Lab 8: Group work on projects
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The goal of this lab is for you to make progress on your project, together as a group. You'll set goals and work towards them, and report what you got done, challenges you faced, and subsequent plans.

Group name: triple fighting

Group members present in the lab today: Songhao Jia , Jiajun Bao , Zongyue Zhao

1: Plan
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1. What is your plan for today, and this week?
   a. Training (transfer learning) classification models.
   b. Re-implement the wake word detection module to support ARM.
   c. Set up pipeline for model deployment

2. How will each group member contribute to this plan?
   a. Zongyue - fine tuning models.
   b. Jiajun Bao - re-implement the wake word detection module to support ARM.
   c. Songhao Jia - model deployment

2: Execution
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1. What have you achieved today / this week? Was this more than you had planned to get done? If so, what do you think worked well?
   a. As discussed in last week's meeting, the latency has been significantly reduced after we migrated to the classification models. Moreover, we observed that the classification models converged fast with a high validation accuracy.
   b. We re-implemented the wake word detection module to support ARM. The current implementation well supports ARM, and can recognize 10 types of different utterance and 2 intents (mask recognition and greeting).
   c. We carefully went through all possible parts, and finally found that there was something wrong with the build of cuda, especially the CUBLAS part, making initial torchRT engine impossible.

2. Was there anything you had hoped to achieve, but did not? What happened? How did you work to resolve these challenges?
   a. No.

3. What were the contributions of each group member towards all of the above?
   a. Zongyue - as discussed in Section 1-1-a.
   b. Jiajun Bao- as discussed in Section 1-1-b.
   c. Songhao Jia - as discussed in Section 1-1-c.

3: Next steps

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1. Are you making sufficient progress towards completing your final project? Explain why or why not. If not, please report how you plan to change the scope and/or focus of your project accordingly.
    a. We have made some progress in model development in both mask detection part and audio detection part. However, some weird bugs continues shown in the procedure of model deployment. We need to do more to deal with the deployment issue.
2. Based on your work today / this week, and your answer to (1), what are your group's planned next steps?
    a. Try to finish the model deployment before the meeting.
    b. Test the whole pipeline: we will meet over the Thanksgiving break and put everything together, then evaluate the pipeline in-the-wild.
3. How will each group member contribute towards those steps?
The three of us will gather and contribute together.