



Education Records  
System (EduRec)



PDF



# NUSPlanner

**Less open tabs, less headaches.**

# Background (If you're not from NUS)

➡ NUS has no fixed study plans

➡ Student Exchange (SEP) requires manual selection and mapping

➡ Now: Most students rely on NUSMods/Excel



Category	Year 1 Sem 1		Year 1 Sem 2		Year 2 Sem 1		Year 2 Sem 2		Year 3 Sem 1		Year 3 Sem 2		Year 4 Sem 1		Year 4 Sem 2		
	Course code	Units	Course code	Units	Course code	Units	Course code	Units	Course code	Units	Course code	Units	Course code	Units	Course code	Units	
1	HSH1000	4	HSS1000	4	IT1244	4	LSM3247	4	(UPIP)	12	(SEP)		LSM3231	4	LSM4245	4	
2	HSI1000	4	HSA1000	4	ZB2201	4	LSM2105	4	GEN	4	LSM4241	4	LSM3228	4	CS2040HS	4	
3	GEA1000	4	DTK1234	4	HSI2007	4	LSM2191A	4			LSM3991	4	LSM3235	4	HS2916	4	
4	ES1103	4	SP1541	4	LSM2106	4	CS1010S	4			LSM3991	4	ZB4171	4	ZB3288	4	
5	CM1102	4	LSM1111	4	LSM2233	4	ZB3101	4			LSM2107	4	CS2030HS	4			
6	CFG1002	2	ZB2101	4	CFG1004	2	HS2911	4					LSM3220	4			
			CFG1003	0													

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Scalability & Future Extensions

Conclusion

# The Problem?

**Creating a study plan shouldn't be this annoying.**

- ➡ **Information is scattered everywhere – NUSMods, faculty websites, random PDFs**
- ➡ **Graduation requirements need to be checked manually**
- ➡ **SEP (Exchange) planning is a whole other struggle**

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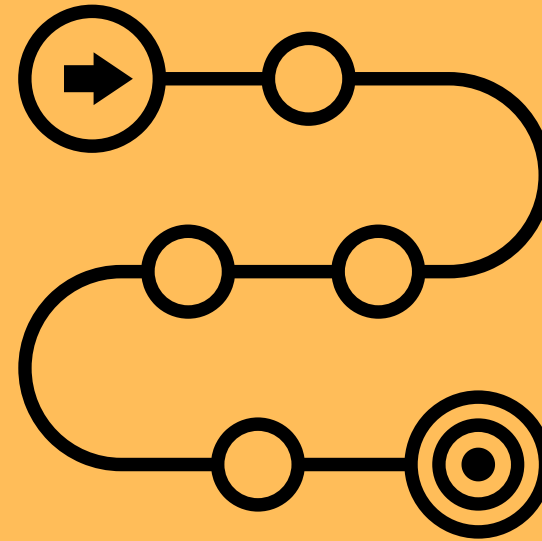
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# Our Solution: **NUSPlanner**



**Automated planning  
with graduation and  
prerequisite check**



**Exchange course  
mapping**



**Built-in AI Agent**

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# Why not just use NUSMods?

Feature	<u>NUSMods</u>	<u>NUSPlanner</u>
<u>Course Planning</u>	<b>Manual</b> , semester by semester	<b>Automatically generated</b> based on major + specialization/focus area
<u>Prerequisite Handling</u>	Checks for <b>prerequisites</b>	Checks for <b>prerequisites &amp;/ corequisites</b> and <b>offered semesters</b>
<u>Graduation Requirements</u>	Not accounted for	Tracks <b>graduation progress</b> by pillar
<u>Exchange / SEP Integration</u>	None	<b>Course mapping + Integration</b> into study plan
<u>AI Assistance</u>	None	<b>Built-in</b> AI assistant for course suggestions

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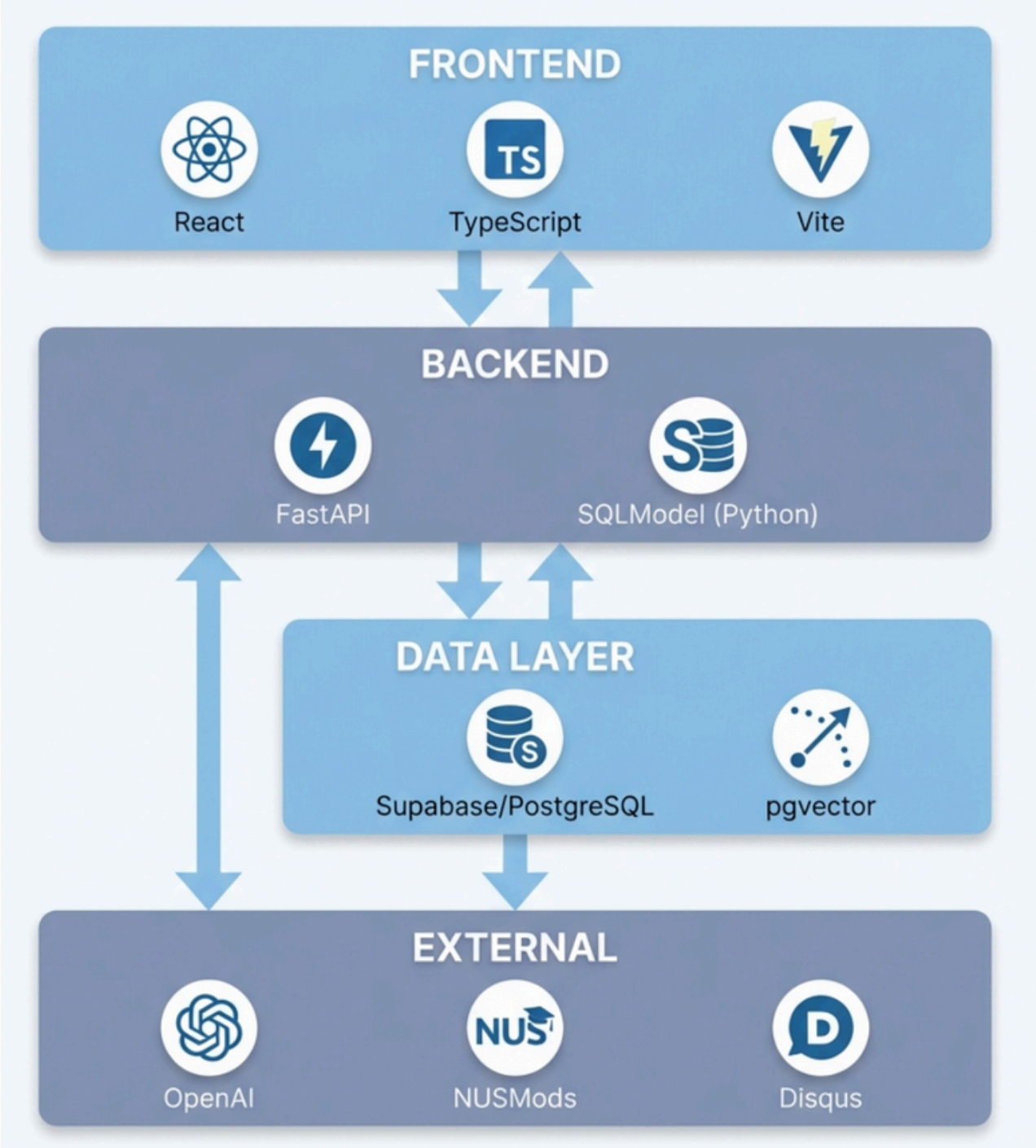
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# Technical Architecture



Layer	Technology
Frontend	React 18, TypeScript, Vite
Backend	FastAPI (Python)
Database	Supabase (PostgreSQL + pgvector)
AI	OpenAI GPT-4
Data Source	NUSMods API/Disqus

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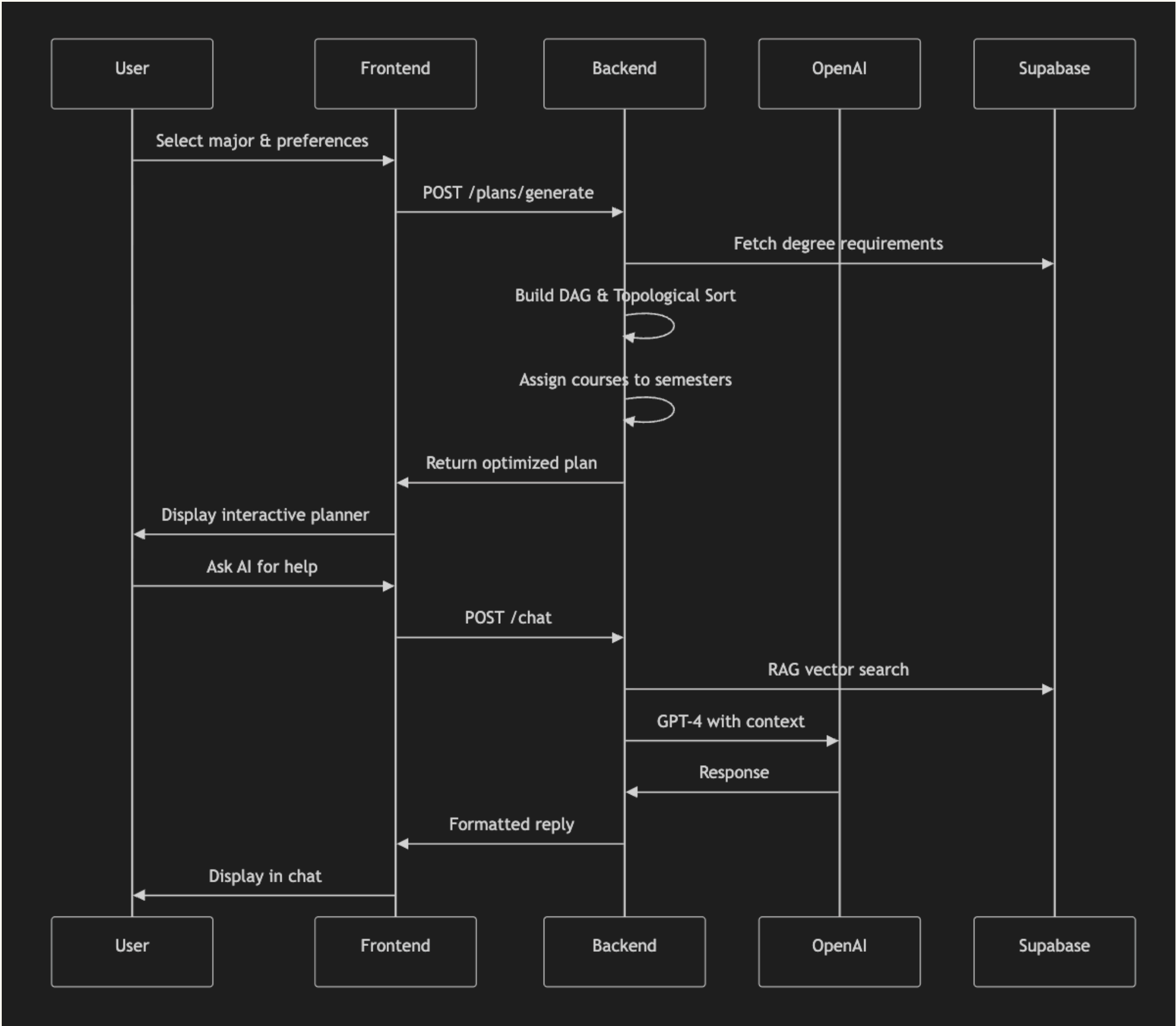
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# Data Flow



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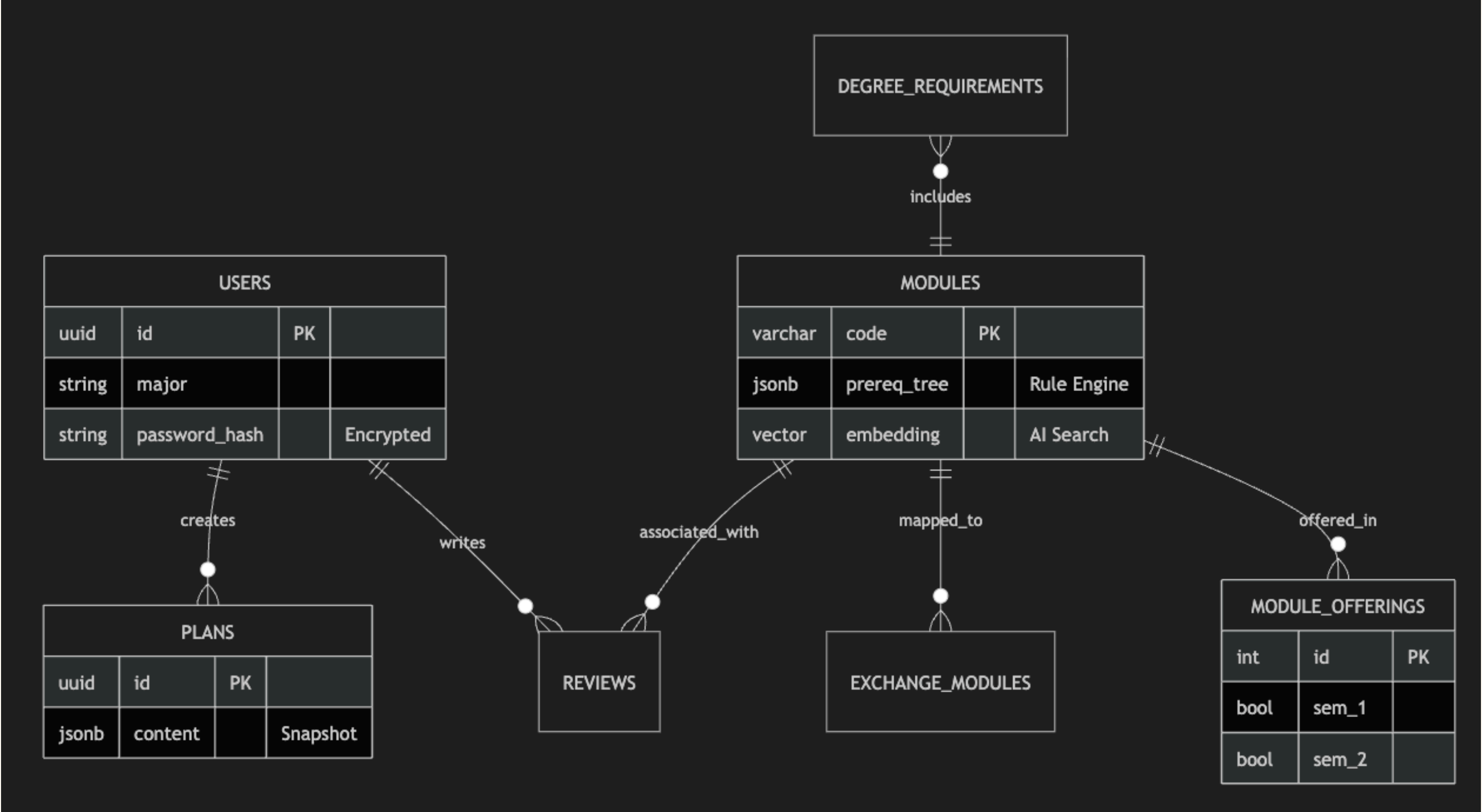
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# Database Schema



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# Demo



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# Challenges we faced

- > **Lack of data for SEP (exchange)**
- > **Maintaining prereq & coreq relationships**
- > **Lack of API keys**

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# Future Plans

- > **Second Major / Minor feature**
- > **Integrate with NUSMods ecosystem**
- > **Support more faculties & degrees**
- > **Collaborate with other schools**



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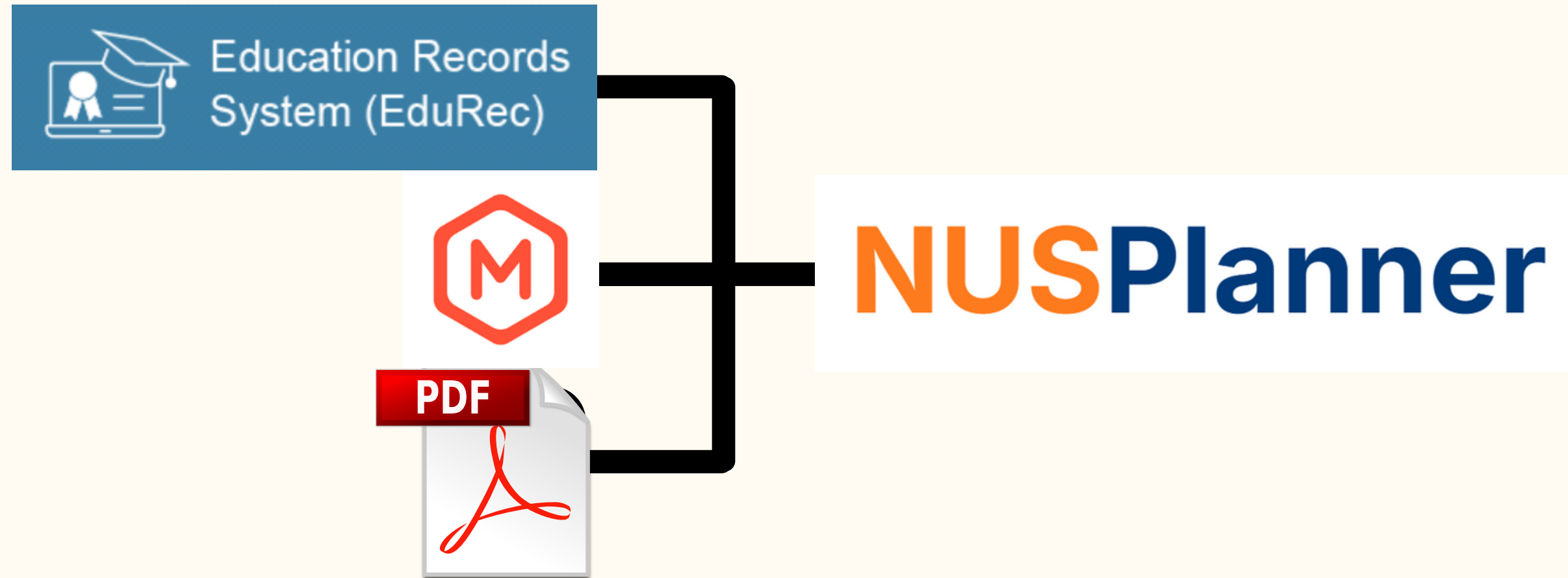
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# Conclusion



**Less chaos, easier planning!**

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**Q&A**

