A Construction Classification System Database for Understanding Resource Use in Building Construction

Welcome to the Construction Classification System Database for Understanding Resource Use in Buildings!

This is a database that contains data on the construction material quantities for buildings that are classified based on UniFormat and MasterFormat (CSI and CSC, 2010, 2016). The ontology developed for this database uses UniFormat in conjunction with MasterFormat for organizing and storing the building material data.

The initial database version is created by the research team supervised by Prof. Shoshanna Saxe at the University of Toronto and published in (Guven et al. 2021). The publication describes the dataset and the associated methods and details.

Content

- · Guidelines on contributing data are provided in Guidelines.pdf
- The database is described, and the meaning of variables are provided in codebook.pdf and the codebook.csv.
- Tabular description of the variables in the database are provided in codebook.csv.
- The database is provided in dataset.csv

Contributing

We encourage use of the database and contributions and further extensions by users. Please refer to the guidelines and codebook for contributions to the database and using the data.

Database structure

For understanding the database structure and variables in the dataset, please read the publication and see the codebook for more details.

Citation

The dataset and the ontology have been documented in the following publication: (Guven et al. 2021). The paper should be cited as: Guven, G., Arceo, A., Bennett, A., Tham, M., Olanrejawu, B., Olson, A.W., Saxe, S. "A Construction Classification System Database for Understanding Resource Use in Building Construction". Submitted to Scientific Data, Nature.

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The following people contributed to the creation of the original database and the ontology published in (Guven et al. 2021):

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- Shoshanna Saxe

References

- CSI and CSC. (2010). *UniFormat A Uniform Classification of Construction Systems and Assemblies*. Constructions Specification Institute (CIS) and Construction Specifications Canada (CSC).
- CSI and CSC. (2016). *MasterFormat Numbers & Titles* (pp. 1–186). pp. 1–186. Constructions Specification Institute (CIS) and Construction Specifications Canada (CSC).
- Guven, G., Arceo, A., Bennett, A., Tham, M., Olanrejawu, B., Olson, A.W., Saxe, S. "A Construction Classification System Database for Understanding Resource Use in Building Construction". Submitted to Scientific Data, Nature.