We want a program in JavaScript or C# that reads data from a JSON file (specific format) and exports data to Microsoft Excel format. The JSON file has nested formatting with multiple objects and nodes. We want the Excel file to include the following worksheets: Note: ignore all "id" properties during import. For example "id" or "unitId" or "consistencyDescriptorId" etc.

Note: please note the program should be able to automatically read and write all properties under each node because in the future we may add or remove to the properties.

**- Project:** put all properties of the "project" node in this worksheet. Each property name becomes a column. Write values below the column-header row. How to handle "extraTags" node? add "name" of each record under this node as a separate column in "Project" worksheet.

All of the following worksheets use the data under the "**boreholes**" node:

**- Test Holes:** this worksheet lists all the top-level data under each object in "boreholes" array.

Note: add these properties from the "drillingGroundwaterLevels" node and add them as 2 more columns in this worksheet: "groundwaterDepth" and "groundwaterElev"

Note: add a column "progressStatus" which brings value of "name" property from the "progressStatus" node. Ignore the other properties in "progressStatus" node.

Note: for "completionNotes" node data, add its properties as separate columns to this worksheet.

Note: for "sptHammer" node, add its properties as separate columns but for column-header text use "SPT "+"name", for example "SPT type"

**- Samples:** this worksheet lists all the data under the "samples" node. However, the first column of this worksheet should be "Test Hole" which carries the value of the "name" property of the borehole object it belongs to. How to deal with data of "labTests" node? add all items of sub-nodes (e.g "indexTests") as a separate column in Samples worksheet.

**- Field Tests:** this worksheet lists all the data under the "fieldTests" node.

**- Comments:** this worksheet lists all the data under the "comments" node.

- Stratigraphy: this worksheet lists all the data under the "stratigraphy" node. Note: ignore "poorlyIndurated" node, "advanced" node, "components" node, "drillingObservations" node, "interimChanges" node

- Drill Runs: this worksheet lists all the data under the "drillruns" node.

**- Discontinuities:** this worksheet lists all the data under the "discontinuities" node.

- Drilling Details: this worksheet lists all the data under the "boringMethods" node.

**-Piezometers:** this worksheet lists all the data under the "piezometerData"/"piezometer" node.

**- Backfill:** this worksheet lists all the data under the "piezometerData"/"backfill" node. Please ignore the "boreholeSurveys" and "photos" nodes

Please change name of worksheet "Test Hole" to "Test Holes"  
Can we set a global minimum column width of 8?

For all column names can we process them before writing Excel file to:

1) separate the words based on first capital letter in string. For example "fromDepth" change to "From Depth"  
2) make first letter of all column names capital, for example "date" changes to "Date"  
3) any column that its name includes "depth" (not case sensitive) please add " (ft)" or " (m)" to the end of column name: if the Project.unitSystem was "Imperial" use " (ft)" otherwise use " (m)".  
4) add the same " (ft)" or " (m)" to these columns in Test Holes worksheet: *groundwaterDepth* and *groundwaterElev*

**Test Holes worksheet:**  
- can you move the *groundwaterDepth* and *groundwaterElev* columns to after the "depth" column?  
- add string of *project.crsMeasurementUnit* in ( ) to the "elevation" column header text. For example "Elevation (**ft**)"

**Stratigraphy worksheet:**  
- make "*description"* column width to 80, and turn on wordwrap for this column  
- don't need *dataEntryMode* column

**Drilling Details worksheet:**  
- make "*notes*" column width to 50, and turn on wordwrap for this column  
- "instrument" column is true/false. Can you make it checkbox?

**Discontinuities worksheet:**  
- make "*infillType*" and "*infillCharacter*" and "*infillThickness*" columns width to 32, and turn on wordwrap for these columns  
- "instrument" column is true/false. Can you make it checkbox?

**Drill Runs worksheet:**  
- change column name "totalLength" to "Total Length of >4 inch Segments"

**Comments worksheet:**  
- change "description" column width to 50

**Field Tests worksheet:**  
- there is a problem with the way we are showing this data in the table. Each type of field test has several data columns (e.g. N60,N1,N2,N3,N,N4) and each of there are several rows of data for each field test. I have attached a screenshot of how data is tabulated in our web app.

In Sampels worksheet ignore the "typeIconUrl" column  
In Stratigraphy worsksheet we are missing the "geologicUnit" and "classificationSystem" nodes

In Drill Runs can we add " (%)" to the column-header name of these columns: rqdRmu, rqdCoreLength, rmr, tcr, scr, tmr

In Drill Runs can we add this to the end of column-header names for totalCoreRecovered and totalLength columns: if project.unitSystem was Imperial add " (in)" otherwise add " (cm)"

In Piezometers worksheet please:

don't show column endCapTypeNumber  
can we make installedStickup a checkbox?