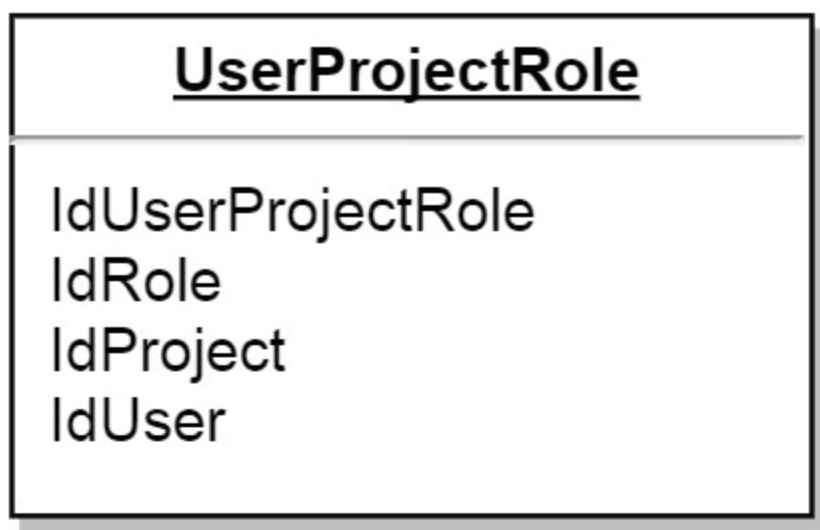
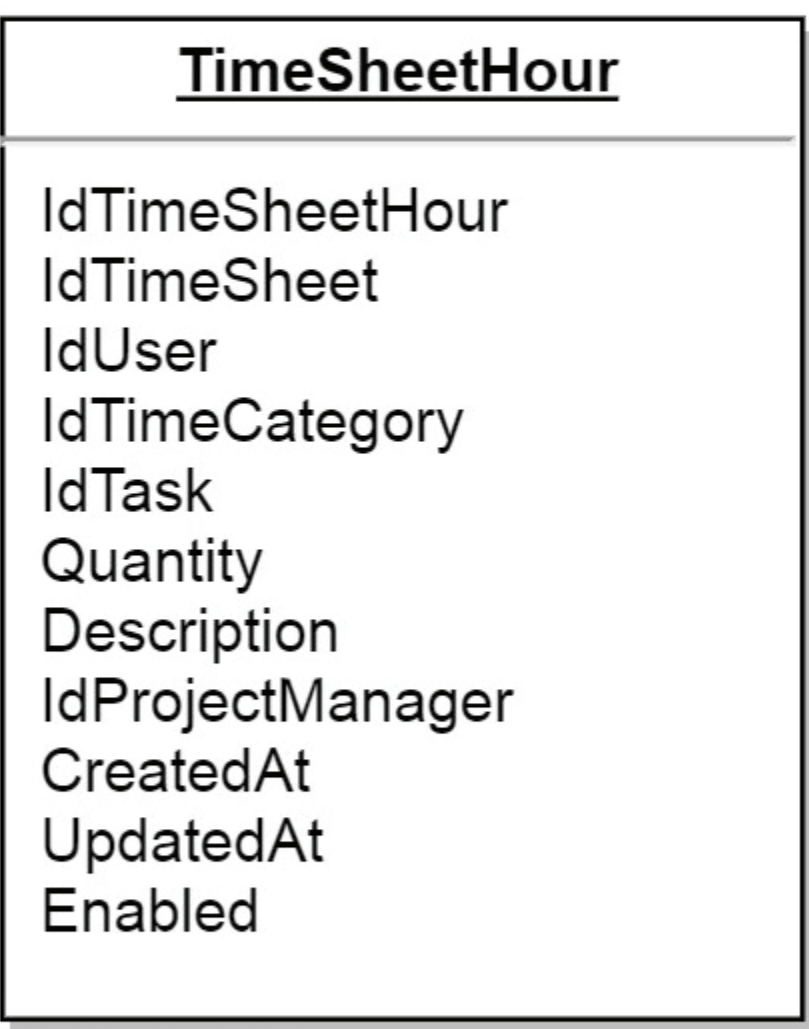
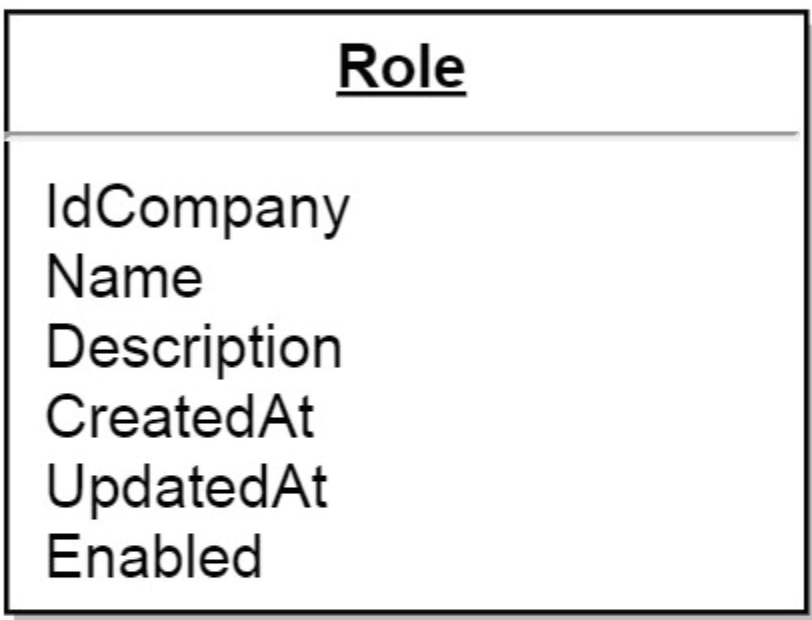


UML to JSON parser

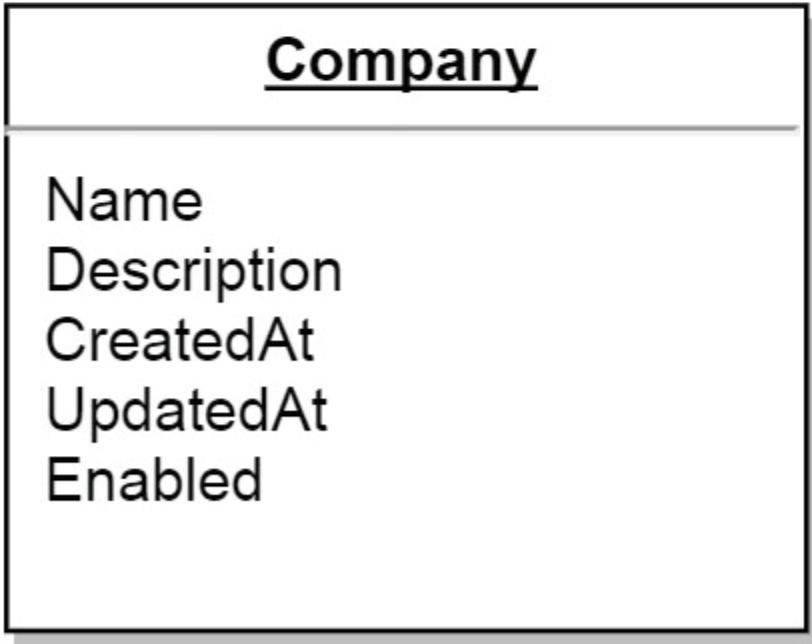
Tool for importing image of UML objects
and retrieving their JSON description



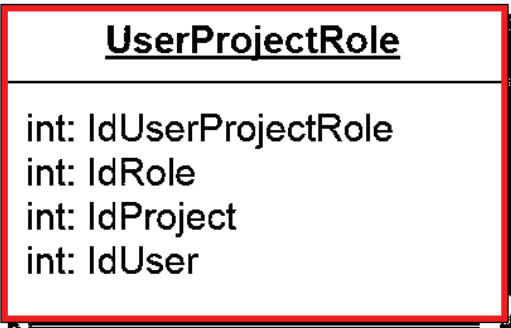
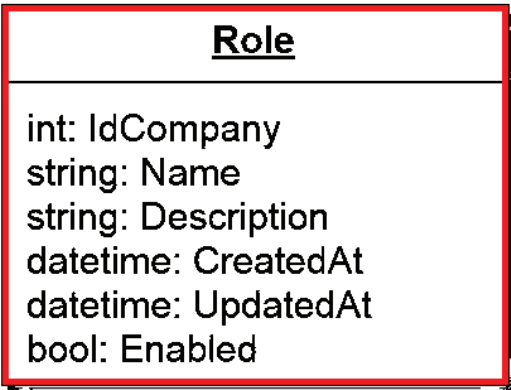
Any image from draw.io schema can
be used



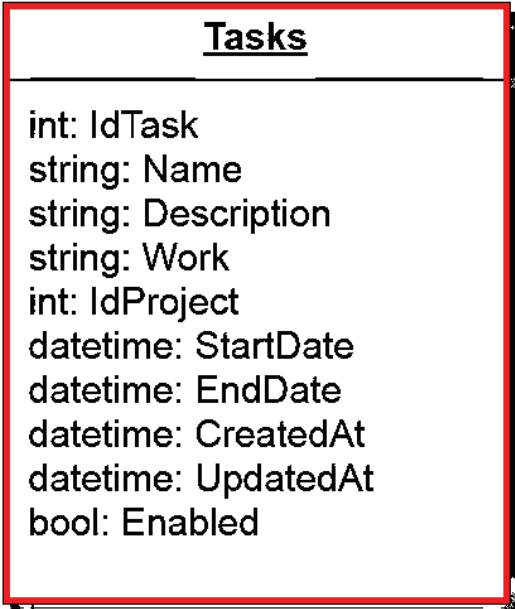
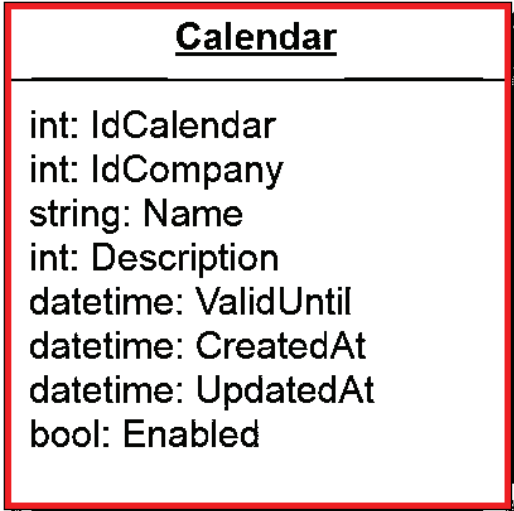
For better results, we use white
background in our entities, and no
background grid



Relations between tables are not
supported by UTJ

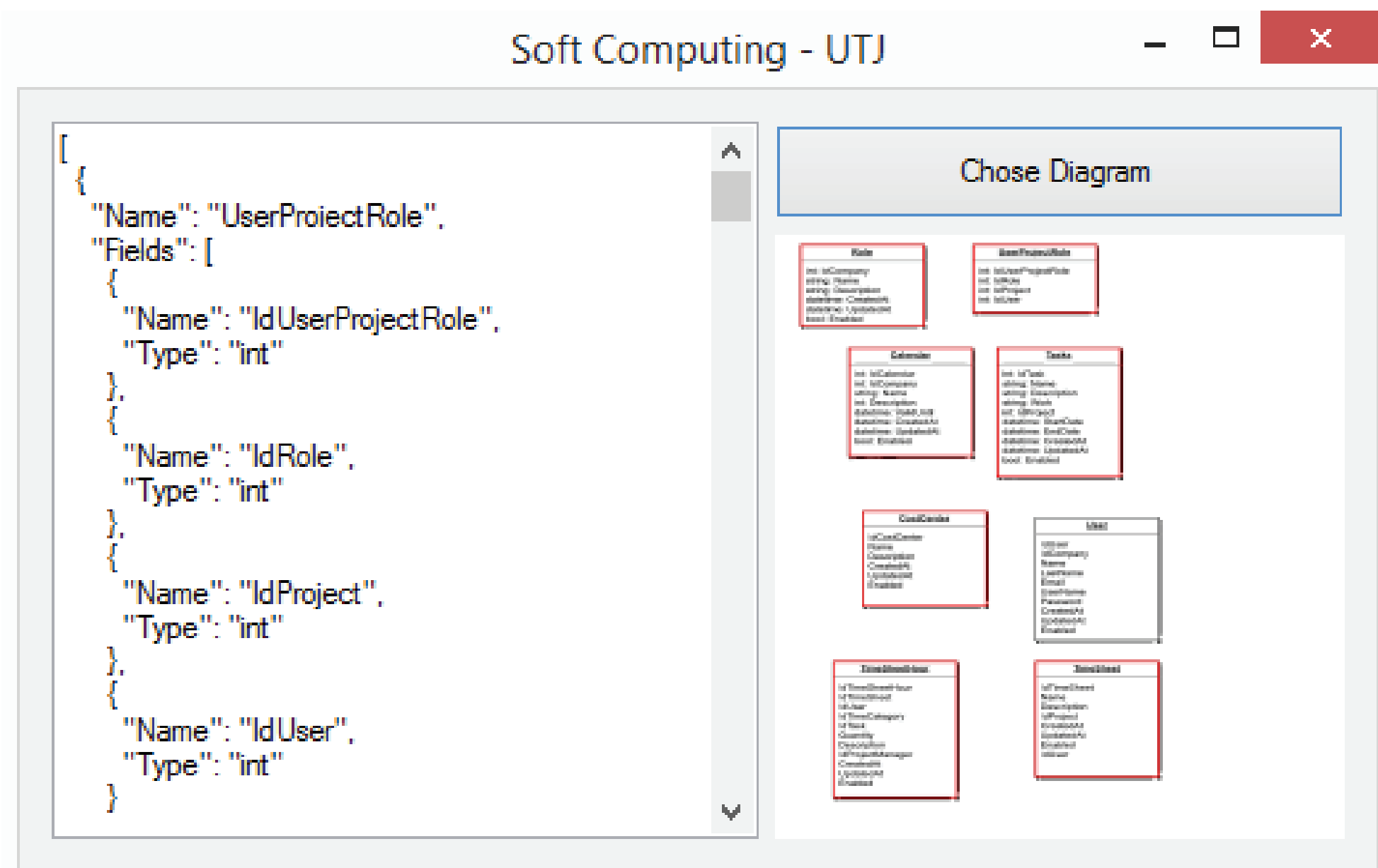
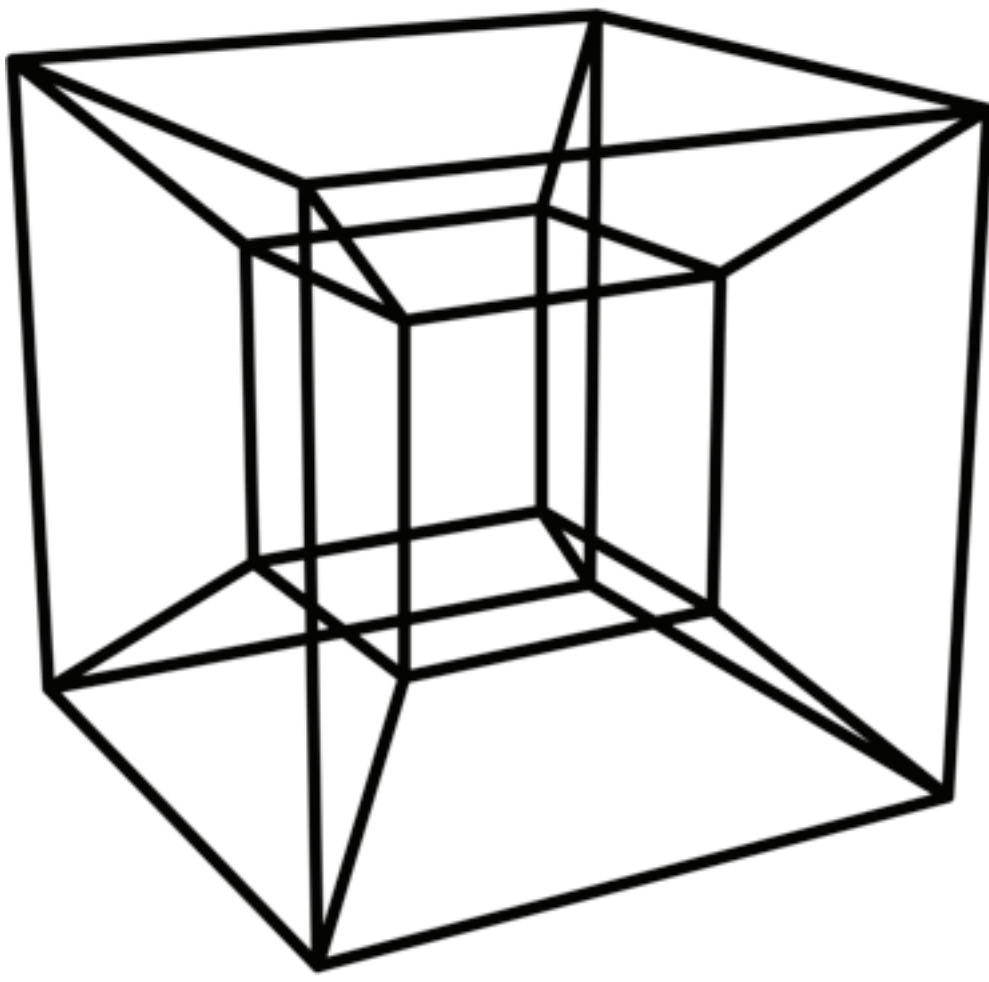


AForge.NET library is used for table
extraction from the diagram image



Each image is pre-processed with
Grayscale and Bradley Local Thresholding
filter, both provided by AForge.NET

Every table is separately processed by Tesseract
library. Pretrained software extracts the text from the
image and formats it as JSON.



As a result, we have a software with a
86,7% precision with tests
performed on 40 test images.

As a validation method, we check
number of recognized entities,
number of recognized columns and
accuracy of entity and column names.