

Course Selector

Helping students choose valid combinations of courses

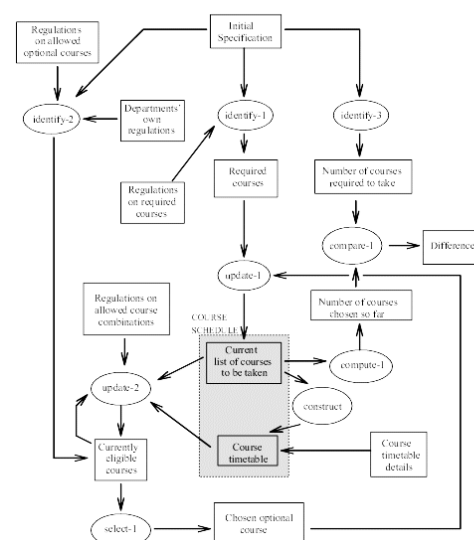
Description:

- ◆ Students in the Department of Business Studies at the University of Edinburgh have wide flexibility in their course choices
 - ◆ but timetable clashes rule out some courses
 - ◆ and Department regulations require some outside courses to be taken for 2 or 3 years.
- ◆ Directors of Studies used to spend 15-20 minutes explaining this to each of 50-60 students.
- ◆ Course Selector is a knowledge based system that advises on legal course combinations and sensible course choices.



Technical approach:

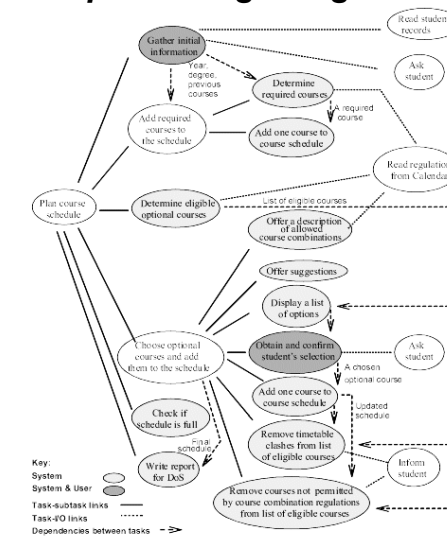
- ◆ Knowledge acquired from one interview and from the University Calendar.
- ◆ Knowledge analysed and system designed using KADS methodology.
- ◆ System implemented using CLIPS, “stripped down” for delivery on student lab PCs.
- ◆ Used ‘negative truth maintenance’ – course Y was marked as *unavailable* due to clash with course X, unless course X was deselected.
- ◆ Entire project took 8 man weeks.
- ◆ Success due to good methodology and structure-preserving design.



Model showing inferences & domain knowledge

Benefits:

- ◆ Students no longer needed to navigate through the 800-page University Calendar.
- ◆ Automatically found timetable clashes (including one between two required courses for a joint degree).
- ◆ Directors of Studies now spent 5 minutes per student in the first week of the academic year instead of 15-20 minutes.
- ◆ Students can keep a disk of course choices from previous years to reduce the input required in later years.



Model showing control & interactions