**HR Automation**

*Robo-Sapiens*

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Summary:

The project we implemented is a solution to the time-consuming tasks of the HR employee. Instead of “wasting” up to 4 hours every day going through more or less irrelevant CVs or hiring requests on LinkedIn, our automation app can download all the CV’s from the user’s email, scrape the relevant information, link it to its corresponding LinkedIn account, followed by some more scraping, in order to filter out the less relevant candidates (by means of skill, experience or practice domain).

The information scraped from LinkedIn and the CV pdf files (right now only standardized for the Europass format) is stored into .xlsx files and later on cross-compared with the job requirements that is desired by the candidate.

UIPath makes easy use of Outlook implementations for retrieving new unread email and its liked attachments (in the form of CV’s). After scraping the data relevant to the LinkedIn profile connection, we use Chrome to navigate and facilitate our obtaining of working experience and other skills.

To determine how well a candidate is suited for its job of choice we calculate a grade: we obtain his experience (measured in time and software knowledge) by adding up periods working in domains that equally relevant to the desired job and scale their impact of the final grade by the relevancy of the domain and the time spent in that workplace (eg. If someone was applying to work as a chef, 1 year spent working in a bakery would easily overweight 2 years spent working as an electrician).

After calculating a grade for each candidate, we pick a delimitation factor – in our implementation we only choose the candidates with an above-the-average grade and follow them up with an email confirming that we would like to have a talk with them. At this point of the implementation, not being able to easily integrate Outlook’s capabilities of planning meetings and keeping synchronized with everyone’s calendar, we made use of Doodle.com. The result meant sending our candidate an email with a personalized link where he could pick an hour he thinks would fit him best for a meaning.

Compatibility:

The robot was tested on **UiPath Studio 2018.4.0**.

Package specifications:

Inside GitHub, you will find all the files required for running this project. In order to start the program, execute the Main file.

Documentation – details of usage:

1. Run **Main** from **EmailCvReader** folder.
2. The robot accesses your Outlook inbox and downloads the CVs in Europass format.
3. The robot gets the LinkedIn paths to the applicants’ profile.
4. The robot loops through the LinkedIn profiles and scrapes relevant data: job positions, work experience, companies where the applicant worked.
5. The current job openings in the company and descriptions are stored in an Excel file.
6. The robot scrapes the Europass CVs and gets relevant information for the job openings available through keywords.
7. Based on an algorithm, the robot calculates a score for each applicant.
8. It filters the highest ranked applicants and sends them an email with a link to register for an interview.

Installation Guide:

1. Activate your HR business mail in **Microsoft Outlook**.
2. Install **Microsoft Excel** on your computer.
3. **Condition**: To run the robot, it should find in your email address attachments containing CVs in **Europass** format with the link to the applicant’s **LinkedIn** profile.
4. Install **Google Chrome** on your computer - the data from LinkedIn will be scraped through this browser.
5. Run **Main** from **EmailCvReader** folder.