**Meeting Summary with Dr. Philip Weber – 28th June, 2024**

Attendee:

* Emmanuel

Focus of Meeting:

The project should integrate and structure technical data with process mining data to streamline information or provide direction on the process.

Key Points Discussed:

**Data Source and Formats:**

* Consider using data from Van Der Aalst's website, particularly focusing on CSV data formats.
* Specific data sets mentioned include the purchase order handling process and complaints filed by customers.

**Handling Heterogeneous Data:**

* The importance of handling heterogeneous data, including textual data, was emphasized.
* There is a need to identify and utilize various formats such as emails, comments, and phone call transcripts.

**Data Preprocessing:**

* Focus on cleaning and streamlining the data to tailor it to the specific process being studied.
* Ethical approval will be necessary for data usage and any modifications.

**Stakeholder Involvement:**

* Consider scenarios involving direct business stakeholders or end-users to evaluate the tool or framework.
* Discuss potential structured conversations with stakeholders for insights on issues and findings.

**Integration of NLP with Process Mining:**

* Develop a method or tool to integrate Natural Language Processing (NLP) with process mining.
* This could involve creating an interface or tool to query process data using natural language.

**Specific Objectives:**

* Implement a system that allows querying of process data to identify bottlenecks, decision-making paths, or performance issues using NLP.
* Consider a user interface that uses NLP to interact with process mining tools, such as Disco or Celonis.

**Evaluation of Existing Tools:**

* Audit existing process mining tools to understand their current capabilities and how NLP can be integrated.
* Focus on tools like Disco, Celonis, and PROM to see how they handle process mining and where improvements can be made.

**Research and Literature Review:**

* Conduct a thorough literature review on process mining and NLP integration.
* Identify past use cases, existing methods, advantages, and gaps that your project could address.

Next Steps:

* Develop a proof of concept that demonstrates the integration of NLP with process mining.
* This could be a plugin for existing tools or a standalone interface that showcases your proposed framework.
* Develop a detailed project plan outlining the steps, timelines, and methodologies to be used.
* Start writing the dissertation early, focusing on the introduction, literature review, and methodology as you progress.
* Ensure to get ethical approval for the data used, specifying how it will be handled, processed, and modified.
* Include considerations for any stakeholder interactions or evaluations.