Intelligent Conversational Bot

Milestone 1

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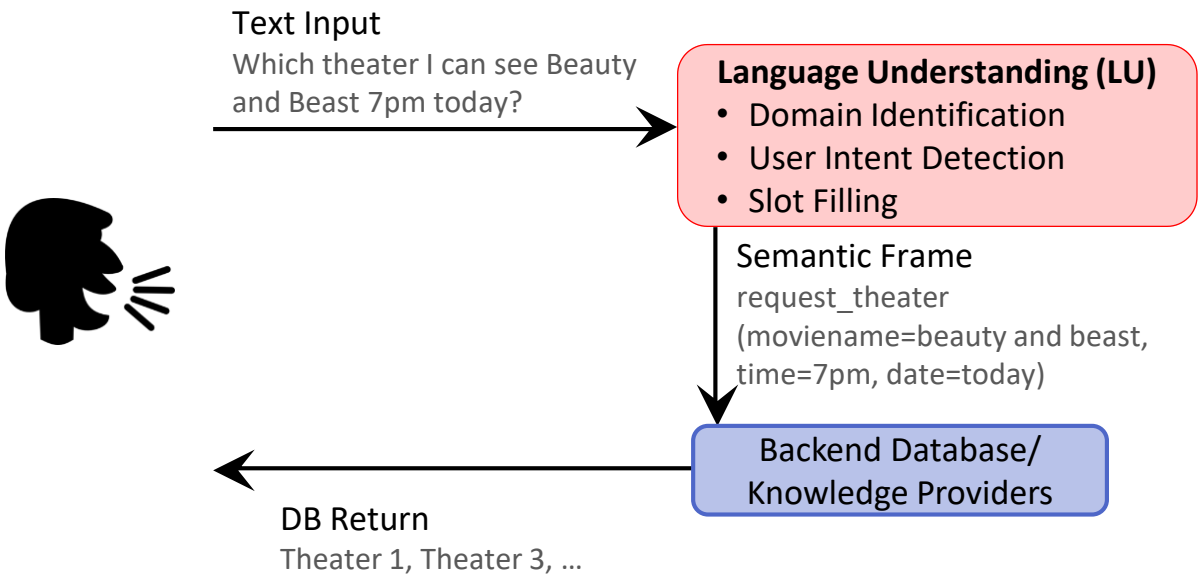
YUN-NUNG (VIVIAN) CHEN

國立臺灣大學
National Taiwan University

WWW.CSIE.NTU.EDU.TW/~YVCHEN/S105-ICB

Milestone 1 – Single-Turn QA



Milestone 1 – Ontology Construction

1) Construct the backend databases
   - Can be online/offline via a downloaded data
2) Design the dialogue semantic schema
   - Decide the number of tables/domains to support
   - Decide the supported user intents
   - Decide the slots that can be specified
3) Generate training examples for each intent
   - Annotate semantic frames (intents and slots)

Milestone 1 – Language Understanding

3) Collect and annotate data
4) Use machine learning method to train your system
   - Conventional
     - SVM for domain/intent classification
     - CRF for slot filling
   - Deep learning
     - RNN, LSTM for domain/intent classification and slot filling
5) Test your system performance

Milestone 1 Requirements

- Report (10%)
  - Ontology
    - List all backend tables
    - List all supported functions
      - e.g. request_moviename, request_theater, etc
  - Language Understanding
    - List all intents and slots in the semantic schema
    - Describe how you implement the LU
      - Approach (e.g. RNN) must include learning based approach
      - Training data statistics
    - Show some training and testing examples and their predicted semantic frames
- Demonstration (5%)
  - Run your code to TAs
  - TAs will randomly pick 5 examples and see the results

Movie Name	Theater	Date	Time
美女與野獸	台北信義威秀	2017/03/21	09:00
美女與野獸	台北信義威秀	2017/03/21	09:25
美女與野獸	台北信義威秀	2017/03/21	10:15