

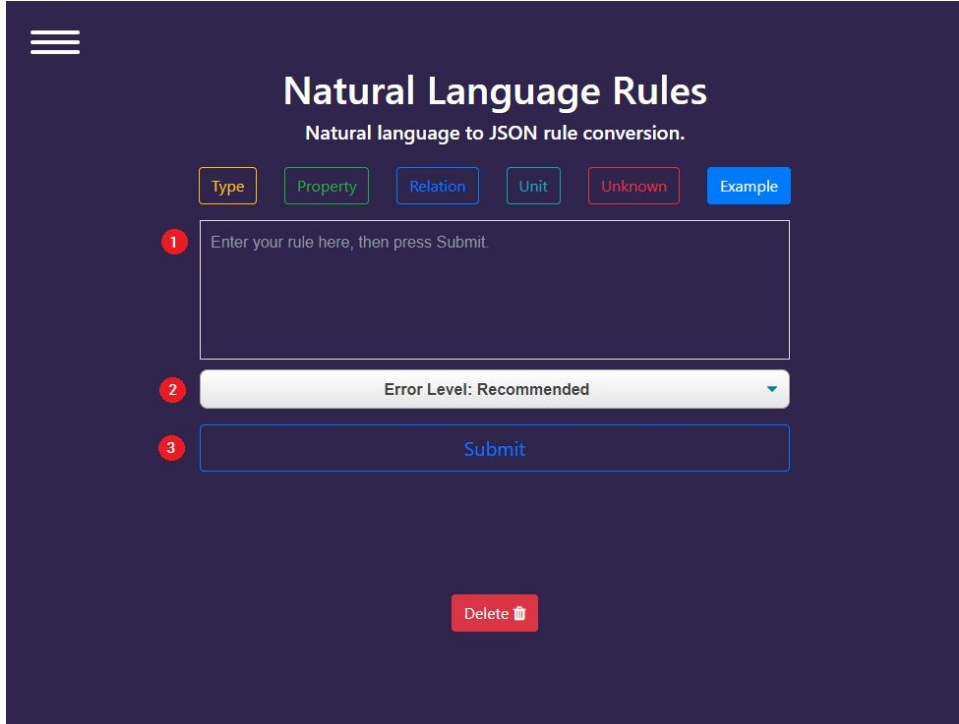
# Natural Language Rules

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Quick Start Guide

# Main Site Functionality

- (1) The text field box for inputting natural rule language. Type your rule in here.
- (2) This box will give you a dropdown list of error levels to choose from, that applies to the rule you are typing in.
- (3) When you have typed out your rule and selected the appropriate error level, you should then hit submit to generate a translation.



The screenshot shows a web interface titled "Natural Language Rules" with the subtitle "Natural language to JSON rule conversion." At the top left is a hamburger menu icon. Below the title are five buttons: "Type" (yellow), "Property" (green), "Relation" (blue), "Unit" (teal), and "Unknown" (red), followed by an "Example" button (blue). A large text input field is labeled with a red circle and the number 1, with the placeholder text "Enter your rule here, then press Submit." Below the input field is a dropdown menu labeled with a red circle and the number 2, showing "Error Level: Recommended" with a downward arrow. Below the dropdown is a blue "Submit" button labeled with a red circle and the number 3. At the bottom right is a red "Delete" button with a trash icon.

# Example Translation

- (1) An example of a rule typed into the input text field. Types recognized by the processor will be coloured in using the colours shown above the box.
- (2) The rule generated by pressing “submit”.
- (3) The result of the processor translating its generated rule back into english. If this translation has the same meaning as the rule you submitted, it was translated correctly.

The screenshot shows a web interface for "Natural Language Rules" with the subtitle "Natural language to JSON rule conversion." At the top, there is a hamburger menu icon and a row of five colored buttons: "Type" (yellow), "Property" (green), "Relation" (blue), "Unit" (teal), and "Unknown" (red), followed by a blue "Example" button. Below these buttons is a large text input area containing the rule: "All windows should have a width of no less than 15 inch and a height of no more than 2 feet and is above a sink." The words "windows", "width", "height", "feet", and "above" are highlighted in yellow, green, blue, teal, and red respectively. To the left of the input area is a red circle with the number "1". Below the input area is a dropdown menu showing "Error Level: Recommended" with a downward arrow. Below that is a blue "Submit" button. Below the submit button are two numbered items. Item 2, marked with a red circle and "2", shows a JSON rule: "ALL Object0 = Window", "ANY Object1 = Sink", "(Object0 Width GREATER-THAN-OR-EQUAL 15.0INCH AND Object0 Height LESS-THAN-OR-EQUAL 2.0FEET AND Object0 and Object1 IsAbove EQUAL True)". Item 3, marked with a red circle and "3", shows the translated English rule: "For all Window objects and any Sink object, Window objects must have Width that is greater than or equal to 15.0 inch and Window objects must have Height that is less than or equal to 2.0 feet and Window and Sink must have the 'IsAbove that is equal to True' relation." At the bottom right is a red "Delete" button with a trash icon.

Natural Language Rules

Natural language to JSON rule conversion.

Type Property Relation Unit Unknown Example

1 All windows should have a width of no less than 15 inch and a height of no more than 2 feet and is above a sink.

Error Level: Recommended

Submit

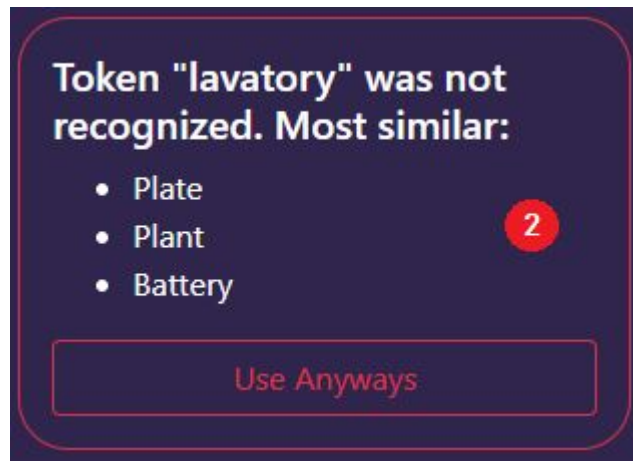
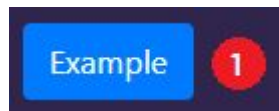
2 ALL Object0 = Window  
ANY Object1 = Sink  
(Object0 Width GREATER-THAN-OR-EQUAL 15.0INCH AND Object0 Height LESS-THAN-OR-EQUAL 2.0FEET AND Object0 and Object1 IsAbove EQUAL True)

3 For all Window objects and any Sink object, Window objects must have Width that is greater than or equal to 15.0 inch and Window objects must have Height that is less than or equal to 2.0 feet and Window and Sink must have the "IsAbove that is equal to True" relation.

Delete

# Translation Tips

- (1) The example button is useful for determining the format required for the rules. If you're having trouble getting the processor to properly translate your rule, try to copy the example's formatting.
- (2) If you use a term that is not recognized by the processor, it will attempt to find similar words that are recognized by it and suggest them to you. However, you may click the "Use Anyways" button to force the processor to treat the term as its own Type even though it does not recognize it.



# Ruleset Sidebar



Press here to create or modify your rulesets.

Press this button on the top left to pull up the ruleset management sidebar.

- (1) The X button will close the sidebar, once opened.
- (2) Click on a rule under the Rules category to view or edit a different rule. When you select a different rule, the appearance of the main page will be altered to display the newly chosen rule, which may then be edited.
- (3) This button below the rules, when clicked, will create a new rule and add it to the ruleset list.
- (4) These text fields may be edited to add a name and a description for your ruleset.
- (5) The “Export to JSON” button will allow you to take the ruleset you have been creating on the site and save it to your computer in JSON format. The “Import JSON” button allows you to select a file created with this Export button from your computer and load it into the website to edit or view. Beware: this will overwrite any ruleset you may be currently working on!
- (6) The delete button located underneath the rule itself may be used to remove the rule from the ruleset.

The screenshot shows the Ruleset management sidebar. At the top, there's a header 'Rules' with a dropdown arrow and a close button (X) labeled 1. Below the header is a list of rules: Rule1, Rule2, Rule3, and Rule4. A plus button labeled 3 is at the bottom of the list. Below the list are two text input fields: 'Ruleset Name' (containing 'My Ruleset Name') and 'Description' (containing 'This is a ruleset description.'). The 'Description' field has a red circle 4 next to it. At the bottom of the sidebar are two buttons: 'Import JSON' and 'Export to JSON'. The 'Export to JSON' button has a red circle 5 next to it.

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Delete