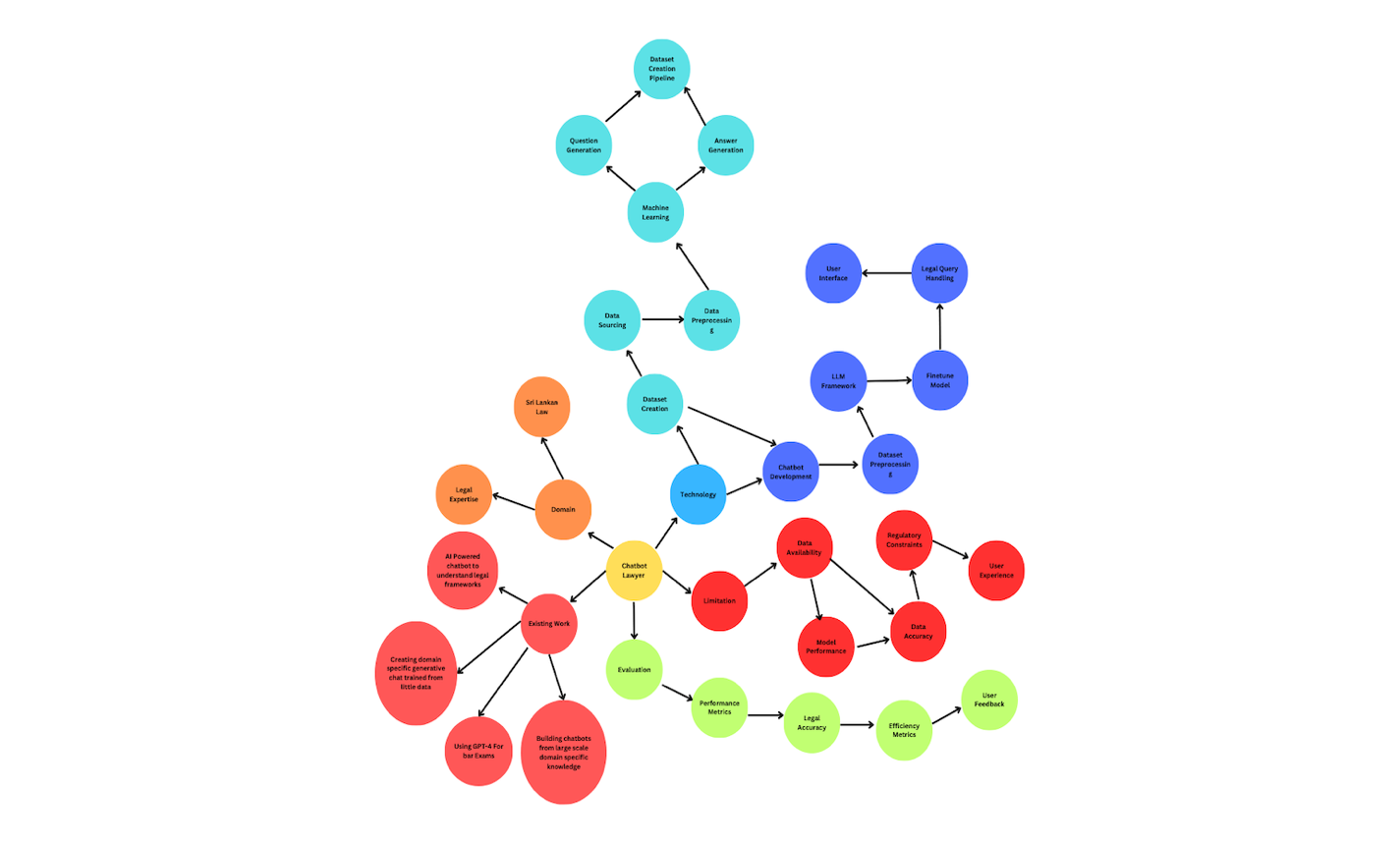
# **Chapter 2 - Literature Review**

## **2.1 Chapter overview**

Law, As indicated in the previous chapter is a very exclusive knowledge in order break this barrier. This chapter provides a comprehensive examination of the pivotal data preparation and transformation of Sri Lankan juridical documents. Additionally, this chapter discusses strategies for generating question-answer pairs from legal text, and the formatting required to construct a domain-specific dataset. Using this created dataset, the chapter will also focus on how the training and testing of the LLM will proceed.

## **2.2 Concept Map**



## **2.3 Problem Domain**

### 2.3.1 Legal Expertise

Developing a chatbot which is specialized in Sri Lankan law required a profound understanding about the legal domain to ensure reliable accuracy for the chatbot and should compliance with legal regulations. Legal expertise is the way of guiding into the development process. Legal professionals bring an invaluable depth of knowledge to the table, and with their involvement this significantly improves the chatbots performance and accuracy.

One of the most critical aspects of incorporating legal expertise in chatbot development is ensuring legal accuracy. Legal chatbots are often relied upon to provide legal advice and information. Legal experts, such as lawyers, are well-equipped to validate the accuracy of the chatbot's responses, thus reducing the risk of providing incorrect or misleading legal guidance to users. ()

When considering Sri Lankan law there are various range of regulations and standards that may change or evolve over time. With this familiarity it ensures that the chatbot responses aligned with current legal standards, which minimizes the potential for legal issues and bolstering the chatbots credibility. ()

Additionally, legal experts possess a unique ability to interpret complex legal documents, such as statutes, case law, and legal opinions. Their expertise allows them to navigate intricate legal texts, extract pertinent information, and provide accurate explanations. ()

The trustworthiness of legal expertise and the unbiased law documents is a paramount for the legal chatbot. Legal expertise ensures this trust by engaging in the data preparations for the development cycle. This trust and unbiased law document will boost user confidence while using this legal chatbot which will enhance the chatbot’s utility. ()

Furthermore, legal professionals can offer valuable guidance on ethical considerations in chatbot development. This guidance is essential for upholding the integrity of the chatbot's interactions with users and preserving ethical standards within the legal community. ()

In conclusion, the integration of legal expertise is foundation in the development of a chatbot which is specialized in Sri Lankan law. With legal expertise guidance this chatbot can uphold legal accuracy, regulatory compliance, user trust, and ethical considerations. Legal professionals contribute significantly to the chatbot's credibility, ensuring that it provides sound and dependable legal information to users.