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Fall 2025 - CMPE 259
Project Proposal

Project Proposal: Virtual Assistant for San José State University Students

The use case for this project is to build a Virtual Assistant (VA) that helps San José State University (SJSU) students to find accurate and timely in information about academic programs, admission requirements, deadlines, and campus resources. The VA will simulate a tool that centralizes answers to common questions about the university experience. The following shows potential queries users migh have:

1. What undergraduate programs are available at SJSU?
2. What are the admission requirements for Computer Science?
3. What is the deadline to apply for Fall 2025?
4. How do I transfer credits from another college?
5. What GPA do I need to maintain my scholarship?
6. When does course registration open?
7. How can I make an appointment with an academic advisor?
8. What are the tuition fees for graduate students?
9. How do I apply for on-campus housing?
10. What is the last day to drop a class with a refund?
11. How can I find information about financial aid?
12. What prerequisites I need to take CMPE 259?
13. What student clubs are available for engineering majors?
14. How can I request my transcripts?
15. What are the library hours during finals week?
16. Can you list all deadlines for Spring 2025 registration?
17. How do I change my major?
18. What is the minimum TOEFL score required for international students?
19. Where can I find campus health services?
20. Who should I contact for disability accomodations?

For this purpose, the assistant will rely on two main tools:
- Structured Database (SQLite): containing SJSU program details, admission requirements, and academic deadlines
- Web Search Tool: to retrieve dynamic or real-time information such as tuition updates, portal availability, or event schedules.

Finally, the proposed LLMs for this work are LLama-3-11B as the large model, and Mistral-7B, where their performance will be compared in accuracy, response quality, and robustness to prompt injection.