MIT2001-05:Research and Development of Mult-Llingual and Multi-Modal Conversational Interfaces

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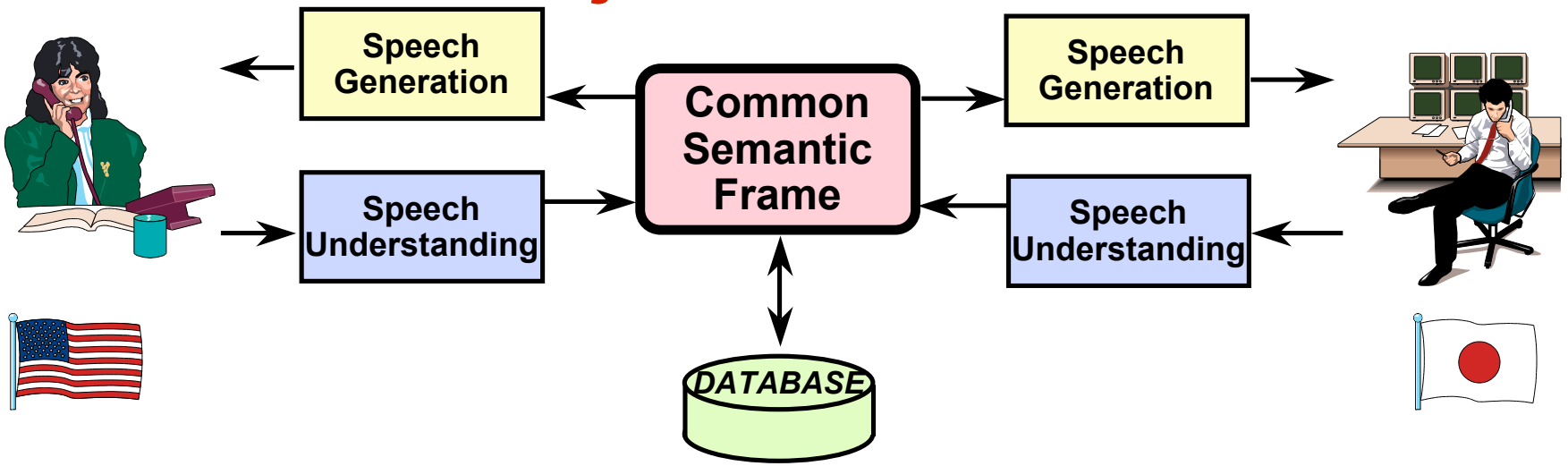
Project Overview



- Develop technology for natural conversational interfaces
- Create methods to facilitate the rapid development of multi-lingual and multi-modal conversational systems
- Use existing SpeechBuilder utility as the basis for incorporating and evaluating research for Japanese systems

Progress Through December 2002

- Generic dialogue module
  - Suite of generic dialogue functions that can be easily configured to new applications via SpeechBuilder
  - Support for grammars and regularizing mechanism for common concepts such as dates and times
- Corpus-based speech synthesis
  - Recorded corpus for Mokusei weather information system
  - Exploring more general intonation model for Japanese
- Redesign of SpeechBuilder compiler to support mirror web-site at NTT

Research Plan for the Next Six Months

- Continue development of generic dialogue manager, and incorporate into SpeechBuilder
- Continue to develop corpus-based synthesizer for the Mokusei weather information domain
- Continue development of more general intonation model for Japanese speech synthesis
- Augment SpeechBuilder with recognizer information useful for developers (e.g., confidence scores, N-best outputs, timing information)