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Master Thesis Task Description:

Se endelig rapport i [DAIM](#)

Working title: [Expanding an NLP-Based Bus Query System to Increase Its Usefulness](#)

The task will be to expand the functionality of the natural language query system BusTUC, to include support for additional information deemed useful by potential users.

The autumn project leading up to this project shall be treated as the groundwork for this thesis. It identified suitable areas of expansion, at least some of which shall be implemented. For example, chronological bus stop lists and support for queries about bus frequencies were found to be popular potential improvements. Written dialogue support is also desirable.

The result shall be compared to BusTUC as it was before the work, and the significance of the work shall be evaluated.

Autumn Project Task Description:

What is the most natural way to get information about bus schedules or other well organised and structured data?

The task will be to extend the functionality of the spoken natural language query system to include support for some other useful and possibly relevant information.

Such information could be train routes (NSB), other train information, or possibly opening hours of for example Trondheim Torg or Studentersamfundet.

If opening hours for popular destinations are included, one might extend the system to answer questions such as "first bus to Trondheim Torg" better: that is, the first bus that will drop you off by an open Trondheim Torg.

One should look at different ways to include this functionality, as well as the consequences for the system as a whole. This could mean investigating user behavior and service quality. For example, what do users think of the system's usefulness and user-friendliness (with this extension)? And could one type of question be easily confused with another and damage the usefulness of the system?

With a prototype in place one could then investigate the actual consequences, and see if any parts of the system could be changed to provide better service overall.

(Some existing work to build on can be found [here](#))