Introduction

• Currently, course advice and progression checking are done manually, at high cost.
• Previous implementations of the automated course advisors had limitations:
  o The academic requirements are not completely represented.
  o No intuitive way for students to plan their degrees.
  o No intuitive way to recommend suitable courses.
  o Not well integrated with other systems (e.g. Handbook).
  o Did not handle dual-award programs or transfer students well.

Aims and Objectives

• Provide dynamic information that is always up-to-date and an accurate representation of faculty rules and regulations.
• Provide enrolment information that is easily accessible by both students and student administrators.
• Provide fully-automated progression checks on academic requirements towards degree completion and inform students on their academic progress.
• Provide students the full control to conveniently plan their degrees while having accessible and understandable program and stream rules, and having the validity of their plans checked regularly.
• Provide accurate and reliable course recommendation.
• Reduce workload for admin staff and Directors of Studies.
• Provide good UI design to ensure system usability.

Functionalities

Overview Component

• View basic information about program and stream enrolments.
• Expanded view shows the rules and requirements.

Report Component

• View academic transcript with completed UOC and UNSW WAM.

Planner Component

• Planner board shows courses in past and future terms.
• Progression board shows not yet completed requirements.
• Progress bar show UOC completed for stream/program.
• Drag-and-drop mechanism used to plan courses.
• Alert notifications on dropping ineligible courses.
• Integrate with recommended popular courses.
• Add and remove preferred courses.
• Course tooltip for quick access to course information such as remaining prerequisites, remaining corequisites and course offerings.

Progression Component

• View detailed completed and remaining requirements.

Handbook Component

• Search any courses, streams and programs with fast autocompletion.
• Responsive handbook results such as course eligibility, GenEd eligibility, remaining prerequisites and remaining corequisites.
• Check course difficulty from grade distribution.

Conclusions

All implemented functionalities are correct and accurate without any major issues. Figure 9 emphasizes the importance of a course advisor system for UNSW demographics. Figure 10 shows the positive response of students towards the degree planner-related functionalities in our system. They felt that the degree planning system provided the flexibility to plan their degrees according to their own preferences while keeping them informed of their progression. Students appreciated the integrated handbook capability (preferring the existing handbook and especially the grade distribution, which they felt gives them a sense of the course difficulty).

Future Works

Completely specify all prerequisites and corequisites for all courses. More options for recommended courses such that recommendations can be based on the types of courses taken or the marks obtained from similar courses. Autoload feature to fill plan based on the structure recommended by faculties or the fastest time taken to graduate. Improve UI design especially the colour convention used.

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