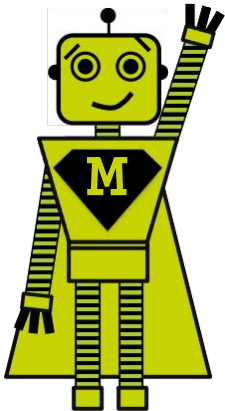


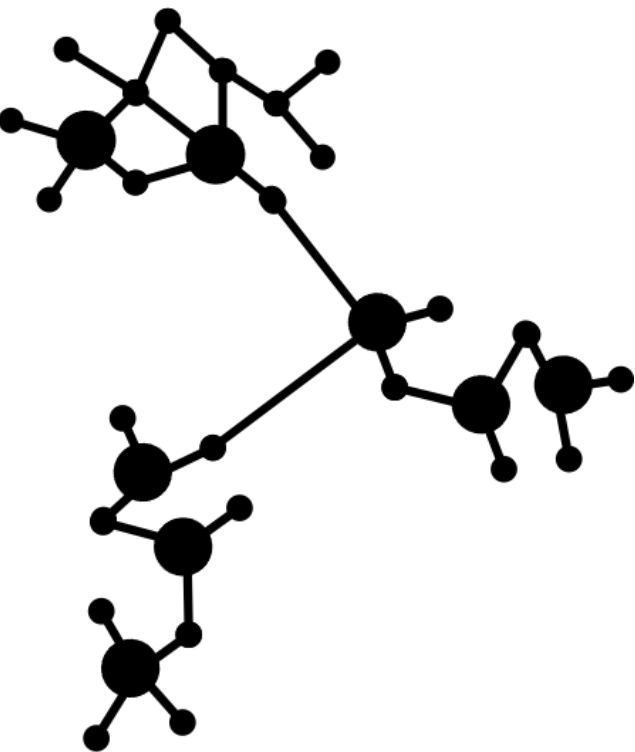
## > Introduction to linked (meta)data and machine-actionability

> Nikola Vasiljevic, DTU Wind Energy

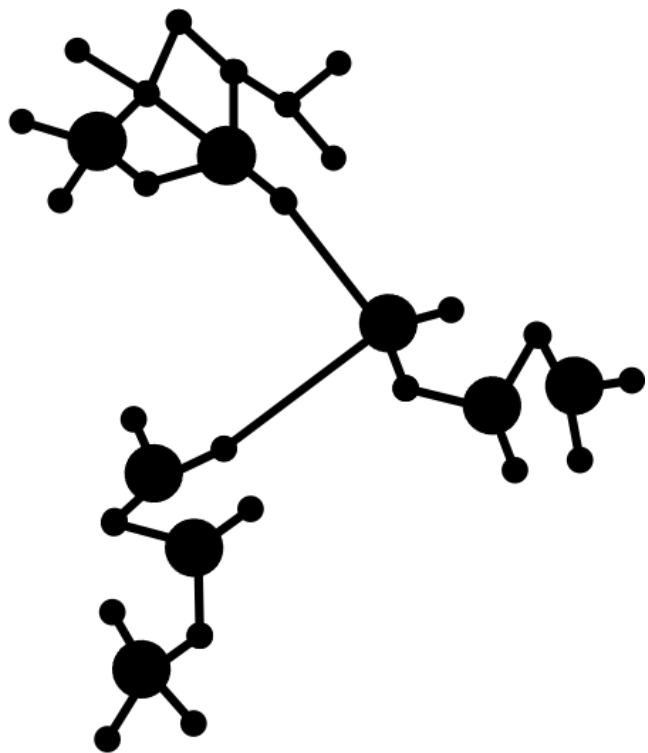
# Hey, this is MetaManMachine!



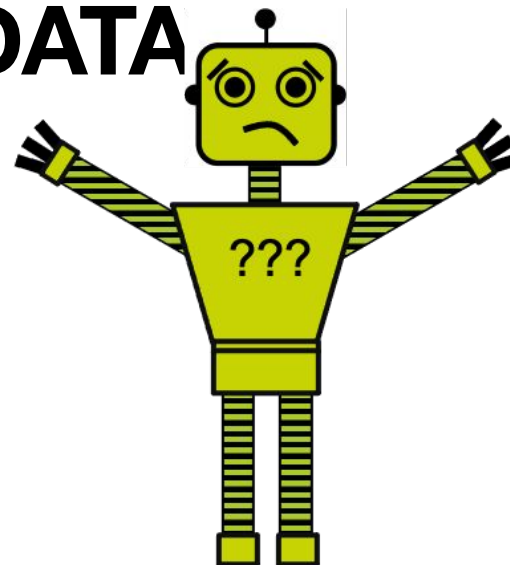
<http://doi.org/10.5281/zenodo.4471098>



# LINKED DATA



# LINKED DATA



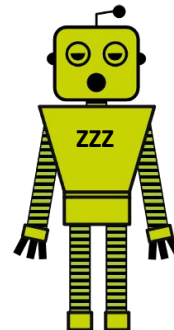
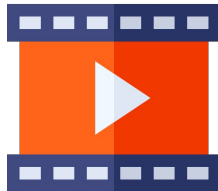
## Tables



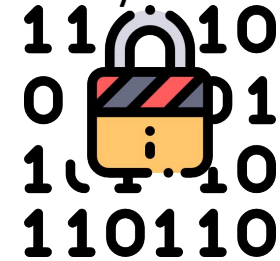
## Images



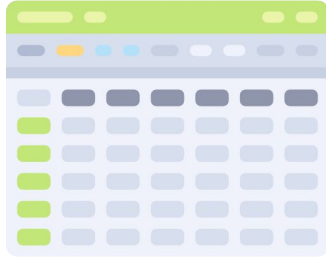
## Videos



## Binary data



Tables



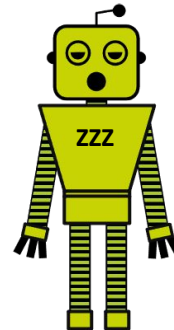
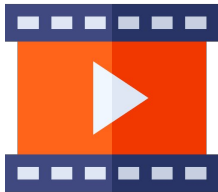
Images



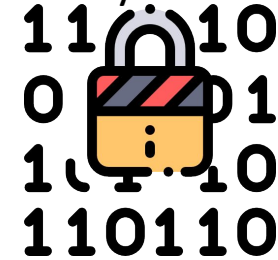
Web sites

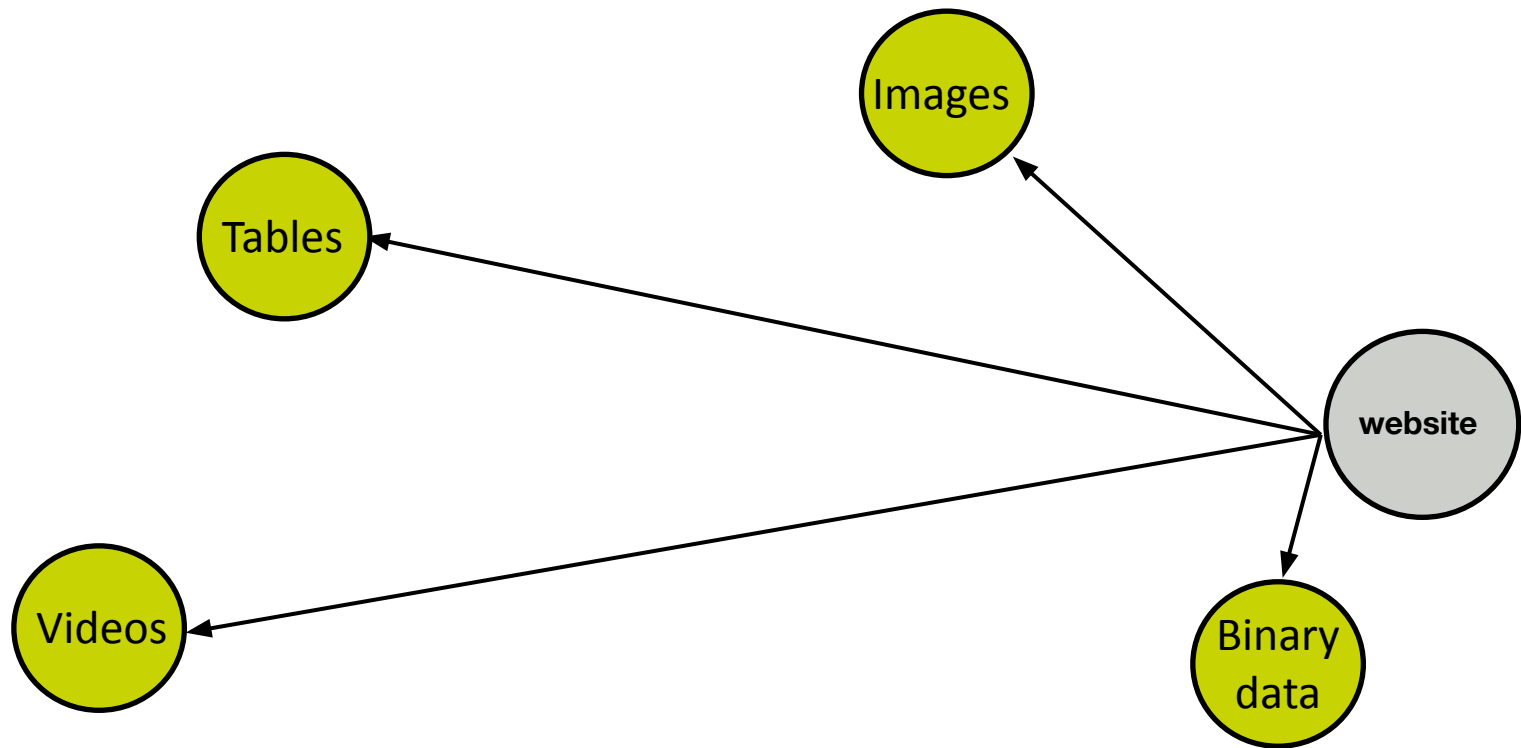


Videos



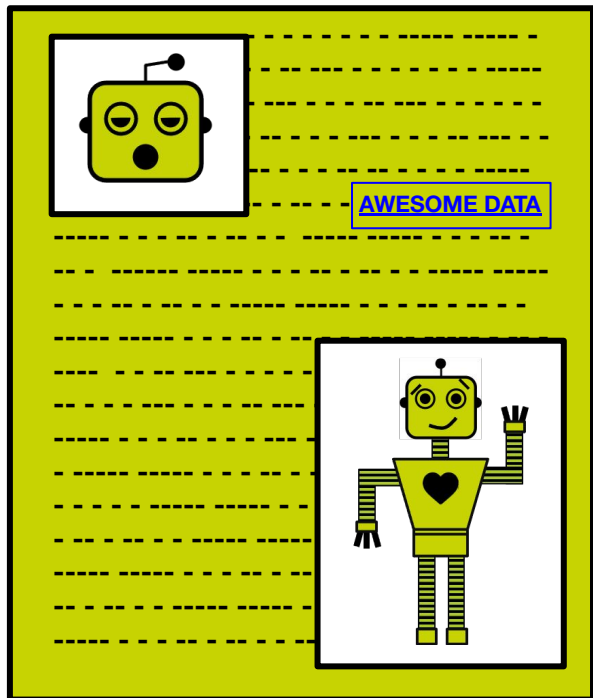
Binary data



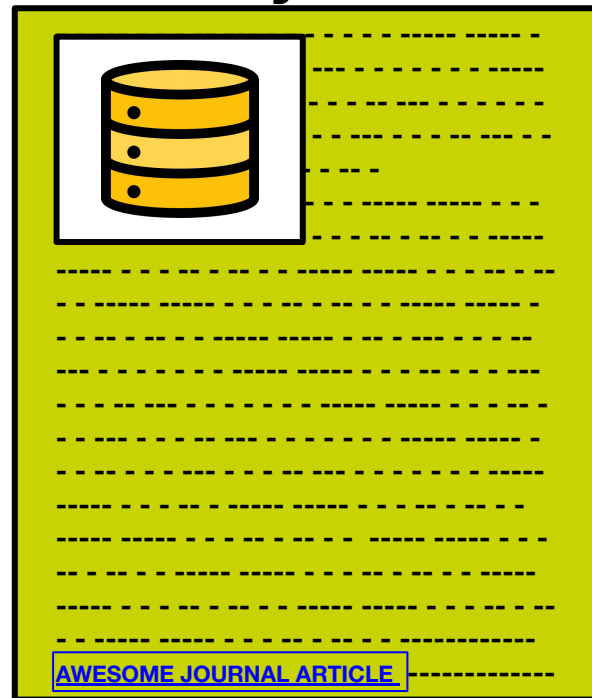


# THE WEB

website x



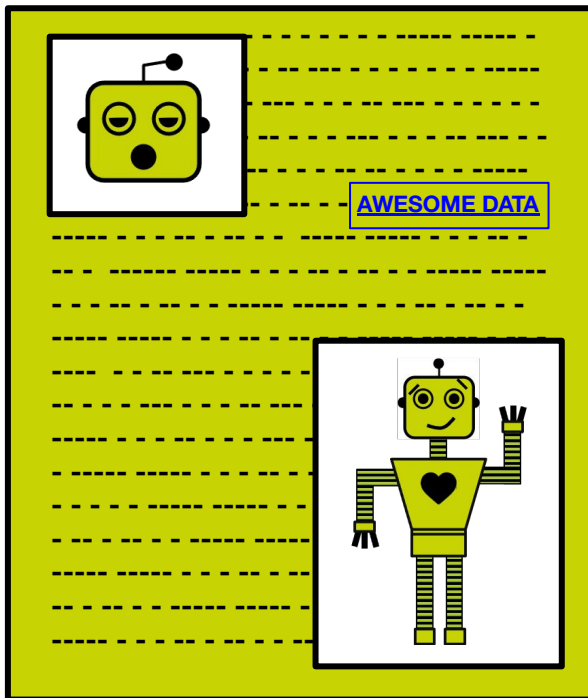
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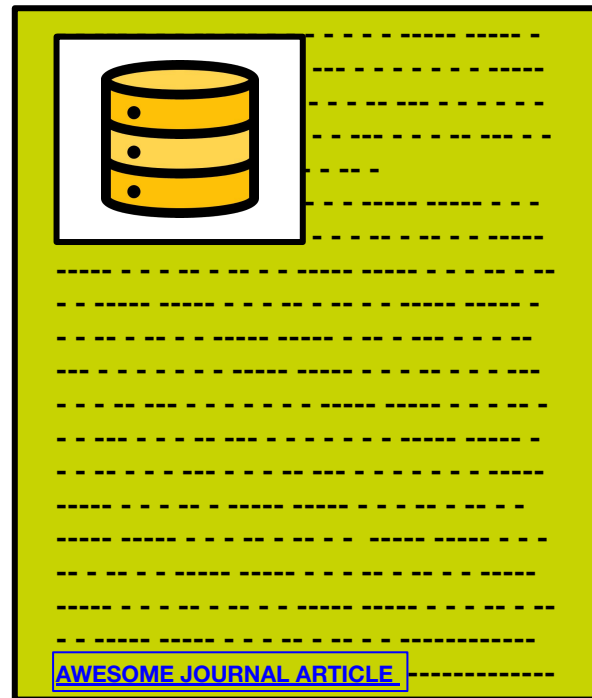


# THE WEB

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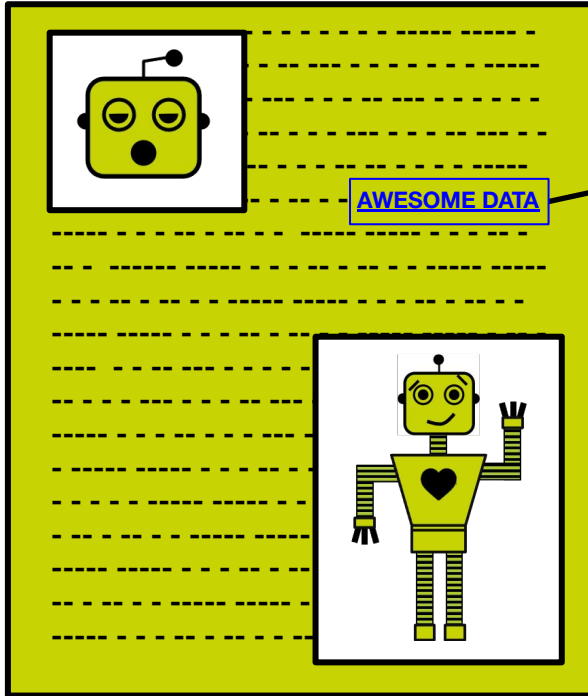


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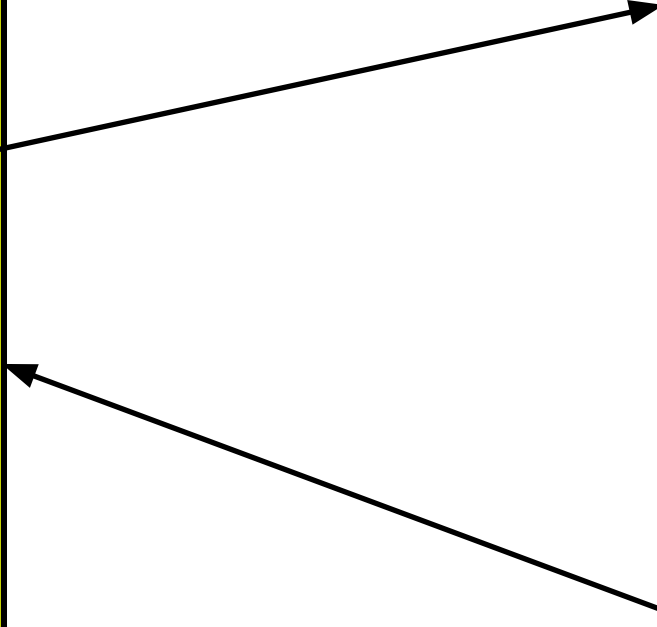
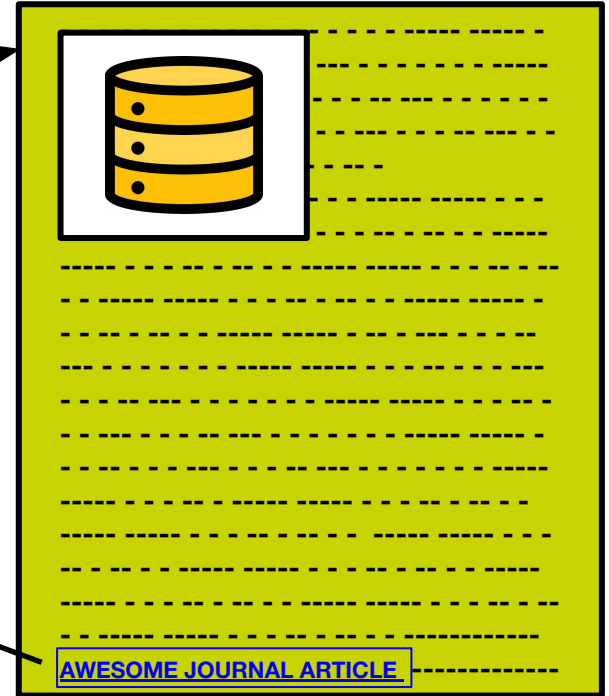


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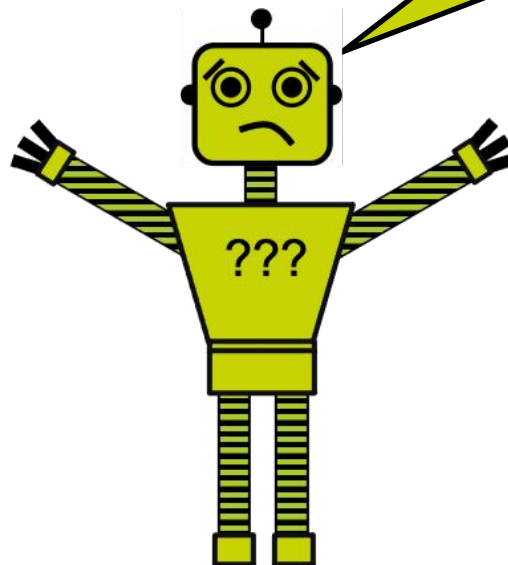
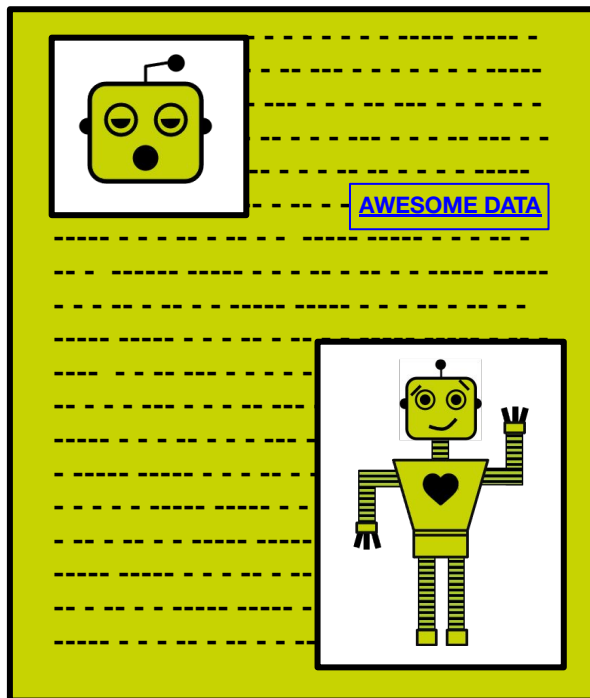
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<http://example.com/awesome-data>

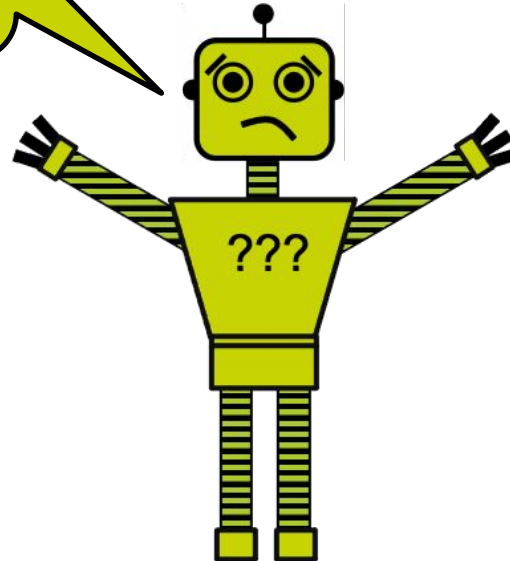


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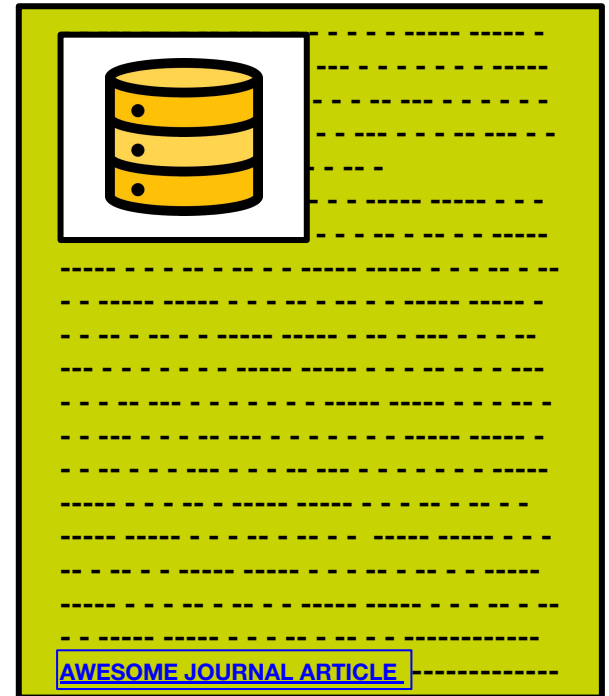


How should I know if this  
AWESOME DATA link  
leads to really awesome  
data?

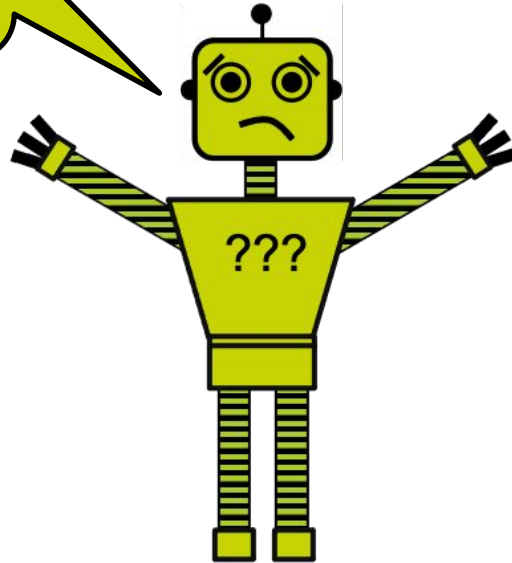
How can I use these data?



<http://example.com/awesome-data>



Please help me, so I can help you!!!



http://example.com/awesome-data



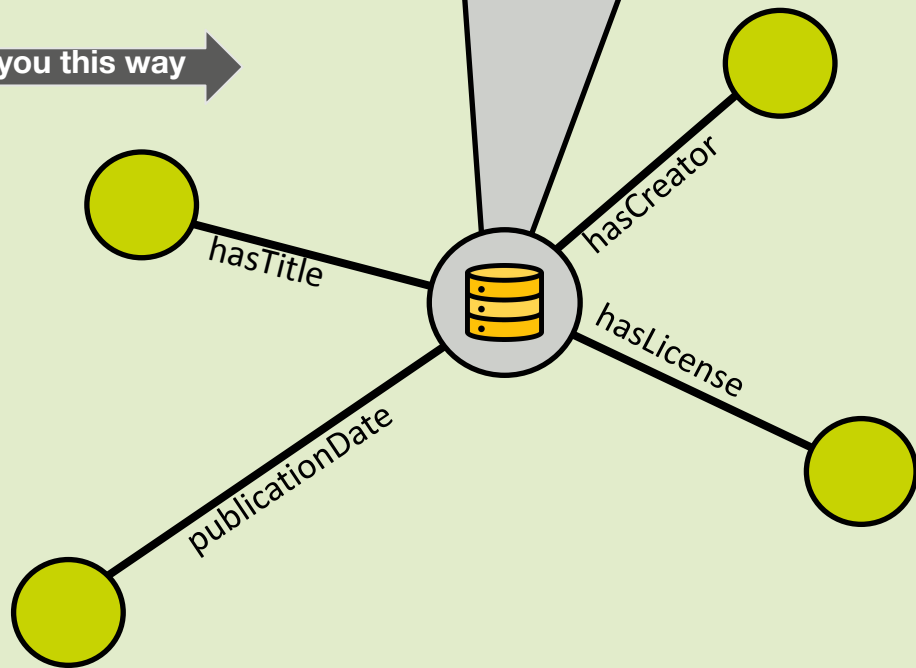
AWESOME JOURNAL ARTICLE



Understandable only by humans

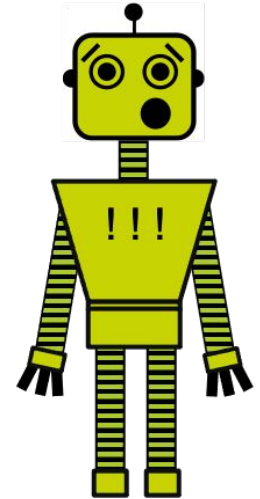
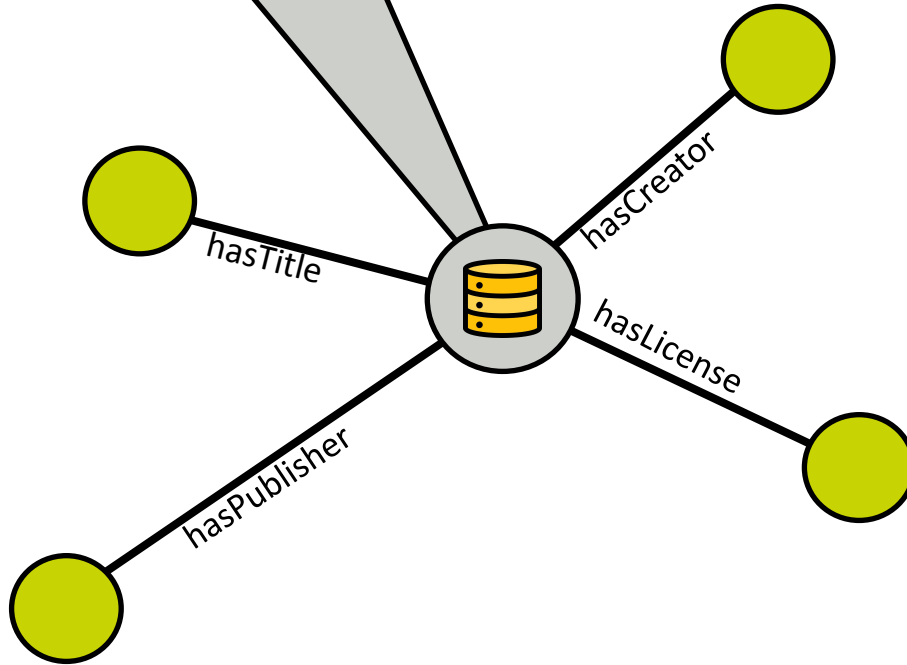
http://example.com/awesome-data

The course directs you this way →

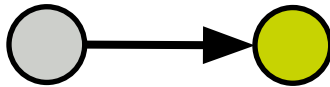


Understandable by humans and machines

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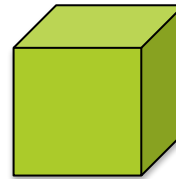


LINKED DATA



**APPROACH**

JSON-LD



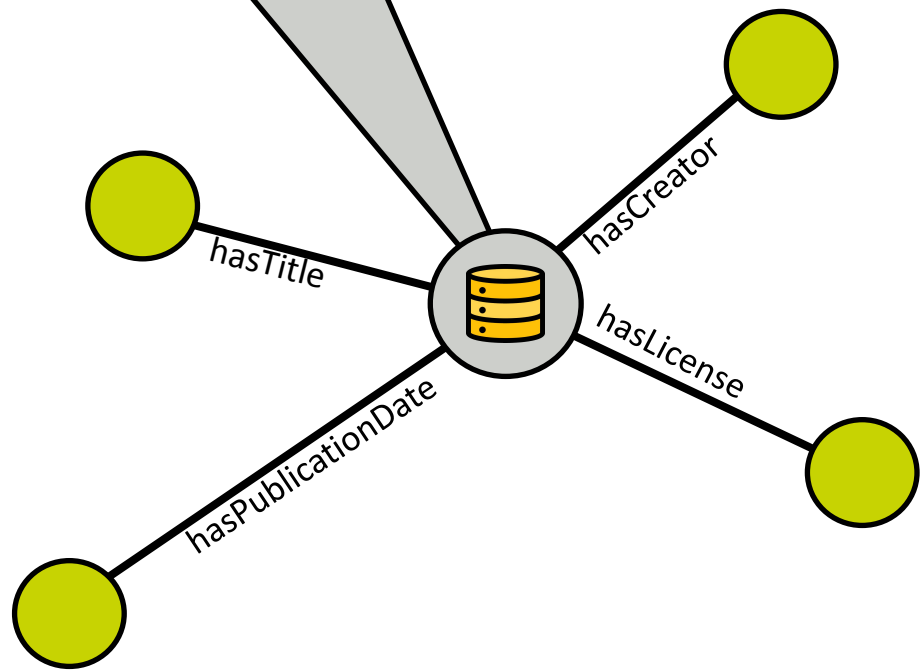
**FORMAT**



# Why LINKED DATA and JSON-LD?

- > **LINKED DATA** builds upon standard Web technologies such as HTTP and URIs/IRIs, but rather than using them to serve web pages for human readers, it extends them to share information in a way that can be read automatically by machines. This enables data from different sources to be connected and queried.
- > **JSON-LD** is a lightweight Linked Data format. It is easy for humans to read and write. It is based on the already successful JSON format and provides a way to help JSON data interoperate at Web-scale. JSON-LD is an ideal data format for programming environments, REST Web services, and unstructured databases such as Apache CouchDB and MongoDB.

<http://example.com/awesome-data>



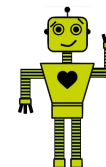
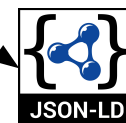
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Creator	Robert
Publication Date	22-01-2021
License	CC-BY-NC-ND
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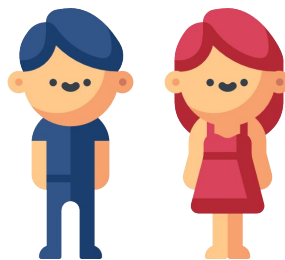
The course directs you this way

Property	Value
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Creator	Robert
Publication date	22-01-2021
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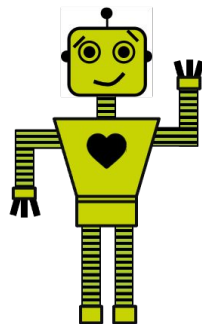
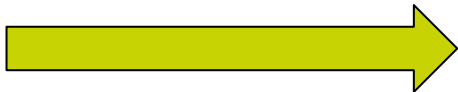
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Property	Value
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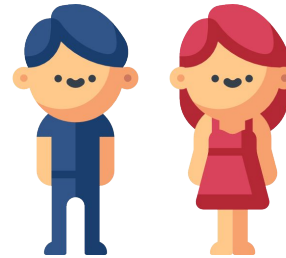
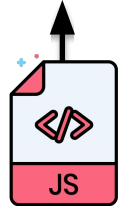




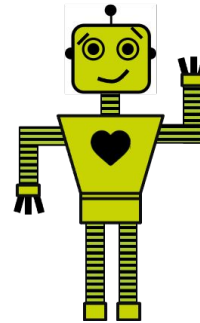
humans



machines



humans



machines

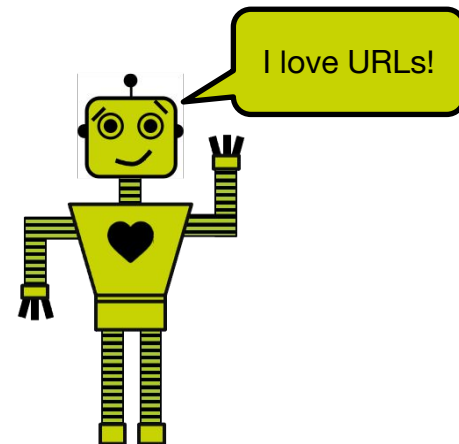
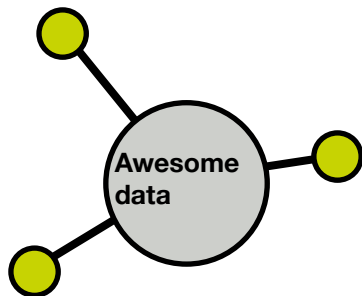
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<http://example.com/awesome-data>

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<https://orcid.org/xx-yss-ss>

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Property	Value
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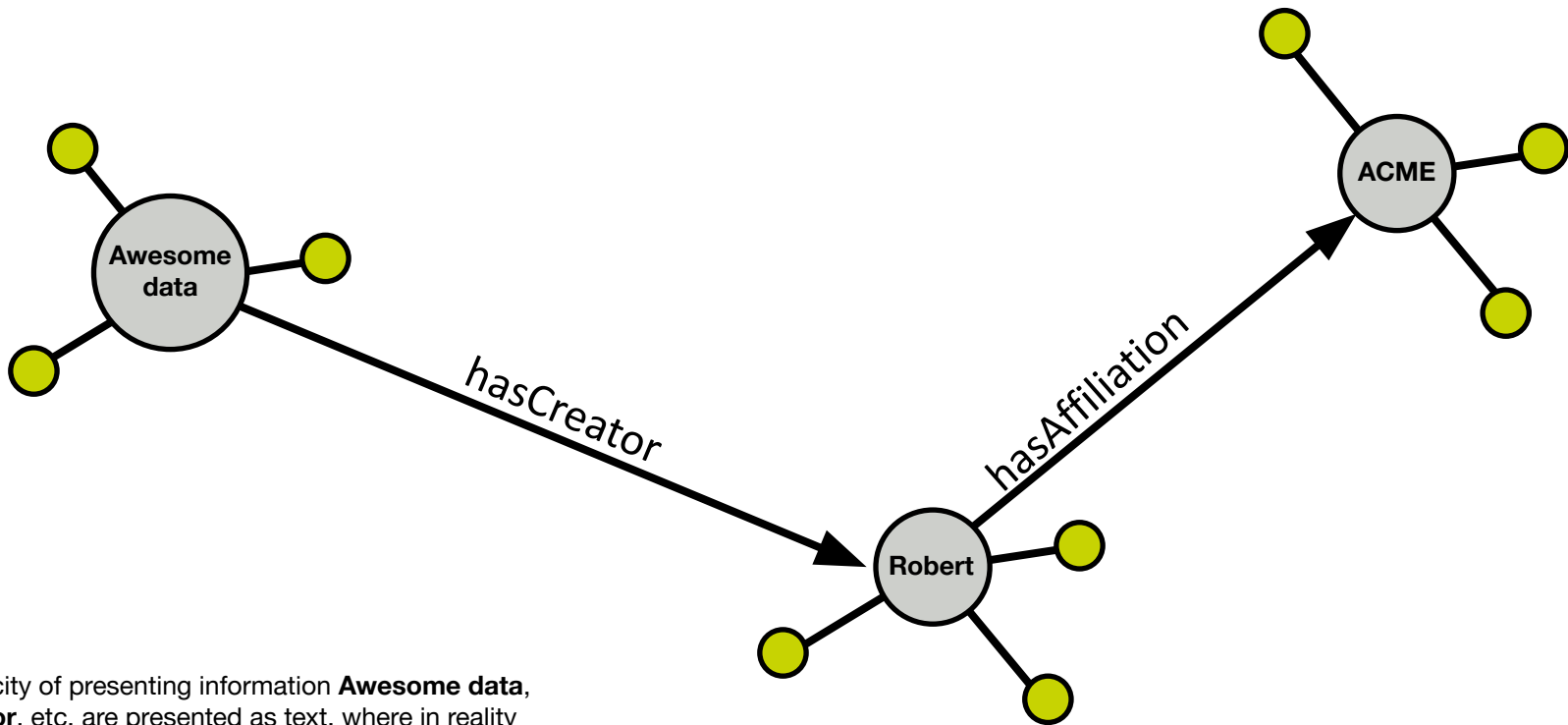
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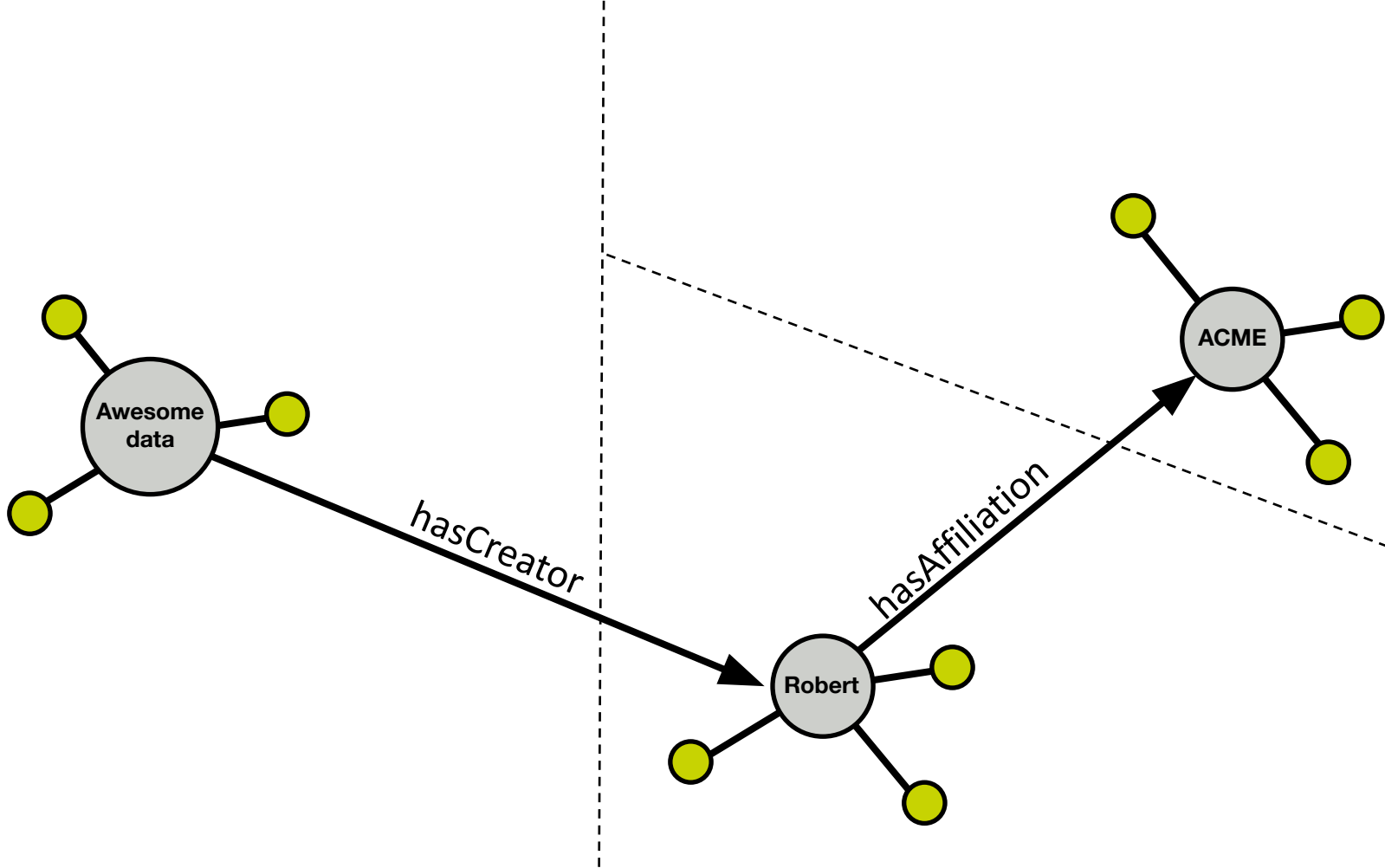
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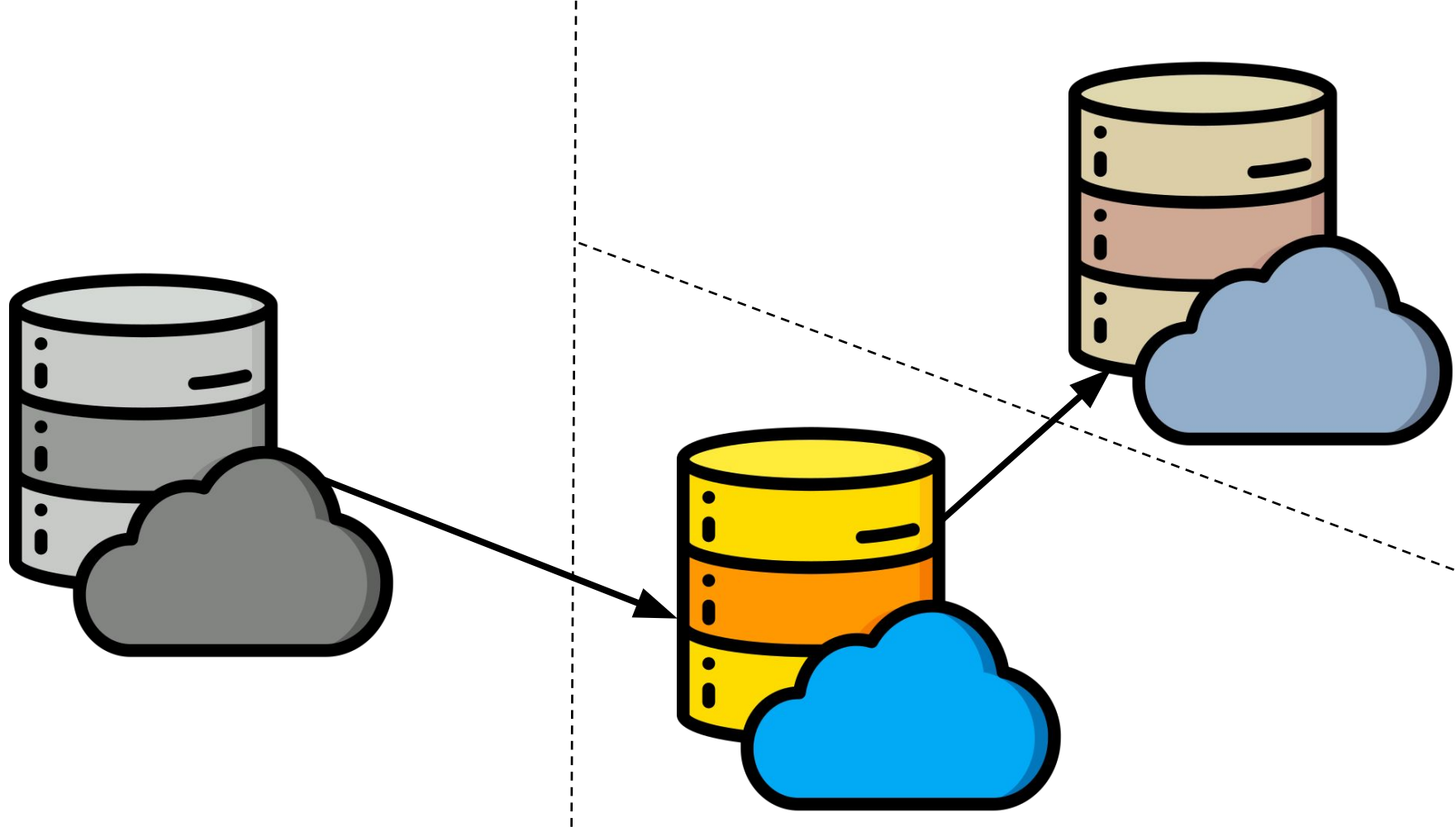


Understandable by humans and machines



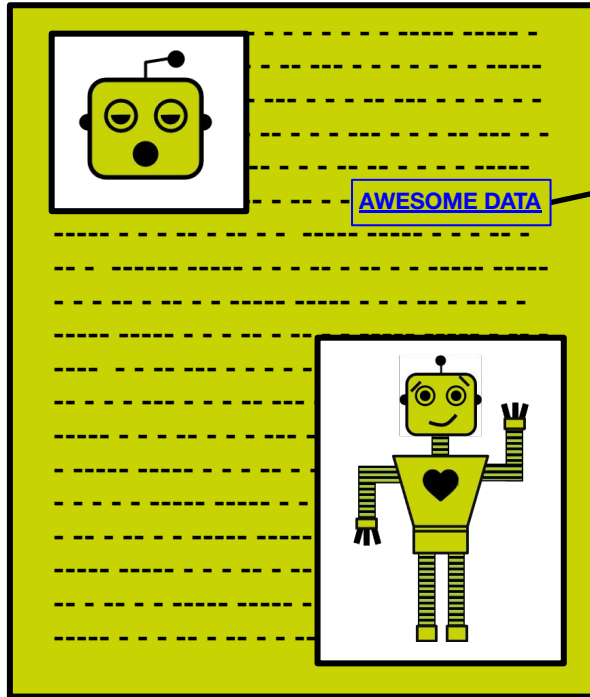
For simplicity of presenting information **Awesome data**, **hasCreator**, etc. are presented as text, where in reality they are LINKS!!!



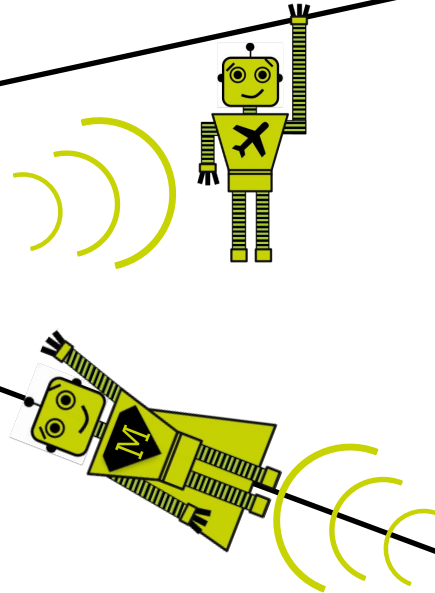
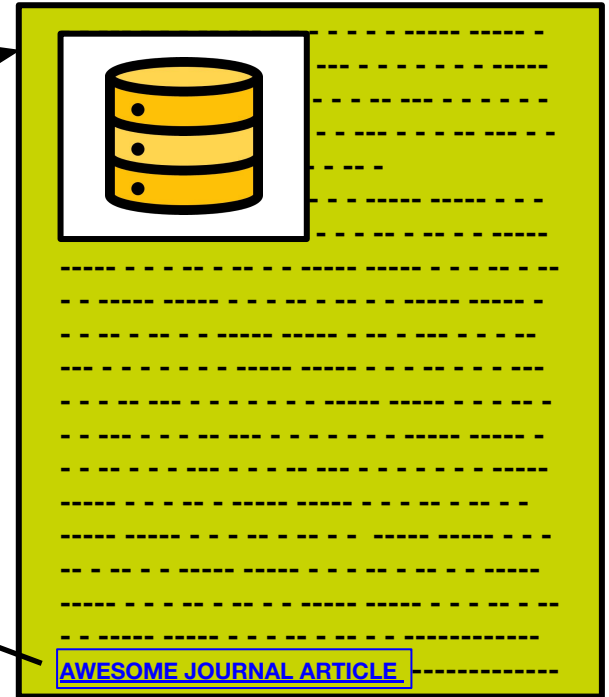


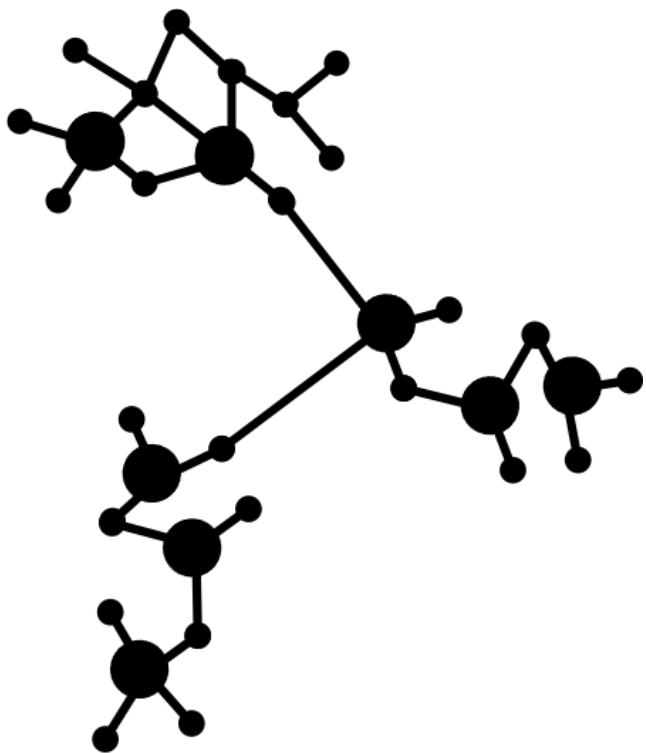
# WEB based on LINKED-DATA

<http://example.com/awesome-article>

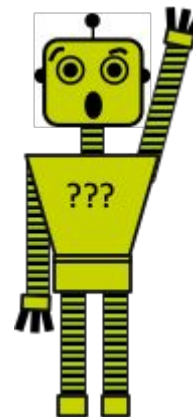


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# QUESTIONS???



# CREDITS



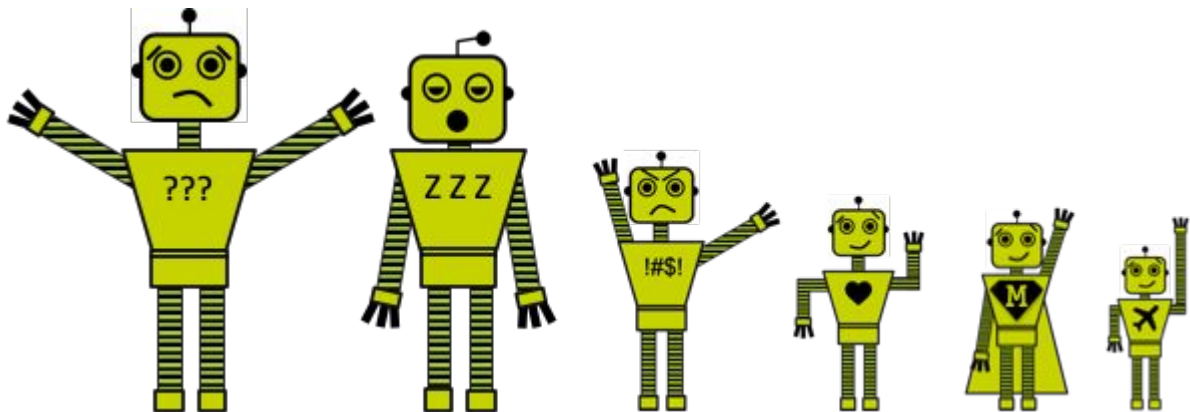
# Source of graphical material for slides - MetaManMachine

Vasiljevic, Nikola. (2021).

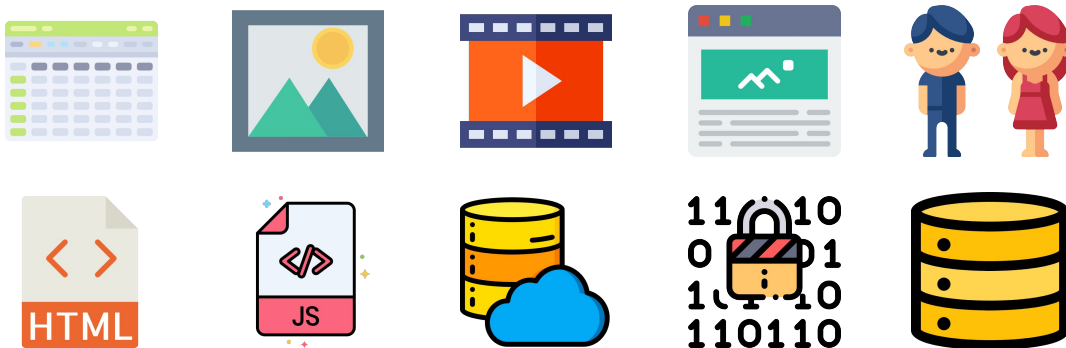
MetaManMachine. Zenodo.

<http://doi.org/10.5281/zenodo.4471098>

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# Source of graphical material for slides - Icons



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