User Story

Jeremy, a first year Software engineering student, is trying to decide on his courses for the next semester. He has taken CIS*1300, CIS*1910, CIS*1250, MATH*1200, and PSYC*1000. Jeremy writes these courses into the website, and it returns a list of courses he can take.

Jeremy realizes that he inputted the wrong course. He took MATH*1080, not 1200. Jeremy clears his course list, and reenters the right course. The website should allow him to delete it, and generate a new list of courses.

Jeremy has read up on the requirements for the software engineering major, and notices that all B.comp students are required to have an area of application. Jeremy really enjoyed PSYC*1000, and would like to pursue that. In order to take more psychology courses, the website should allow Jeremy to filter the returned list to only PSYC courses.

Additionally, In his planning, he learns he has to take at least 2.0 credits in 2000 level PSYC courses for his minor. Jeremy should be able to filter the returned courses not only to just PSYC, but PSYC at the second year level.

Test cases:

Test case 1:

Enter zero courses

Expected output:

List of courses with NULL as their prerequisite.

Delete	Course Code	Name	Description	Credits	Location	Restrictions
	AGR*1110	Introduction to the Agri-Food Systems	This introductory course provides an overview of Canadian and global agri-food systems. Students will be introduced to many different facets of agriculture, including primary production (conventional and organic) of commodity, mid-value and high-value crops, and livestock. Students will explore the agri-food system by tracing consumer end-products back to primary production. Modern, industrial agri-food systems as well as subsistence farming will be discussed. The course incorporates an experiential learning component in which students will explore a new agri- food opportunity for Ontario by designing and assessing the value chain.	1.00	Guelph	AGR*1100. AGR*1250. Restricted to students in BAH.FARE, BSC(AGR), Minor in Agriculture
	ANSC*3120	Introduction to Animal Nutrition	This course applies the principles of nutrition to the development of diets and feeding programs for the various species of animals of agricultural importance. Co-requisite(s): NUTR*3210	0.50	Guelph	Registration in BSC(Agr) or BSC.ABIO.
	ANTH*1120	Biological Anthropology	In this course students will be introduced to the central concepts of biological anthropology. Potential topics to be explored include hominid evolution, contemporary human diversity, primatology, nutrition and diet, and an introduction to forensic anthropology and paleopathology.	0.50	Guelph	This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations. Please see the departmental website.
	ANTH*1150	Introduction to Anthropology	This course deals with humankind from a broad historical and cross- cultural perspective. Theoretical models, case studies and specific methods will be presented. Course topics may include the origin and transformations of human society, the relationship between biological and cultural traits, human language, variation in family structure and religion, the economic and political aspects of human society.	0.50	Guelph	

Test case 2:

CIS*1300

Expected output:

Course list should now include CIS*2500, and no longer include courses without prerequisites.

Delete	Course Code	Name	Description	Credits	Location	Restrictions
	CIS*2170	User Interface Design	This course is a practical introduction to the area of user interface construction. Topics include user interface components and their application, best practices for user interface design, approaches to prototyping, and techniques for assessing interface suitability.	0.75	Guelph	
	CIS*2250	Software Design II	This course focuses on the process of software design. Best practices for code development and review will be the examined. The software development process and tools to support this will be studied along with methods for project management. The course has an applied focus and will involve software design and development experiences in teams, a literacy component, and the use of software development tools.	0.50	Guelph	Restricted to BCOMP.SENG majors.
	CIS*2500	Intermediate Programming	In this course students learn to interpret a program specification and implement it as reliable code, as they gain experience with pointers, complex data types, important algorithms, intermediate tools and techniques in problem solving, programming, and program testing.	0.50	Guelph	

Test case 3:

CIS*1300, CIS*1910 both inputted

Expected output:

Course list should now include CIS*2910, as well as CIS*2500. It should also no longer include CIS*1300, or CIS*1910.

Delete	Course Code	Name	Description	Credits	Location	Restrictions
	CIS*2170	User Interface Design	This course is a practical introduction to the area of user interface construction. Topics include user interface components and their application, best practices for user interface design, approaches to prototyping, and techniques for assessing interface suitability.	0.75	Guelph	
	CIS*2250	Software Design II	This course focuses on the process of software design. Best practices for code development and review will be the examined. The software development process and tools to support this will be studied along with methods for project management. The course has an applied focus and will involve software design and development experiences in teams, a literacy component, and the use of software development tools.	0.50	Guelph	Restricted to BCOMP.SENG majors.
	CIS*2500	Intermediate Programming	In this course students learn to interpret a program specification and implement it as reliable code, as they gain experience with pointers, complex data types, important algorithms, intermediate tools and techniques in problem solving, programming, and program testing.	0.50	Guelph	
	CIS*2910	Discrete Structures in Computing II	This course is a further introduction to discrete structures and formal methodologies used in computer science, including sequences, summations, recursion, combinatorics, discrete probability, and graph theory.	0.50	Guelph	

Test case 4:

Input CIS*1300, CIS*1910, and PSYC*1000 choose to filter courses by CIS.

Expected output:

No psyc courses should be present in output, only CIS.

Delete	Course Code	Name	Description	Credits	Location	Restrictions
	CIS*2170	User Interface Design	This course is a practical introduction to the area of user interface construction. Topics include user interface components and their application, best practices for user interface design, approaches to prototyping, and techniques for assessing interface suitability.	0.75	Guelph	
	CIS*2250	Software Design II	This course focuses on the process of software design. Best practices for code development and review will be the examined. The software development process and tools to support this will be studied along with methods for project management. The course has an applied focus and will involve software design and development experiences in teams, a literacy component, and the use of software development tools.	0.50	Guelph	Restricted to BCOMP.SENG majors.
	CIS*2500	Intermediate Programming	In this course students learn to interpret a program specification and implement it as reliable code, as they gain experience with pointers, complex data types, important algorithms, intermediate tools and techniques in problem solving, programming, and program testing.	0.50	Guelph	
	CIS*2910	Discrete Structures in Computing II	This course is a further introduction to discrete structures and formal methodologies used in computer science, including sequences, summations, recursion, combinatorics, discrete probability, and graph theory.	0.50	Guelph	

Test case 5:

Input CIS*1300, and filter to only 2000 level courses.

Expected output:

Should be the same as case 2, but with 3000 level ENG courses removed.

	CIS*2170	User Interface Design	This course is a practical introduction to the area of user interface construction. Topics include user interface components and their application, best practices for user interface design, approaches to prototyping, and techniques for assessing interface suitability.	0.75	Guelph	
	CIS*2250	Software Design II	This course focuses on the process of software design. Best practices for code development and review will be the examined. The software development process and tools to support this will be studied along with methods for project management. The course has an applied focus and will involve software design and development experiences in teams, a literacy component, and the use of software development tools.	0.50	Guelph	Restricted to BCOMP.SENG majors.
	CIS*2500	Intermediate Programming	In this course students learn to interpret a program specification and implement it as reliable code, as they gain experience with pointers, complex data types, important algorithms, intermediate tools and techniques in problem solving, programming, and program testing.	0.50	Guelph	
	CIS*2910	Discrete Structures in Computing II	This course is a further introduction to discrete structures and formal methodologies used in computer science, including sequences, summations, recursion, combinatorics, discrete probability, and graph theory.	0.50	Guelph	
	ENGG*2410	Digital Systems Design Using Descriptive Languages	Review of Boolean algebra and truth tables, Karnaugh maps. Design, synthesis and realization of combinational circuits. Design, synthesis and realization of sequential circuits. VHDL: structural modeling, data flow modeling, synchronous & asynchronous behavior descriptions, algorithmic modeling. Designing with PLDs. Digital design with SM charts. Designing with PGAs and complex programmable logical devices. Hardware testing and design for testability. Hierarchy in large designs. The course will primarily be concerned with the design of multi-input, multi-output digital controllers which provide the central control signals that orchestrate the collection of hardware devices (from SSI to VLSI) found in a digital system. An introduction to FPGA-based, as well as microprocessor-based digital systems design will be given. Design examples will include systems such as UART, microcontroller CPU, ALU and data acquisition system.	0.50	Guelph	This is a Priority Access Course. Enrolment may be restricted to the CENG and ESC specializations in the BENG and BENG:C programs. See department for more information. Non-BENG students may take a maximum of 4.00 ENGG credits.