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Listening practice for learners of English: towards an intelligent tutoring system

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Listening skills practice for learners of English:

- Reading, writing, listening, speaking being the major skills examined in language assessment
- Our goal: to enable personalised listening practice for language learners
- Using multiple-choice questions (at first) from Cambridge University Press & Assessment placement tests
- Manual tagging of questions with psycholinguistic attributes required to answer them
- Currently CEFR levels B1 and B2 (intermediate)
- Web-app developed with Python Flask during summer internships funded by Incubator Fund, King's College & The ALTA Institute (supported by Cambridge University Press & Assessment)
- Users randomly assigned into control group (question selection based on difficulty level) or experiment groups: (1) with question selection through adaptive learning algorithm; (2) with the above plus functionality to adjust playback speed (informed by research on speech processing)

Prototype web-app:

The image displays three screenshots of the 'ALTA Institute: Listen & Improve' web-app prototype. The first screenshot shows a 'Consent and Data Collection' page with five numbered points regarding data usage and a 'New users: Registration' button. The second screenshot shows a 'Please answer the 5 questions below:' section with a audio player interface (0:00 / 2:32) and a multiple-choice question about Gary's brother David. The third screenshot shows a 'Register an account' form with fields for Username, Age, Password, and Confirm Password, along with dropdown menus for language selection and frequency of use.

(questions obscured for security reasons)

Next steps:

- Completion of web-app for pilot study
- Ethics approval received from Department of Computer Science & Technology
- Data collection and analysis of group effects via answer accuracy and engagement over time
- Incorporation of different question types and more proficiency levels
- Longitudinal study of listening skills development and teaching strategies, further insights from psycholinguistic research

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