

Self Proposed Final Project Grading Rubric

Grade Percentage	Description
20%	T1: Document Input, Parsing, and Chunking <ul style="list-style-type: none">- Enable input of and set up processes for accurate text extraction from pdf educational documents.- Remove irrelevant symbols, extra line breaks, other noise and normalize text if needed such as converting text to lowercase.- Split text into chunks that can fit within the LLMs token limit.- After chunking, organize each segment in a structured format (probably a dictionary).
25%	T2: Flashcard JSON Creator <ul style="list-style-type: none">- For each chunk, use LLM prompts to extract key terms, definitions, summarizations of the text, and questions for flashcards.- Store all flashcard in a CSV format that is compatible with the popular Anki flashcard software and includes:<ul style="list-style-type: none">- Front: Key concept or question.- Back: Answer or explanation.- Tags (optional): To categorize by topics and allows for organizing cards within Anki.- The goal is the user will use this to create flashcards and use Anki's software to go over them seamlessly.
30%	T3: Quiz, Knowledge Gap Detection, and Flashcard Adaption <ul style="list-style-type: none">- Create a system for the user, after they have spent some time on Anki going over the flashcards, which presents the front side of flashcards one at a time and allows typed in answers on the terminal.- Use an LLM to evaluate the score of flashcard answers by comparing the inputted responses to the correct answers on the back of the card.- Log which questions were answered incorrectly and identify specific knowledge gaps based on these results.- Use the LLM to generate new flashcards targeting concepts the user got wrong in the quiz to improve their understanding in future rounds of studying.- Additionally also remove flashcards of topics the user has shown mastery in.

	<ul style="list-style-type: none"> - Append new flashcards to the existing Anki-compatible deck and export updated flashcards in a CSV format compatible with Anki for further flashcard practice on the platform.
25%	<p>Evaluation</p> <ul style="list-style-type: none"> - I want to evaluate this by creating flashcards from the relevant chapters of my Probability textbook and see how encompassing the topics of the flashcards are by comparing result to a set-list of topics I would expect to be covered by the flashcards (which I will in advance push to my repo). - Additionally I will judge the accuracy of the LLMs scoring of responses by creating test cases to see if correct and incorrect responses are labeled correctly. - Hopefully I can finish this all before my Probability final comes around!