Master To-Do List

Phase 1: Setup & Organization

- ✅ Set up GitHub repository for file sharing and version control.
- ✅ Confirm communication channels (WeChat, WhatsApp).
- ✅ Schedule weekly meetings (Mondays 3–6 PM + extra when needed).
- Assign clear responsibilities for research areas:
    - Hardware → **Lance & Ryuichi**
    - Behavioral AI → **Melvin & Roderick**
    - Networks → **Shawn**
    - Design → **Keke**

Phase 2: Research & Data Collection

- **Hardware (Lance & Ryuichi):**
    - Study hardware fundamentals (CPU, GPU, memory, storage, sensors).
    - Collect examples of hardware supporting AI systems (e.g., GPUs for deep learning, TPUs, edge devices).
    - Research future hardware trends (neuromorphic chips, quantum hardware).
- **Behavioral AI (Melvin & Roderick):**
    - Define behavioral AI and its applications.
    - Study case studies (autonomous driving, recommendation systems, adaptive robotics).

    - Research psychological/behavioral models integrated into AI.

- **Networks (Shawn):**
    - Review basics of computer networks and their role in AI (cloud computing, data transfer).
    - Explore edge computing vs. centralized networks.
    - Research how network speed and reliability affect AI performance.
- **Design (Keke):**
    - Draft visual style guidelines for PPT and study guide.
    - Collect diagrams, charts, and infographics to support explanations.

Phase 3: Analysis & Synthesis

- Compare notes from different research areas to highlight connections between hardware, behavioral AI, and networks.
- Identify overlaps (e.g., hardware enabling networks, networks enabling AI behavior modeling).
- Review past 2024 student projects → evaluate what worked, what didn't, and how to improve.
- Brainstorm as a team to decide the final structure of the study guide and PPT.

Phase 4: Content Creation

- **Study Guide:**
    - Draft outline (topics, subtopics, learning outcomes).
    - Write content collaboratively.
    - Add quizzes at the end of each section to test understanding.

    - Create a mindmap for all the topics.

- **Presentation (PPT):**
    - Create slides summarizing research.
    - Use visuals (diagrams, charts, infographics).
    - Ensure slides are concise, engaging, and easy to follow.
- **Additional Learning Materials:**
    - Record short explanation videos for complex concepts.
    - Design practice quizzes and interactive exercises.

Phase 5: Review & Finalization

- Group-wide peer review of PPT and study guide.
- QA testing by Sean (check clarity, usefulness, engagement).
- Design polishing by Keke (consistent visuals and formatting).
- Final adjustments based on group feedback.

Phase 6: Delivery

- Submit PPT and study guide.
- Present findings to the class.
- Share extra resources (quizzes, videos) with classmates for learning support.