

User: I would like to find an *architectural attraction* to go to in the *centre*. Can you help me?
 Agent: Yes! I found 5 attractions matching your requirements . Would you like to know more?
 User: I would like to get the entrance fee and address of them please.
 Agent: *Great Saint Mary's Church* is 2 pounds and the other 4 are free. Would you like the address for Great Saint Mary's church?
 User: *Yes*, that would be great.

Annotation: {(attraction, type, architecture), (attraction, area, centre), (attraction, name, Great Saint Mary's Church)}
Prediction: {(attraction, type, architecture), (attraction, area, centre)}

3. Annotator disagreement on user confirmation (unlabeled)

Description: Similar to the last type of errors, this one comes from the scenario that the tuple is added to the belief state by the model but not by the annotator.

Examples:

Agent: There are many great restaurants in the *centre*. Is there a certain type of food you would like to have?
 User: What do you have that is *expensive*?
 Agent: Yes, there are many. Would you be interested in trying British cuisine or African?
 User: *British cuisine* is fine. Can you suggest a restaurant?
 Agent: *Fitzbillies restaurant* meets all of your requirements. Would you like more info on them?
 User: Book this for *6 people* on *Monday* at *12:30*.

Annotation: {(restaurant, area, centre), (restaurant, food, British), (restaurant, price range, expensive), (restaurant, time, 12:30), (restaurant, book people, 6), (restaurant, day, Monday)}
Prediction: {(restaurant, area, centre), (restaurant, food, British), (restaurant, price range, expensive), (restaurant, time, 12:30), (restaurant, book people, 6), (restaurant, day, Monday), (restaurant, name, Fitzbillies restaurant)}

4. Paraphrases not recognized

Description: The paraphrases of a value is not recognized by the model.

Example:

User: Can you help me find a place to go in the centre?
 Agent: I can help you with that. Is there a certain kind of attraction that you would like to visit?
 User: Surprise me. Give me the postcode as well.

Annotation: {(attraction, area, centre), (attraction, area, don't care)}
Prediction: {(attraction, area, centre)}

5. Value exactly matched but not recognized

Description: The value of a slot is mentioned and exactly matched in the user's utterance, but the model fails recognize and predict it.

Examples:

Agent: I am sorry, there is no restaurant serving specifically North American or American food in my database, is there another type of food you would consider?
 User: How about *Modern European* food?
 Agent: There are 3 Modern European restaurants. Two in the centre and one in the south. Do you have a preference?
 User: I would prefer the one on the *centre*, could I have the phone number and postcode please?

Annotation: {(restaurant, food, Modern European), (restaurant, area, centre)}
Prediction: {(restaurant, food, Modern European)}

6. User responses misunderstood

Description: The model misunderstands the user's intention and fails to predict based on the user utterance.

Examples: