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Memo

TO:	SS26 AI Engineer (Intern/Co-op) Applicants
FROM:	b(x) Theory Team
DATE:	February 4, 2026
SUBJECT:	Take-Home Assessment Instructions

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Background

Thank you for taking the time to apply to our AI Engineer (Intern/Co-op) role*! This take-home assessment is a fun stage in our hiring process that will allow you to get a glimpse of the type of work you'll be doing with us, while allowing us to learn more about how you think and work in a practical setting.*

Project Title: Exam Study Planner

Due: Sunday, February 8, 2026, at 11:59 p.m. ET

User Story: A student has 3 midterm exams coming up in 2-3 weeks. They need a comprehensive day-by-day study plan, outlining what to study each day, per course, from today until the date of their last midterm.

Task: Build a multi-agent system that generates a day-by-day study plan based on the topics to be covered for a student's midterms.

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Design Requirements

- **Multi-agent orchestration:** Define at least three distinct agents. Each agent must have a clear responsibility. All agents must collaborate as a team.
- **Large, multi-document processing:** At minimum, the user must be able to upload each course's textbook (see: *Provided Materials*) in order to estimate the amount of time required to study a given topic.
- **State management:** The user must only need to upload each file once per user session, and information must persist through multiple agent invocations within that session.
- **Structured output:** The result of the user session must be a CSV or Markdown file of the study plan that follows a consistent, predictable format.

Technical Guidelines

- We **recommend that you use a free Gemini API key** (via AI Studio) for LLM calls, although you are free to use models from other providers.
  - *Why? It's simple to set up, and free! Plus, Gemini 3 Flash (Preview) is one of the most impressive models at the moment—balancing quality vs. cost and speed—and is optimized for agentic workflows.*
- We **recommend that you use Google's Agent Development Kit (ADK)**, although you are free to use other agentic frameworks or build from scratch.
  - *Why? ADK is an underrated framework that balances flexibility vs. ease of use, making it ideal for our startup to build quickly while maintaining scalability.*
- We **do not** require you to make a web app. To run your agents, ADK has a built-in UI and CLI that you can use.
  - *Why? To save you time, as this role does not necessarily require you to have full-stack development skills.*
- We **encourage you to use AI** throughout your development process, if you wish.
  - *Why? We design and code with AI on our team, but we do it responsibly. There's a lazy way vs. a smart way to do it, so we can tell when work is generated by AI vs. done in collaboration with AI. As long as you review your work, edit with your human touch, and take full ownership of it.*
- You may **expect to spend 2-4 hours** on this take-home assessment. If it takes longer, please feel free to stop and tell us what you would do next, if you had more time. Though, you are also free to go above and beyond.
  - *Why? We want to respect your time, especially with your busy schedules. If you're having fun though, spend as much time as you'd like.*

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Submission Guidelines

- **Video demo:**
  - Please provide a 1- to 3-minute demo video that showcases the functionality of your agentic system.
  - You are free to attach the file/upload to Google Drive or send us a link to an unlisted video on YouTube.
- **Code submission & ownership:**
  - Please upload your code to GitHub and send us the link. If you would like to keep your repository private, please add bxsmtj as a temporary Contributor and remove her on February 11.
  - 100% of your code is YOUR intellectual property and may be added to your personal portfolio, if you wish :) You do not need to mention anything about b(x) Theory in your repo.

We look forward to receiving your email reply providing us access to your video demo and GitHub repo by **Sunday, February 8, 2026, at 11:59 p.m. ET**.

Provided Materials

Please use the files (i.e., course information, textbooks) we have uploaded to this folder: https://drive.google.com/drive/folders/1WuofVqa74GxM2LY23WfjX0gXvTjiPKmO?usp=sharing

Additional Resources

- "**Building Effective Agents**" by Anthropic: https://www.anthropic.com/engineering/building-effective-agents
- "**Startup Technical Guide - AI Agents**" by Google: https://services.google.com/fh/files/misc/startup_technical_guide_ai_agents_final.pdf
- "**Get Started**" by Google ADK: https://google.github.io/adk-docs/get-started/
- "**Build Your First Intelligent Agent Team**" by Google ADK: https://google.github.io/adk-docs/tutorials/agent-team/
- "**Multi-Agent Systems in ADK**" by Google ADK: https://google.github.io/adk-docs/agents/multi-agents/
- *Bonus – though not agent-related, here is a foundational book on ML that we recommend!* "**A Course in Machine Learning**" by Hal Daumé III: http://ciml.info/