

User: I could use some help finding a restaurant that is moderately priced.  
 Agent: We have many options that are *moderately priced*. Is there a specific area or type of cuisine you are looking for?  
 User: I do not care about the cuisine but I want it to be *in the west*.  
 Agent: We have *Prezzo*. It is an Italian restaurant located in the west. it is moderately priced. Would you like me to book it for you?  
 User: *That will not be necessary*. What is the postcode?  
 Agent: Prezzo's postcode is cb30ad.

**Annotation:** {(restaurant, price range, moderate), (restaurant, area, west)}  
**Prediction:** {(restaurant, price range, moderate), (restaurant, area, west), (restaurant, name, Prezzo)}

## 7. Multi-turn inference failed

Description: In this scenario, it requires information from multiple turns to predict the value of a slot, but the model fails to perform multi-turn inference.

Example:

User: Hello, may I have a list of museums in the west?  
 Agent: There are 7: Cafe Jello Gallery, Cambridge and County Folk Museum, ...  
 User: Please give me the entrance fee and postcode of County Folk Museum  
 Agent: The entrance fee is 3.50 pounds and the postcode is cb30aq. Would you like any other information?  
 User: I need a place to eat *near the museum*. I do not want to spend much so it should be *cheap*. what do you have?

**Annotation:** {(attraction, area, west), (attraction, type, museum), (attraction, name, Cambridge and County Folk Museum), (restaurant, price range, cheap), (restaurant, area, centre)}  
**Prediction:** {(attraction, area, west), (attraction, type, museum), (attraction, name, Cambridge and County Folk Museum), (restaurant, price range, cheap)}

## 8. Implication not understood

Description: Implication expressed by the user is not understood by the model.

Examples:

User: I am trying to find a train leaving after *14:45* that's heading out *from London Liverpool street*. What do you have?  
 Agent: There are 45 trains that fit your criteria. Please clarify your destination, day of travel and the time you want to arrive by so that i can narrow it down.  
 User: I need a train *to Cambridge* on Tuesday.  
 Agent: I have 5 departures fitting your criteria on the :39 of the hour from 15:39 to 23:39. Would you like me to book any of these for you ?  
 User: Yes please do book the 15:39.

**Annotation:** {(train, leaveat, 14:45), (train, departure, London Liverpool street), (train, destination, Cambridge), (train, day, Tuesday), (train, book people, 1)}  
**Prediction:** {(train, leaveat, 14:45), (train, departure, London Liverpool street), (train, destination, Cambridge), (train, day, Tuesday)}

## 9. Incorrect value reference

Description: There are multiple values of a slot in the context and the model refers to an incorrect one. This usually happens in time-related slots such as train departure time.

Examples: