

### General - Logic

#### If... then

Implements a typical conditional statement. It allows you to follow your workflow through executing one of the two branches depending on the expression value (true or false). If the value is true, then it will execute the 'Yes' branch, otherwise the 'No' branch will be executed.

#### Do-while loop

Implements a loop that is executed when a specified condition is met. By default, the 'Assign value to variable' activity is added when using the 'Do-while loop' activity. It enables you to quickly set the behavior of the loop body; for instance, by modifying a counter variable. However, the 'Assign value to variable' activity is not mandatory to use and can be replaced by any other set of other activities. If the condition in the 'Do-while loop' activity is true then the 'Yes' branch is executed, otherwise the robot will execute the 'No' branch.

#### Assign value to a variable

Enables you to assign a desired value to a variable.

#### Delay

Waits a specified amount of time before executing the next step in the workflow.

#### Subprogram

Invokes a subprogram: a separate file with a workflow constructed in the 'Studio Pro'. The 'Error' branch is implemented to add some additional logic if an exception has occurred inside the subprogram.

#### Log

### General - Logic (cont)

Outputs the given information to a text file.

#### Console log

Prints a value to the 'Studio Pro' console.

#### Open Application

Opens a specified application

#### TODO

An activity with a changeable text for descriptive purposes only.

### General - Human in the loop

#### Input dialog

Opens an input dialog to allow the user input a text. The 'Save value to variable' activity.

#### User notification

Prompts a pop-up window with a specified text. The window closes either after pressing the button

#### Select file of folder

Selects file or folder through the Windows explorer

### OS Automation - Credentials

#### Get passwork

This function returns the password as a result. For computer and account security, all passwords should be stored only on your computer.

#### Get username

Returns the login corresponding to the selected credential from the "Credentials" tab in the settings.

### OS Automation - Files and Folders

#### Append to file

Appends text to a specified file.

#### Read text file

Reads the content of a text file. The 'Save value to variable' activity appears automatically when choosing the 'Read file text' activity. It automatically saves the value to a variable. However, the activity is not mandatory to use and can be removed from the workflow.

#### Copy file

Copies a content of one file to another or downloads a file from the specified URL. Both HTTP and FTP protocols are supported. If you copy to a file that doesn't exist, then the robot will create a new file automatically.

#### Create file

Creates a new file in the specified destination. The content of the new file can also be set.

#### Delete file

Deletes the specified file of any desired extension.

#### File found?

Checks if a specific file exists in the specified directory. If the file exists, then the 'Yes' branch is executed, otherwise the 'No' branch will be executed.

#### File information

Extracts information about a specified file. The 'Save value to variable' activity appears automatically when choosing the 'File information' activity. It automatically saves the value to a variable. The activity is not mandatory to use and can be removed from the workflow.



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### OS Automation - Files and Folders (cont)

#### Move file

Moves a file to a specified destination.

#### Overwrite file

Overwrites a text file by deleting the old content and replacing it with new content.

#### List directory files

Extract all files' names in a directory and stores them in an array. The 'Save value to variable' activity appears automatically when choosing the 'List directory files' activity. It automatically saves the value to a variable. However, the activity is not mandatory to use and can be removed from the workflow.

#### Create directory

Creates a folder by the specified path and name.

#### Zip files

Compresses specified files into a zip archive.

#### Unzip files

Extracts files from a zip-archive and places them to a specified folder.

#### File trigger

Waits for a specific event with files in a folder

### MS Office - Office 365

#### Read emails

Reads emails from a Microsoft account.

#### Send email

Sends an email using a Microsoft account.

### MS Office - MS Outlook

#### Read emails

Reads email messages from a specified Outlook account.

#### Send email

### MS Office - MS Outlook (cont)

Sends an email message from a specified Outlook account.

### OS Automation - System

#### Command Prompt

Implements the command prompt functionality.

#### Process found?

Checks if the specified process is running. If at least one instance of the process is running the bot will execute the 'Yes' branch, otherwise the 'No' branch will be executed.

#### Kill Process

Stops the specified process. If more than one instance of the process is running, all of them will be stopped

#### Shutdown computer

Logs the current user out, restarts, hibernates or shuts the computer down.

### OS Automation - Clip board

#### Read clipboard

Reads the clipboard content and saves it to a single file or multiple files (depending on the content of the clipboard). The files are automatically placed to the 'C:\Users\

#### Clear clipboard

Clears the clipboard content.

#### Copy to clipboard

Copies the given variable's value to the clipboard as a text.

### Web Automation - Web Browser

#### Open URL

Opens the browser and automatically navigates to the specified URL. To open the browser with the user settings, click the 'ElectroNeek Bot Runner' icon in the tray, select 'Settings', then click 'Browser' and select the 'Load user profile with cookies, extensions etc.' option.

#### Close browser

Closes the browser opened via the 'Studio Pro'.

#### Find IFrame

In the browser opened via the 'Studio Pro', searches for an iframe by the specified selector and saves the found result with a specific number. To interact with elements inside the iframe in the other activities from the 'Browser' section, the tab and iframe number must be specified.

#### Execute JavaScript

Executes JavaScript code on the opened page

#### Scrape Structured data

Allows you to set relations between elements with data you want to extract and performs scraping.

### Web Automation - Keyboard

#### Input to browser

Simulates a user input from the keyboard in the browser opened via the 'ElectroNeek Studio Pro'.

#### Send hotkey

Emulates sending keyboard shortcuts to a specific interface element.



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### Email

#### Read emails

Reads messages from an email starting from a specified date. The 'Save value to variable' activity appears automatically when choosing the 'Read emails' activity. It automatically saves the value to a variable. However, the activity is not mandatory to use and can be removed from the workflow.

#### Send email

Sends a message via an email.

#### Email trigger

Waits for a specific email.

#### For Each Email

Applies a set of actions to each email for the selected account

### Gui Automation - Machine vision

#### Click on image

Finds and clicks on the image on the screen.

#### Find image

Finds the image on the screen and returns an array of coordinates of the found matches (top left corner).

#### Take a screenshot

Takes a screenshot of the entire screen or active window and saves it to file.

#### Wait for image

Waits a specified amount of time (seconds) for the provided image to appear on the screen. If the image appeared then it will execute the 'Yes' branch, otherwise the 'No' branch will be executed. The activity reacts the same way in case multiple images are found.

### Gui Automation - App window

#### Maximize element

Maximizes the specified element if possible

#### Minimize element

Minimizes the specified interface element if possible

#### Activate element

Brings the specified element to the foreground

#### Close window

Closes a window by its selector or its child element

### Gui Automation - UI

#### Get element property

Extracts the value of the specified attribute in a selector. The 'Save value to variable' activity appears automatically when choosing the 'Get element property' activity. It automatically saves the value to a variable. However, the activity is not mandatory to use and can be removed from the workflow.

#### Get element value

Extracts the 'Value' attribute from a selector. The 'Save value to variable' activity appears automatically when choosing the 'Get element value' activity. It automatically saves the value to a variable. However, the activity is not mandatory to use and can be removed from the workflow.

#### Get position

Gets an element coordinates and size using the element's selector. The 'Save value to variable' activity appears automatically when choosing the 'Get position' activity. It automatically saves the value to a variable. The activity is not mandatory to use and can be removed from the workflow.

### Gui Automation - UI (cont)

#### Set element value

Changes the 'value' attribute of a selector

#### Element found?

Checks whether the indicated element exists on the screen. The element is identified through its selector. The 'Yes' branch is executed if the element exists, and the 'No' branch if it does not.

#### Wait for element

Waits a specified amount of time for the selected element to appear. The element is identified through its selector. If the element appeared then it will execute the 'Yes' branch, otherwise the 'No' branch will be executed.

#### Wait for vanishing

Waits a specified amount of time for the selected element to vanish. If the element vanished then the bot will execute the 'Yes' branch, otherwise the 'No' branch will be executed. If the element was not found at start of the activity then then an exception will be thrown.

### Gui Automation - Keyboard

#### Input to desktop app

Enters a text to a focused or an indicated through selector element. The text may contain special keys. To enter special keys from the keyboard, such as ~, %, ^, &, (,), +, you need to put these characters in curly braces, for example, {%}.

#### Send hotkey

Emulates sending keyboard shortcuts to a specific interface element.



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### MS Office - MS Word

#### Read Word file

Reads the content of a Word file. The 'Save value to variable' activity appears automatically when choosing the 'Read Word file' activity. It automatically saves the value to a variable. However, the activity is not mandatory to use and can be removed from the workflow.

#### Write Word file

Overwrites the content of a Word document. If the document doesn't exist, then the robot will create a new file automatically.

#### Appen to Word file

Appends data to a Word document. If the document doesn't exist, then the robot will create a new file automatically.

#### Replace words in template

Replaces words in double braces in a word file with the desired values

### MS Office - MS Excel file

#### Read Excel file

Reads the content of an Excel file. The 'Save value to variable' activity appears automatically when choosing the 'Read Excel file' activity. It automatically saves the value to a variable. However, the activity is not mandatory to use and can be removed from the workflow.

#### Write Excel file

Writes data to an Excel file.

#### Append row to Excel file

Adds a row to the end of an Excel sheet.

#### Insert/Delete Rows

Inserts or deletes a row on specified address

#### Read Excel Range

### MS Office - MS Excel file (cont)

Gets the value of the range from Excel file

#### Write Excel Range

Writes specified values to a specified range in Excel file

#### Read Excel Row

Gets the value the row from Excel file

#### Update Excel Row

Updates the value the row from Excel file

#### Read Excel Cell

Reads the value of a specified cell in an Excel document

#### Update Excel Cell

Updates the content of a specified value in an Excel document

#### Execute macro

Executes a .vbs macro in the specified Excel file. Make sure to enable the "trust access to the VBA project object model" option before using the activity.

#### Insert/Delete Columns

Inserts empty column or deletes a column on specified address

#### Read column

Gets the value of a column from Excel file

#### Append column

Add the column to the end of Excel file

#### Update column

Updates the column of Excel file

#### Sort range

Sorts range in Excel file by columns

### Gui Automation - Mouse

#### Click on element

Clicks on the specified interface element. The element is identified by its selector, which is generated automatically when hovering over the element.

#### Click on coordinate

Clicks on the screen-point located at the given coordinates. The reference point of the coordinates is located at the top-left corner, so the horizontal axis is directed from left to right while the vertical axis is from top to bottom.

#### Read checkbox state

Get the value of checkbox state

#### Set checkbox state

Set the checkbox state

#### Select list item

Selects an item from a drop-down list

### General - Block input

#### Block Input

Blocks user mouse and keyboard input commands so that the bot can perform its actions without

#### Unblock Input

Unblocks the user input when it was blocked by the 'Block input' activity.

### Web Automation - UI

#### Get element property

Reads an attribute of the specified element in the browser opened via the 'Studio Pro'.

#### Set element property

Modifies a specified attribute in a given web-page element

#### Get element value



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### Web Automation - UI (cont)

Reads the 'value' attribute or the text between tags of the specified element in the browser opened via the 'Studio Pro'.

#### Set element value

Sets the 'value' attribute of the specified element in the browser opened via the 'Studio Pro'.

#### Element found?

Checks whether the specified element in the browser opened via the 'Studio Pro' exists. The 'Yes' branch is executed if the element exists, otherwise the robot will follow the 'No' branch.

#### Wait for element

Waits a specified amount of time for the specified element to appear in the browser opened via the 'Studio Pro'. If the element appeared then it will execute the 'Yes' branch, otherwise the 'No' branch will be executed.

#### Wait for vanishing

Waits a specified amount of time for the specified element to vanish in the browser opened via 'Studio Pro'. If the element vanished then the bot will execute the 'Yes' branch, otherwise the 'No' branch will be executed. If the element was not found at start of the activity then then an exception will be thrown.

### Document Processing - OCR Engines

#### Microsoft Cloud OCR

Recognizes an image text using the Microsoft OCR technology. Available formats for recognition: JPEG, GIF, PNG and BMP

#### Google Cloud OCR

### Document Processing - OCR Engines (cont)

Recognizes an image text using the Google OCR technology. Available formats for recognition: JPEG, PNG, BMP, GIF and SVG.

#### ABBY Cloud OCR

Recognizes an image text using the ABBYY Cloud OCR technology. Either images or pdf files can be processed.

#### Recognition template

This activity enables you to specify a document which will be used as the recognition template. The document will be displayed as an image where, with a graphical tool, you will be able to select areas, where the text should be recognized from, and specify the corresponding variables which will store the recognition results. Works with recognition result from Yandex and Microsoft recognition activities.

### Document Processing - PDF

#### Read text

Extracts the text layer from a pdf file and saves it as a string

#### Convert to image

Converts a pdf file to an image or to a set of images in case of multiple pages in the pdf file

#### Extract Page Range

Extract selected pages from the PDF file to a new PDF file.

#### Get PDF page count

Gets number of pages in PDF file.

#### Combine to PDF

### Document Processing - PDF (cont)

Combines files from folder to a single multiple-page PDF file. Supported file formats: pdf, docx, xlsx, rtf, tiff, bmp, jpeg, jpg, gif, png, html, xps, html

### Programming - Database

#### Connect to database

Establishes a connection to the database.

#### Execute query

Executes a database query.

### Spreadsheets - Google Sheets

#### Get values

Reads a content of a Google Sheets table in the specified range. To make the activity work, you need to provide the platform access to the Google services (right click on the 'ElectroNeek Bot Runner' in the bottom right tray - "Settings" - 'Google' - Authenticate Google services).

#### Update values

Changes a content of cells within the specified range. To make the activity work, you need to provide the platform access to the Google services (right click on the 'ElectroNeek Bot Runner' in the bottom right tray - "Settings" - 'Google' - Authenticate Google services).

#### Append values

Adds values to the first completely empty line in a table. To make the activity work, you need to provide the platform access to the Google services (right-click on the 'ElectroNeek Bot Runner' in the bottom right tray - "Settings" - 'Google' - Authenticate Google services).



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### Programming - Dates and Time

#### Get current date

Returns the current date and time

#### Calculate date

Performs an action with the specified input date (adding or subtracting a time unit) and returns a new date.

#### Calculate difference

Calculates the time difference between two dates.

#### Export to format

Converts an input variable with a date to a string of a specific format.

#### Time trigger

Waits for a specific time.

### Programming - API

#### HTTP request

Sends an HTTP request with the specified parameters. The 'Save value to variable' activity appears automatically when choosing the 'HTTP request' activity. It automatically saves the value to a variable. However, the activity is not mandatory to use and can be removed from the workflow.

#### Get OAuth token

Performs an OAuth 2.0 authorization. Returns access token to use in other activities.

### Programming

#### Execute Js code

Enables you to write and execute a JavaScript code. All variables created in this activity will remain local. Global variables can be used and modified inside this activity.

#### Execute Python

### Programming (cont)

Executes a Python script with parameters. Set path to venv folder to activate a virtual environment.

### Programming - Strings

#### Text found?

Checks if a specified portion of text exists in another text.

#### Extract text

Extracts the portion of text between two words in a given text.

### Spreadsheets - Tables

#### Read table

Reads a table from Excel, Google Sheets, or CSV file

#### For each row

Runs a loop through a specified table's rows and performs activities the user placed inside the loop. To address the table's columns on each iteration, variables are automatically generated on the basis of a table's header specified as the template

#### Remove empty rows

Removes all empty rows in a table

#### Save table

Saves a table to an Excel file, a CSV file, or a Google Sheets document

### Connectors - Google Drive

#### Download file

Downloads a file from the Google Drive and saves it to a specified folder.

#### Upload file

Uploads a file to Google Drive and saves it to a specified folder.

#### Create directory

### Connectors - Google Drive (cont)

Create a Google Drive folder in the specified parent folder.

### Citrix & RDP - Surface Automation

#### Click on image

Finds and clicks on the image on the screen

#### Find image

Finds the image on the screen and returns an array of coordinates of the found matches (top left corner)

#### Take a screenshot

Takes a screenshot of the entire screen or active window and saves it to file

#### Wait for image

Waits a specified amount of time (seconds) for the provided image to appear on the screen. If the image appeared, it will execute the 'Yes' branch; otherwise, the 'No' branch will be executed. The activity reacts the same way in case multiple images are found.

### Citrix & RDP - Terminals

#### Input from keyboard

Sends text to a specified terminal area

#### Read text from area

Reads the content of a specified terminal area

#### Wait for text

Waits for a text in a specified terminal area

### Document Processing - Data extraction

#### Klippa OCR

Recognizes an image text using the Klippa technology and user-provided credentials

#### Nanonets OCR



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### Document Processing - Data extraction (cont)

Recognizes an image text using the Nanonets technology and user-provided credentials

#### Microsoft Form Recognizer OCR

Recognizes an image text using the Microsoft Form Recognizer technology and user-provided credentials

#### Amazon Textract OCR

Recognizes an image text using the AmazonTextract technology and user-provided credentials

#### CaptureFast OCR

Recognizes an image text using the CaptureFast technology and user-provided credentials

### Web Automation - Mouse

#### Click on element

Clicks the specified element in the browser opened via the 'Studio Pro'.

#### Hover over element

Hovers the mouse cursor over the specified element in the browser opened via the 'Studio Pro'.

#### Drag an drop element

Moves an element on a webpage to another element.

#### Select list item

Extracts available options for the specified dropdown list and selects a value chosen by the user.



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