Conversational Agents

GROUP PROJECTS –
GETTING STARTED

Assessment

- 100% by group coursework & class participation
- No exam :) But 8 hours per week **group work**
- Group Project presentation + feedback : 15% (week 7) :
- Project Demonstration + feedback session : 15% (week 12):
- Group **Final report**: 55% (week 12)
 - 6-8 pages, ACL conference paper style (latex or word template):
- Individual reflection report : 15% (week 12)

Group Projects

- <u>Design</u>: explain and motivate possible designs for your chosen system, including an analysis of the target user group and/or a relevant corpus analysis. Compare and contrast at least 2 possible designs;
- Analyse: based on research literature and previous approaches relevant to your system, write an analytical review of the main problems and research issues relevant to your problem;
- <u>Develop</u>: use some of the tools listed (or other relevant software, or your own code) to develop a working prototype of your system design;
- Evaluate: using either a working prototype or a functional mockup of your system(s), perform a contrastive evaluation of 2 or more possible designs, using qualitative and/or quantitative methods. Analyse your results for statistical significance.



Possible roles in the project

Some roles might need 2 or more people to collaborate

All members contribute to: design, demo, presentations, report-writing

- 1. Project Coordinator
- 2. Deputy Coordinator
- 3. NLU language understanding (with LLM)
- 4. DM dialogue manager (with LLM)
- 5. NLG language generation (with LLM)
- 6. User testing / Evaluations / Ethical issues and approval
- 7. Speech recognition: ASR / STT
- 8. Speech synthesis: TTS
- 9. System integration (ASR → LLM → TTS, + back-end /APIs)
- 10. App and GUI development

Group meeting times – supervision meetings

8 meetings with your supervisor(s) – weeks 2-4, 7-11 Have your **weekly progress update** ready!

Supervision slot for each group from the following:

Tuesdays:

• 2-3.30 F20CA (4th years)

Thursdays:

• 2-3 F21CA (MSc)

 You should also meet with your group for >1 hour each week





Weekly progress /issues tracking

• <u>Weekly group reporting google doc</u> – to be submitted before each meeting

• Helps you to track progress and issues, and write the final report

• You should also keep an **Individual Project Logbook** to track your own work on the project — update this with your notes weekly to help create your Individual report

How to collaborate?



We will set up a Team (on MS Teams) for each group



You can also use Slack, Discord, etc if you wish



You will meet with your supervisor for ~30 mins each week



You should have at least one other group meeting per week with all of your team members – to be planned by your group coordinator

Next steps



Read the sources suggested by your supervisors (papers, websites, ..)



Decide on the overall goals of your project – what will your system do?

Write some example conversations that you aim to support

Make a list of features that you target



Assign one or more roles to each team member (by week 3)



Select software and tools that you will use (LLM, ASR, TTS ...)

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