on-the-ethics-of-web-scraping-and-data-journalism/> – an article on the ethics of web scraping