

**Virtual World Projects**

Proposal

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**Problem Statement:**

Finding the right sorting technique for a specific type of data is a hard task to do as the time taken to sort varies from one algorithm to the other. We will be extracting data related to online projects present on different freelancing websites to apply multiple sorting techniques and study the time each algorithm takes to sort a huge amount of data (1 million data). Moreover, multiple efficient searching techniques will be used to search deep through the project details.

**Attributes:**

1. Title (Project Description)
2. Category (Type of Project)
3. Name (Person)
4. Project Cost
5. Project Delivery (In days)
6. Reviews (Related to the person)
7. Rating

**Requirements:**

* Extract 1 million project details from multiple freelancing websites.
* Option to start, pause, resume, and stop scraping.
* Progress bar showing scraping progress.
* Multiple sorting techniques on each detail of the project. (including additional non-explored techniques).
* Sorting techniques include Bubble Sort, Selection Sort, Insertion Sort, Merge Sort, Quick Sort, Hybrid Sort, Heap Sort, Radix Sort, Bucket Sort, Comb Sort & Cycle Sort.
* Multiple searching techniques on the extracted data.
* Display time for each sorting technique in milliseconds (ms).

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Description automatically generated**UI Design:**