

This Final Year Design Project Proposal outlines the development of a "Quantized Text Summarizer and Quiz Generator," also referred to as "Pocket Doc." The project, undertaken by Muhammad Haider Sultan, Ahmed Arif, Ausaf Gill, and Kamran Faisal under the supervision of Abdul Mateen at the University of the Punjab Lahore, aims to create a compact machine learning model capable of running efficiently on regular CPUs. The primary objective is to apply quantization techniques to enhance the model's performance by reducing memory usage and inference time, making advanced summarization and assessment tools accessible without high-performance resources. The project seeks to extract important information from large amounts of text while generating suitable quiz questions from user inquiries to encourage participation and memory retention. The quantized approach will enable efficient implementation across diverse educational and professional environments, overcoming computational limitations. The proposal includes an introduction, literature review, FYDP overview, a section on tools, libraries and technologies, a work division plan, and references.