## Language Technology II, SS06 Homework 1: call a dialog system

Pick at least one of the dialog systems below and experiment with it.<sup>1</sup>

Write down the **observations** you make while talking to the system (if possible, record the dialog and take notes after you're done), along the points listed below. Bring your notes into the class for discussion. Additionally, email a brief **report** (approx. 1 page) on your findings by **June 21, 2006** to Magdalena Wolska (magda@coli.uni-sb.de)

## Issues to investigate

- speech recognition accuracy;
- speech output quality;
- dialog management (e.g. ease of navigation/communication with the system, system's responsiveness, error/ambiguity handling, help, bargein, support of mixed initiative);
- task handling (e.g. goal completion).

## Systems to consider

**Jupiter** is a conversational system that provides up-to-date weather information for about 500 cities worldwide over the telephone.<sup>2</sup> Find out what information Jupiter can give you and how to communicate with Jupiter (e.g.

<sup>&</sup>lt;sup>1</sup>Some systems are located in the U.S. To reduce cost, you may wish to use call-by-call, cf. for example http://www.teltarif.de/ or http://www.billiger-telefonieren. de/. If you cannot make a call from your home line, you may use the phone in office 1.01 in the CoLi building. To access the office, ask either Magdalena Wolska or Frau Maurus to let you in. Please limit your call to 30 minutes at most, and do not make any other phone calls.

 $<sup>^2 \</sup>mathrm{Jupiter's}$  number is 001-888-573-TALK

say "help" or "what can I ask about?", "what can I say?"). Think of your own weather questions and ask Jupiter. Then solve the following tasks:

- Find out about what countries/regions the system knows;
- Find out the temperature in a city of your choice a) tomorrow, b) on a particular day (e.g. June 17th);
- Find out about the weather in Birmingham or Cambridge;
- Find a city/region with interesting weather events, e.g. hail, thunderstorms, hurricane, tornadoes, floods, etc.;
- Find a sunny place in e.g. Norway;
- Find a rainy city.

**TellMe** is a voice portal whose features include: driving directions, weather, horoscopes, and stock quotes. Call TellMe<sup>3</sup> and find out driving directions between two cities of your choice.

**Deutsche Bahn** train time-table information is operated by a spoken dialog system. Call Deutsche Bahn<sup>4</sup> and find out about available trains between two locations of your choice. Inquire about e.g. discounts for students, transfers, availability of a sleeper car, a restaurant car. In order to compare dialog management strategies, call also the **Philips system**<sup>5</sup>, a research system that can only provide information about train connections for a subset of German train stations, but has a more flexible dialog management. Try to find out in what respects the behaviour of the Philips system differs from that of the DB system.

<sup>3</sup>on 001-800-555-8355

 $^4\mathrm{The}$  DB dialog system's number is 0800-1-507090

 $<sup>^5 \</sup>mathrm{The}$  Philips' number is 0241-604020