Paul Dean, Soo Bin Hwang, Seunghwa Jun
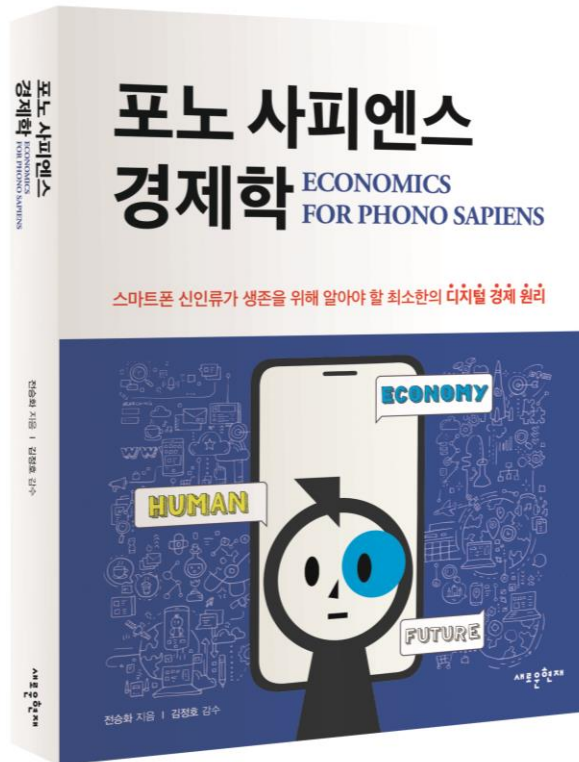
CREATING

(Maybe the World's First!)

Economics Book!

With *Interactive* Online References!!

Outline

Creating the Online Reference Database and the Interactive Functions for the book titled *<< Phono Sapiens Economics : The New 'Human-Centered Digital Economy >>*

- **The book was published in Korean in this September (paper and e-book) and will be e-book published in English in January 2020.**

- **Team members' names will be listed in the 'Acknowledgements.'**

[In Korean bookstores]

Reference List & Search

The data set was manually and tediously created by the author and then an web page with multiple search categories are coded!

[Work Flow]

| Data Set Excel (213 Records) | Converting to Jason | Coding! (HTML, CSS, D3.js, and Java Script) | Tada! |

PhonoSapiens Economics
Reference List and URL Links

5 Filter Searches
(Part / Chapter /
Page / Institution /
Language)

Automatic Reference Table with URLs

(When clicked, it opens a new window
of the linked website)

Filter Search

Enter a Part
I/II/III/VI

Enter a Chapter
1 to 14

Enter a Page
1 to 325

Enter an Institution
Institution

Enter a Language
EN/KOR

Filter Table

Reset Table

Part	Chapter	Page	Institution	Language	Keyword	URL
Prologue	Prologue	7	Economist	EN	Phono Sapiens	https://www.economist.com/leaders/2015/02/26/planet-of-the-phones
I	1	28	Pew Research Center	EN	World Wide Web timeline	https://www.pewinternet.org/2014/03/11/world-wide-web-timeline/
I	1	32	GSMA	EN	Smartphone Users	https://www.gsmaintelligence.com/research/?file=b9a6e6202ee1d5f787cfebb95d3639c5&download
I	1	35	McKinsey	EN	Rethinking Car	https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/rethinking-car-software-and-electronics-architecture
I	1	35	McKinsey	EN	5G and Autonomous Car	https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/development-in-the-mobility-technology-ecosystem-how-can-5g-help
I	1	39	GSMA	EN	Understanding 5G	https://www.gsma.com/futurenetworks/wp-content/uploads/2015/01/2014-12-08-c88a32b3c59a11944a9c4e544fee7770.pdf
I	1	39	GSMA	EN	5G, Future Network	https://www.gsma.com/futurenetworks/technology/understanding-5g/
I	1	39	GSMA	EN	From 4G to 5G	https://www.gsma.com/futurenetworks/wp-content/uploads/2017/03/704_GSMA_unlocking_comm_opp_report_v5.pdf
I	1	39	GSMA	EN	Mobile Infrastructure	https://www.gsma.com/publicpolicy/wp-content/uploads/2018/02/GSMA_DigitalTransformation_Delivering-the-Digital-Revolution.pdf
I	1	39	Visual Capitalist	EN	Comparing 4G and 5G	https://www.visualcapitalist.com/the-future-of-5g-comparing-3-generations-of-wireless-technology/
I	2	41	Visual Capitalist	EN	50 Million Users	https://www.visualcapitalist.com/how-long-does-it-take-to-hit-50-million-users/
I	2	42	Forrester	EN	Metcalfe's Law	https://go.forrester.com/blogs/beyond-moores-law-how-exponential-technology-will-drive-disruption/
I	2	42	HBR	EN	Network Effects	https://hbr.org/2016/04/network-effects-arent-enough
I	2	42	WEF	EN	Moore's Law	https://www.weforum.org/agenda/2015/04/whats-beyond-moores-law/
I	2	43	Ericsson	EN	Mobility Report (2019)	https://www.ericsson.com/49d1d9/assets/local/mobility-report/documents/2019/ericsson-mobility-report-june-2019.pdf
I	2	43	Forrester	EN	Deceptive Nature of Exponential Change	https://www.ayasdi.com/blog/artificial-intelligence/the-deceptive-nature-of-exponential-change/
I	2	43	Forrester	EN	Deceptive Nature of Exponential Change	https://www.forrester.com/report/Move+Your+Big+Data+Into+The+Public+Cloud/-/E-RES136229
I	2	43	GSMA	EN	Mobile Internet Users	https://www.gsmaintelligence.com/research/?file=b9a6e6202ee1d5f787cfebb95d3639c5&download

Reference Dashboard

Displaying detailed consultant info using dropdown menu

Consultant Name:

| WEF ▼ |

Consultant Info

Institution:

WEF

Referred to in Parts:

I,II,III,IV

Referred to in Chapters:

2,4,6,7,8,10,11,12,13,14

Referred to on Pages:

42,45,49,80,81,121,147,162,164,165,195,201,235,262,263,271,284,296,297,315,316

Key Terms:

Moore's Law, Technological Tipping Points , Inequality in USA, Digital Transformation, Fourth Industrial Revolution, Digital Revolution, Human-Centered Economic Progress, End of Capitalism, AI, AR/VR, Blockchain (Creative Economy), Talentism , LawGeex and AI , Future of Jobs , Readiess for the Future Production Report, Future of Production, Future of Retail, Sharing Economy , The Future of Jobs, 2022 Robot Adoption Rate, 2022 Skills Outlook , Future Employment Model, Alibaba Ecosystem, Organization Transformation, Putting People at the Center, Trust in Government , Trust Gap

Reference Dashboard

Overview of Steps

Consultant Name:

WEF ▼

Consultant Info

Institution:

WEF

Referred to in Parts:

I,II,III,IV

Referred to in Chapters:

2,4,6,7,8,10,11,12,13,14

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Key Terms:

Moore's Law, Technological Tipping Points , Inequality in USA, Digital Transformation, Fourth Industrial Revolution, Digital Revolution, Human-Centered Economic Progress, End of Capitalism, AI, AR/VR, Blockchain (Creative Economy), Talentism , LawGeex and AI , Future of Jobs , Readiness for the Future Production Report, Future of Production, Future of Retail, Sharing Economy , The Future of Jobs, 2022 Robot Adoption Rate, 2022 Skills Outlook , Future Employment Model, Alibaba Ecosystem, Organization Transformation, Putting People at the Center, Trust in Government , Trust Gap

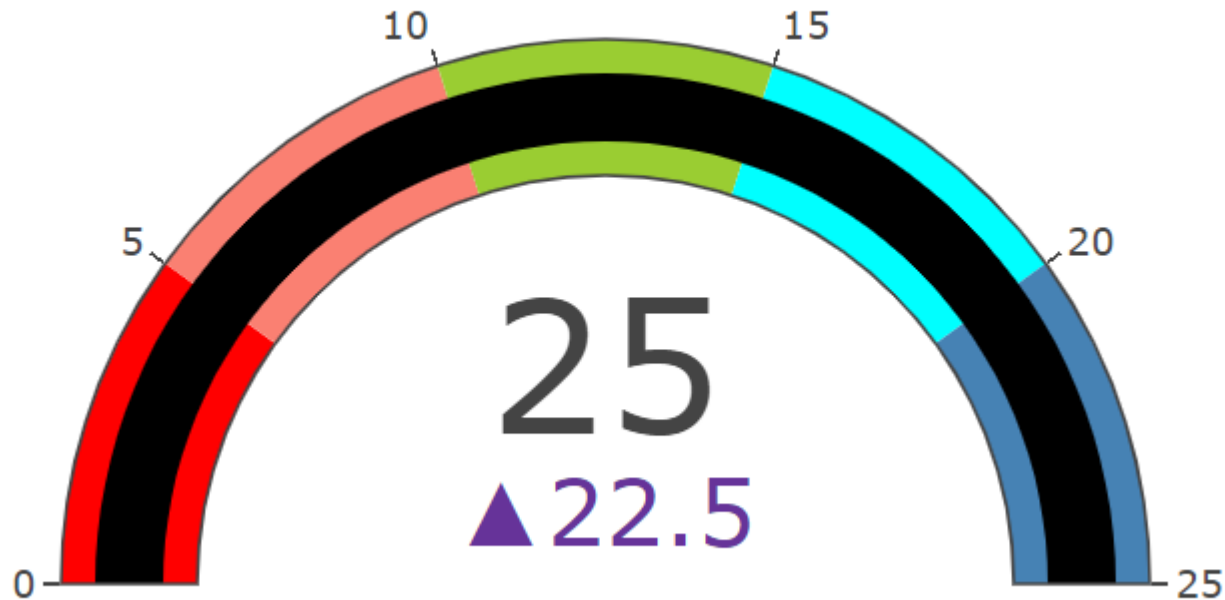| Import data from JSON file into app.js using d3.json().then | Collect the consultant name selection using element.property('value') | Filter the data using that consultant name, and create lists of unique parts, chapters, etc. using if(list.includes(item)) statements | Print data to the info box by iterating through those lists |

Reference Dashboard
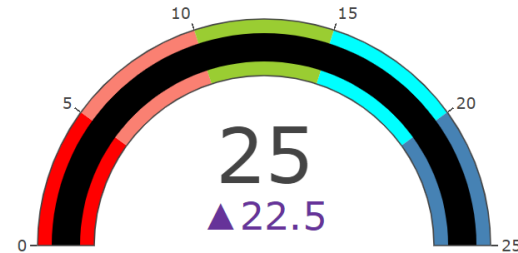
Displaying gauge info using dropdown menu

Number of References of Institution vs Mean

Reference Dashboard

Overview of Steps

Number of References of Institution vs Mean

25
▲22.5

Import data from JSON file into app.js using d3.json().then

Collect the consultant name selection using element.property('value')

Filter the data using that consultant name, and collect the number of times that consultant name was referenced

Feed that reference count amount into plotly using mode:
mode: 'gauge+number +delta'

Scraping Latest Articles

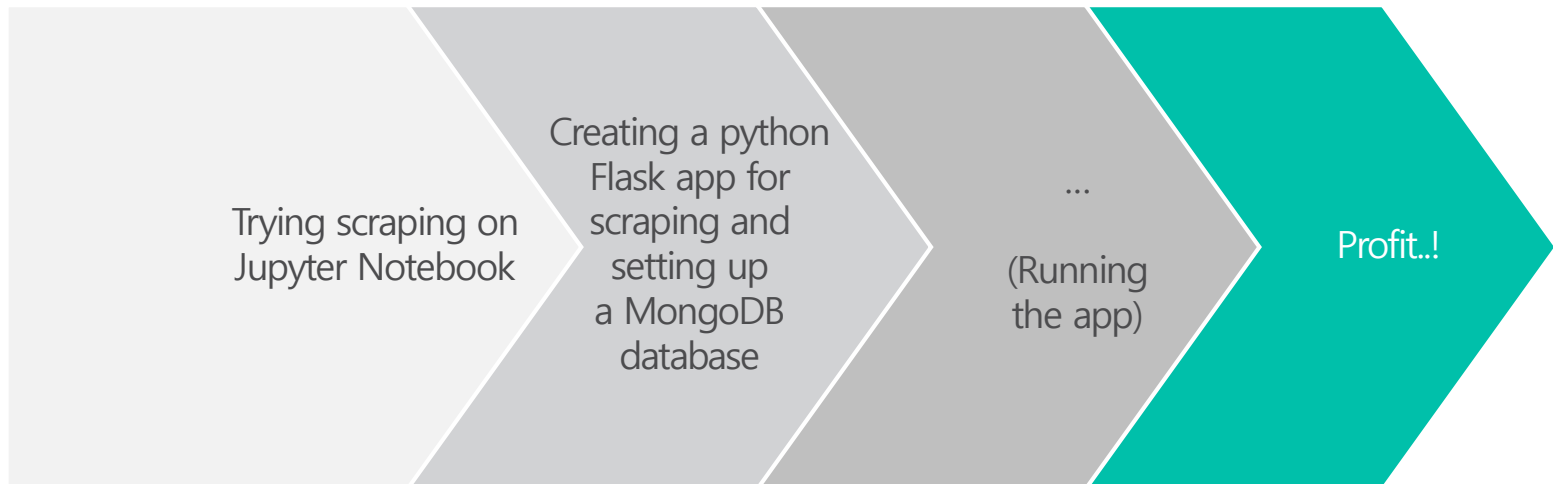**Visit each website and scrape the top search result.**

Insert company images and show titles of each article retrieved.

[Methods used]
Python (Flask, Jupyter Notebook)
JavaScript (Bootstrap)
MongoDB
HTML

[Python libraries used]
Flask   Requests
Pymongo   Time
BeautifulSoup   Splinter

Trying scraping on Jupyter Notebook

Creating a python Flask app for scraping and setting up a MongoDB database

…

(Running the app)

Profit..!

Latest Articles

Click the button below to retrieve the latest articles about digial economy from the frequently sourced references.

To visit the website, click the company image.
To read the article, click the title of each article.

[Search]

Shaping the Future of Digital Economy and New Value Creation ...

Currently, about 50% of the world's population does not currently participate in the digital economy at all – and growth in internet adoption is slowing. The G20's ...

Powering the digital economy

The economics of energy are changing: cheaper storage is bending the electricity cost curve, giving a boost to charging stations. Utilities meanwhile are refining... strategies and raising their digital game.

How Technology is Disrupting the Construction Industry

What Big Consumer Brands Can Do to Compete in a Digital Economy

Companies like P&G need to adapt to compete with the likes of Amazon.

Google Pay Is Evolving Into A Platform To Grab A Slice Of India's Growing Digital Economy

Thank you~!