

Rough Plan for Hardware and Behavioral AI module

Group : DDRone

Introduction

In today's fast-evolving tech landscape, the connection between **Hardware** and **Artificial Intelligence (AI)** plays a key role in shaping innovations across industries — from self-driving cars to smart devices and robotics. Understanding this relationship is essential not just for computer scientists, but also for engineers, economists, and anyone involved in designing or analyzing modern technology systems.

This group project brings together a diverse team of students from various academic backgrounds — including Mechanical Engineering and Economics — to develop clear, engaging, and accessible study materials on the topic of **Hardware and AI**. By leveraging our different strengths and perspectives, we aim to break down complex ideas and present them in a way that benefits everyone in the class, regardless of their specialization.

Our goal is to create a study guide and presentation that will help classmates grasp the fundamentals, real-world applications, and emerging trends in Hardware and AI. This will be done through collaborative research, analysis of previous student work, and creative presentation formats designed to enhance understanding and engagement.

The following rough plan outlines our team structure, communication methods, and steps we will take throughout the project to deliver a high-quality learning resource for the class.

Team Members

- **CEO**
Melvin — Indonesian international student from Jakarta, chess and sports enjoyer, alcoholic.
Strengths: Curious, thoughtful, good at math & physics, easygoing.
Weaknesses: Overthinks, kryptonite.
- **CTO**
Lance — Indonesian international student from Surabaya, cycling, running, cars.
Strengths: Curious, experienced in mechanics.
Weaknesses: Time management.
- **CIO**
Vicson (Vic) — Indonesian international student from Surabaya, average Reddit user, systematic person, into train systems.
Strengths: Enthusiastic, musically gifted (piano, guitar, drums).
Weaknesses: Yapper (likes to rant), lazy, lacks social awareness, unathletic.
- **Designer**
Priscilla (Keke) — Indonesian international student from Solo, drawing, guitar player.
Strengths: Experienced in digital art, creative, adaptive.
Weaknesses: Time management, easily distracted, stage fright.

- **QA Tester & QnA-maker**

Sean — Malaysian who studied in Jakarta (traitor), fitness enthusiast, MMA, acrobatics.

Strengths: Occasionally resourceful, can do logarithms, healthy.

Weaknesses: Underdelivers (all bark, no bite), bad sleep schedule.

- **Writer**

Roderick (Rod) — Malaysian international student from Kuala Lumpur, music enthusiast, family with a musical background, composer (not sampler), public speaker, first language is English.

Strengths: Open-minded, good communication skills, can speak Chinese fluently, able to adapt to difficult roles, great humor.

Weaknesses: Procrastinator, tends to “tunnel vision,” fried sleep schedule, can have mood swings (which may affect work).

Communication and Collaboration

To make sure our project runs smoothly and stays on track, we will use a combination of communication tools, file-sharing platforms, and regular meetings. This ensures that everyone can contribute effectively and stay updated on progress.

- **Communication:** We will use WeChat and WhatsApp to keep in touch quickly and share updates.
- **File Sharing:** All project files will be stored and managed on GitHub for easy access and version control.
- **Guidance & Research:** We will rely on ChatGPT, classmates, Wikipedia, and reference books as our main sources of guidance and information.
- **Meetings:** The group will meet every Monday from 3–6 PM, with additional sessions on other free days when needed.

To-Do List and Workflow

To successfully complete this project, our group will follow a step-by-step workflow. Each stage builds on the previous one, ensuring that we stay organized and produce high-quality study materials. By breaking down the tasks, we can divide responsibilities, track progress, and make sure nothing important is overlooked.

Our main tasks include:

1. **Set up GitHub** – Create a shared repository where all project files, drafts, and resources can be stored and updated collaboratively.
2. **Study and understand the chosen module** – Each member will carefully review the assigned topic on Hardware and AI to build a solid foundation.
3. **Individually review the 2024 class projects** – Analyze previous work done by other students to identify strengths, weaknesses, and areas where improvements can be made.
4. **Discuss improvements and conduct collective research** – Come together as a group to share insights, brainstorm improvements, and carry out further research to strengthen our content.
5. **Collect relevant data** – Gather accurate information, examples, and case studies that will support our study materials and make them more engaging.
6. **Prepare the presentation (PPT)** – Design and organize slides that summarize our research and study guide in a clear and visually appealing way.
7. **Plan a comprehensive study guide** – Outline the structure, key topics, and learning goals of the guide before drafting it.
8. **Create the study guide** – Write and finalize the complete guide, ensuring it is clear, easy to follow, and helpful for students across different majors.

By following this workflow, we aim to not only meet the project requirements but also create a study resource that is practical, informative, and enjoyable to use.