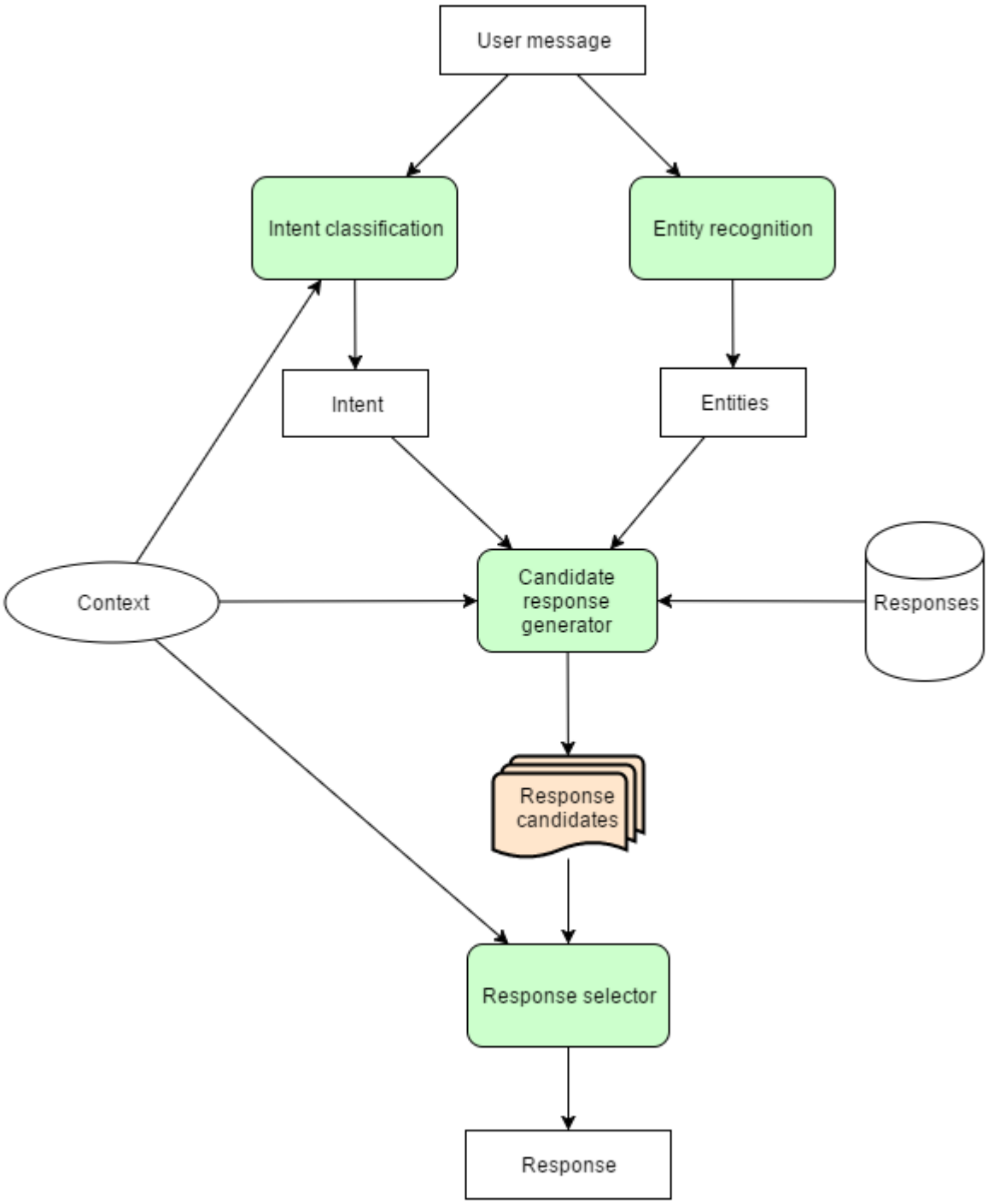
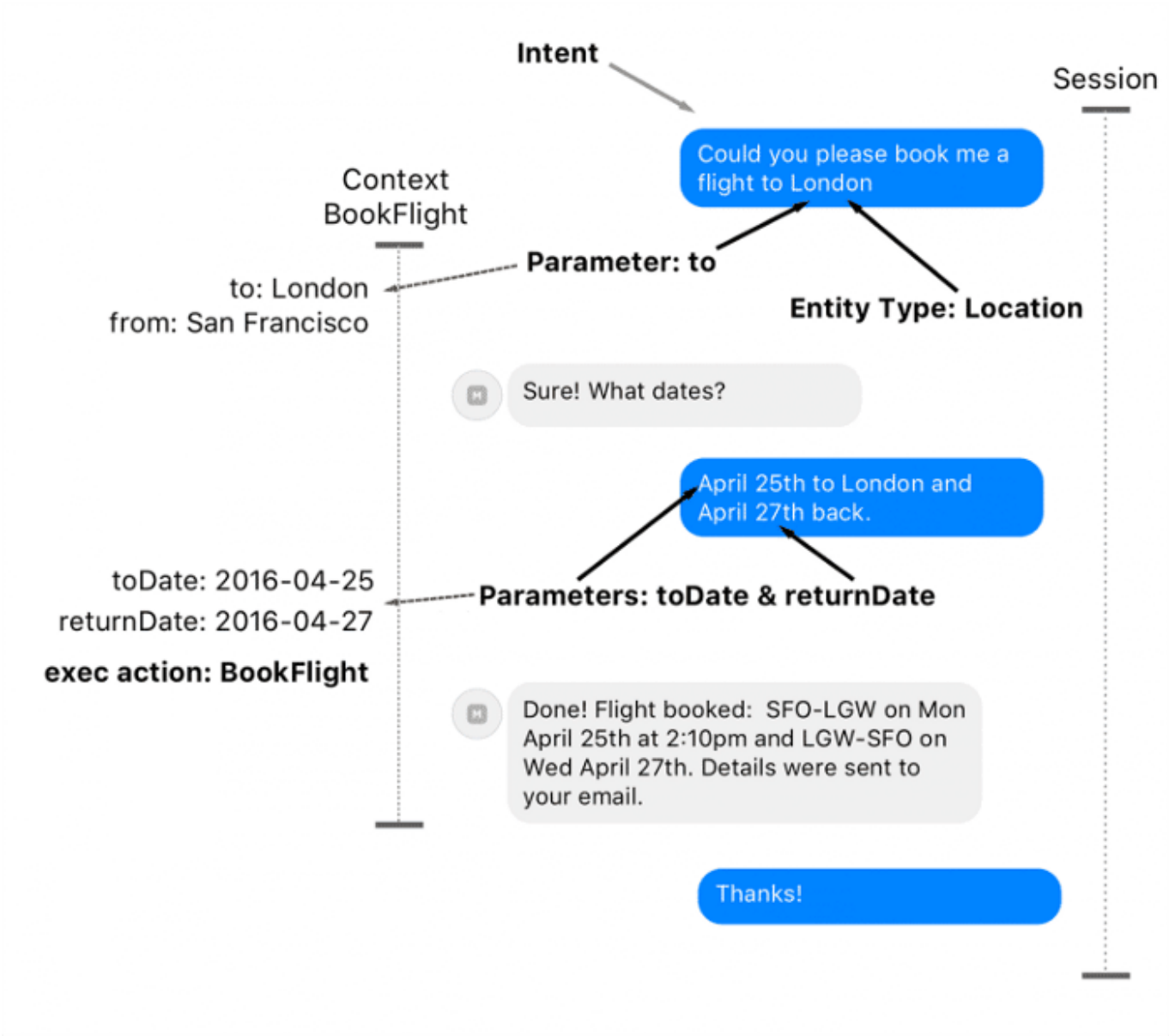
Week 01: General Study

Mon, 29/07/2019 - 05/08/2019

I. Chatbot Operation



Example



Một vài task mà 1 chatbot phải làm:

- Hiểu message: intent + parameter
- Xử lý (intent + parameter) -> next action (ask subsequent question or delivered a response)
- Maintain the Context in a single session. (its state with all parameters)

II. Problems

1. How to get intents & entities
2. Context: what & how to save
3. How to response

III. Proposed Methodology

1. Get intents Using intent classification

   > DATA: đưa vào bao nhiêu class intents, rồi bỏ vào mạng deep learning.

   Xử lý dữ liệu: lemmatize, stemming, stopword removal.

2. Get entities Build entity recognizer with NLTK & SpaCy (person, location, date)

3. Context Save parameters + entites + intents

IV. Experiences

1. Semantic Similarity Chatbot (belong to Information Retrieval Chatbot)
   link

   - data: cornell-movie
   - Biểu diễn word bằng vector (300 dimensions)
   - Câu => Vector(300 dimension) (mean all words)
   - Request => Vector => Nearest Turn (compare 2 vector) => Response

2. Chatbot using LSTM-RNN model
   link Xây dựng mạng LSTM-RNN sử dụng Tensorflow.