**PROPOSAL**

**Objective:** Developing Business Intelligence capabilities for the Sales at C-Care LLC. Curating datasets for analyzing product inventories and sales trends of various brands from their online presence through web-scraping, generating periodic reports and identifying strategies for expanding the packaging process and looking into new sources of revenue.

**Description:**

* Developing web-scrapers that can gather data from e-commerce websites of popular cosmetic brands – Sephora, Ulta, Nordstrom to look at beauty products as directed by the point of contact at C-Care.
* Organizing datasets to facilitate analysis by the sales team and identifying new opportunities to pursue.
* Generating a mechanism to retrieve LinkedIn profiles, validating the REST API for access and hits.
* Exploratory analysis and Visualizations for baseline interpretation, generating reports to be validated by the sales team

**Project Plan:**

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| **Goal** | **Tasks** | **Description** | **Timeline** |
| 1. **Developing web-scrapers for e-commerce sites.** | 1.1 Analyzing websites | Go through the website to determine structure and scale | **6 Hrs.** |
| 1.2 Web-scraper for Sephora | Develop python script for fetching data from Sephora | **10 Hrs.** |
| 1.3 Web-scraper for Sephora | Develop python script for fetching data from Ulta | **6 Hrs.** |
| 1.4 Web-scraper for Sephora | Develop python script for fetching data from Nordstrom | **6 Hrs.** |
| 1.5 Data Validation | Preliminary data to be validated by users i.e. Sales POC for sanity checks, structure | **N/A**  **(0 Hrs.)** |
| 1.6 Modification and final data integration | Making changes suggested by POC and final handoff and knowledge transfer | **6 Hrs.** |
| 1. **LinkedIn profile crawlers** | 2.1 Analyzing LinkedIn API | LinkedIn REST API to be analyzed for level of access and restrictions on data retrieval | **6 Hrs.** |
| 2.2 Web-Crawler implementation | Develop Web-Crawler for fetching data from LinkedIn | **10 Hrs.** |
| 2.3 Data Validation | Data to be validated for all necessary details, sanity check | **N/A**  **(0 Hrs.)** |
| 2.4 Tool submission | Hand-off and Knowledge Transfer | **2 Hrs.** |

**Project Deliverables:**

* Python codebase for future use to be set up, datasets for analysis tailored to company requirements
* Tools to be used with minimal technical inputs for easy use by sales POC
* Knowledge transfer sessions to train the users

**Costing:** Project will be completed in the given estimate of time, an hourly rate commensurate with the technical inputs to be decided on further discussions.

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C-Care LLC