### UTDiscovery Weekly Report & Time Log

| **Weekly Report Number** | 3 |
| --- | --- |
| **Reporting Period** | 9/16/23 to 9/22/23 |
| **Group Number** | 2 |
| **Project Name** | xEstimate API and ALgorithm improved |
| **Mentor/Faculty Advisor** | Dr. Noirrit Chandra |
| **Project Team Members** | Marcos Munoz, Mehedi Toufiqe, Yaseen Mohammed, Sayema Rahman |

**Weekly Report**

1. Tasks Outlined in Previous Weekly Progress Report

* Gain access to the previous prototype model.
* Get access to more complete training data
* Finish brainstorming and researching ideas on text analysis
* Send a direct message about the tools and languages you’re comfortable using, ML algorithms you’ve used, and what other skills you’re hoping to use in this project to Andrew Bartnik
* Do sentiment analysis on the text variable in the Excel spreadsheet shared with us.

1. Progress Made in Reporting Week (Limit your write-up to no more than two page)

* This week, We successfully obtained access to the previous prototype model. We collaborated with the Autix team members to ensure a smooth transition of access rights and privileges.
* We made significant progress in acquiring more comprehensive training data for our project. We reached out to Andrew to secure the necessary datasets. While some datasets were obtained, the process is ongoing as we aim to gather additional data to enhance the model's performance.
* We dedicated considerable time this week to brainstorming and researching various ideas related to text analysis. This included exploring different text preprocessing techniques, feature engineering approaches, and potential deep learning architectures. We also reviewed relevant literature and discussed ideas with team members to ensure a well-informed approach.
* We sent a direct message to Andrew Bartnik regarding our expertise and skills relevant to the project. In the memo, We outlined the tools and languages we are comfortable using, detailed the machine learning algorithms we have experience with, and discussed other skills that we hope to leverage in this project.
* As per the project requirements, we will conduct sentiment analysis on the text variable within the Excel spreadsheet shared with the team.

1. Difficulties Encountered in Reporting Week (Limit your write-up to no more than one page)

* Team member Sayema couldn’t access the Azure DevOps and access the data. After some troubleshooting, the issue is solved.
* Team member Mehedi is not able to access the data. Andrew and Jake are working to fix this issue. As of Friday night, Mehedi issue still needs to be solved.
* The initial dataset doesn’t have any pricing information so now we will do our analysis without any price prediction model.
* We couldn’t meet with our Faculty advisor this week, since Dr. Chandra has to attend a conference.

1. Tasks to Be Completed in Next Week (Outline the tasks to be completed in the following week)

* We have to do some analysis and research to find an applicable solution to text analysis on the dataset.
* We have to prepare a report/slides to present our work during the next team meeting.
* We have to meet with our faculty advisor on Wednesday to discuss any issues we are currently facing,
* Team member Mehedi has to get access to the dataset.
* We have brainstormed ideas for approaching text analysis based on pricing and SEMA.

**Time Log**

1. Teams Meeting.

* Description(optional): Via MS Teams and in-person.
* Students: Marcos Munoz, Mehedi Toufiqe, Yaseen Mohammed, Sayema Rahman
* Dates: 9/22/2023
* Hours: 1
* Other:

1. Client Meeting.

* Description(optional): Via MS Teams
* Students: Marcos Munoz, Mehedi Toufiqe, Yaseen Mohammed, Sayema Rahman
* Dates: 9/20/2023
* Hours: 1
* Other: N/A
* Who didn’t attend the meeting with client: Mehedi Toufiqe

1. Faculty Advisor Meeting.

* Description(optional): The meeting was canceled by the Faculty advisor. Next meeting 09/26.
* Students: N/A
* Dates: N/A
* Hours: N/A
* Other: N/A
* Who didn’t attend the meeting with FA: N/A

1. Solution Development.

* Description(optional)
* Students: N/A
* Dates: N/A
* Hours: N/A
* Any progress? N/A
* Other: N/A

1. Documentation.

* Description(optional)
* Students: N/A
* Dates: N/A
* Hours: N/A
* Other: N/A

1. Preparation Slides., if applicable.

* Description(optional)
* Students: N/A
* Dates: N/A
* Hours: N/A
* Other: N/A