



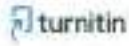
LEGAL RESEARCHER AI ASSISTANT

UNDERGRADUATE THESIS
Submitted as one of the requirements to obtain
Sarjana Komputer

By:
RANDY GUNAWAN
001202200135

FACULTY OF COMPUTER SCIENCE
INFORMATICS STUDY PROGRAM
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ABSTRACT

As legal practitioners in Indonesia conduct research and draft documents they face the daunting task of sorting out the vast array of existing laws. Coming up against the limits of a manual approach, the process of cross-referencing and drafting compliant legal documents can be extremely time consuming. The lack of tailored insights and localised information from existing tools exacerbates the problems, and for this reason, the “Legal Researcher AI Assistant” initiative has suggested an AI-powered chatbot that makes use of a Large Language Model. The goal of this system is to bring a real boost in speed and accuracy to the legal research process, and also takes on the jobs of drafting legal documents and dissecting legal problems. Well-known for its scalability and effectiveness, the chosen answer is a Multi-Agent System, which takes a modular approach with specialist AI agents for different tasks, for instance, research, drafting and opinion generation. Its Retrieval-Augmented Generation (RAG) setup stores summaries of laws in a vector database and pulls the full texts from government sources as and when needed, so that the system stays accurate. The coordination by LangGraph and the modular design of the system makes it cost-efficient too. The project follows a continuous cycle of requirements gathering, design, implementation and rigorous testing, and will ensure that its product is reliable and practical.

Keywords: Legal Researcher AI Assistant , Multi-Agent System , Retrieval-Augmented Generation (RAG) , Large Language Model (LLM) , Indonesian Legal Knowledge.

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