Leap Designs

As requested by QED Technologies: Eduvise

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Revision History

12/03/2019 Leap Designs

i. Version 0.9

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Glossary of Terms

Academic Advisor	An academic advisor working for the Faculty of Education at UVic
Annotation	An additional comment on a document
Course overview	Course information specifying a course's code, title, description, unit
Course overview	credit, and prerequisites.
NetLink ID	A unique personal identifier which is used as a username for online
NeiLink ID	services provided by UVic
Professor profile	A read-only collection of references to professor record in the UVic
Professor profile	internal records database
Referee	A person who writes a reference letter for a student
Reference letter	A letter of from a referee that assesses the capability of a student to
Reference leffer	be an educator
Referral document	Reference letter
Student number	A unique numeric identifier given to each new student when enrolling
Student number	at the University of Victoria in the form V00 followed by 6 other digits
Student	A student enrolled in a program in the Faculty of Education at UVic
Student document	Any file created by or uploaded to Eduvise pertaining to a student
Ct. dant matila	The collection of a student's Eduvise documents and their student
Student profile	record
Student record	The collection of entries pertaining to a student accessed through the
Student record	UVic internal records database
Student record entry	Any piece of information or file in a student's UVic internal record
UVic internal records	The existing database, managed by UVic, which contains every
database	student record and information about every professor and course at
	UVic

Table 1: Glossary

1 Introduction

1.1 Purpose

This requirements specifications document details the specifications of the requirements needed for QED Technologies' new academic advising system for the Faculty of Education at The University of Victoria. This project, titled "Eduvise", will be a software system that aims to increase the efficiency of academic advisors by providing them with a better system to store and manage student documents and records, and by providing easier access for students to see their own documents, records, and progress related to their degree. Eduvise aims to make the academic advising process of the Faculty of Education more efficient by removing the necessity of physical storage and manual retrieval of documents and records.

1.2 Project Scope

This project's primary focus is to create a digital system for the viewing and manipulation of academic advising information for the Faculty of Education. The information includes students' correspondence with the Faculty of Education, documents and annotations added to Eduvise by academic advisors, and records from the UVic internal student records database.

A user of Eduvise will be in one of three classes: Student, Academic Advisor, or Referee. Each academic advisor will have full access to add, view, and modify documents and annotations pertaining to any student. Students will be able to view some of the information pertaining to them, including information about their academic progress, performance, and planning. Referees will only submit reference letters for students. Eduvise will interact with its own database, UVic's internal student records database, and the UVic NetLink authentication server.

1.3 Overview

This document consists of six main sections and one appendix. This Section, "Introduction", has discussed the background to the report. Section 2, "Overall Description," describes Eduvise from a high level, including the product perspective, product features, user classes, operating environment, constraints on development, dependencies, and assumptions. Section 3, "System Features", outlines the core features that must be in Eduvise. This section includes a description of each feature, the level of priority of each feature, and the requirements associated with each of the system features. Section 4, "External Interface Requirements", describes logical characteristics between a proposed solution and the following four interfaces: user interface, hardware interface, software interface, and communication interface. Section 5, "Other Non-Functional Requirements", describes the performance requirements, safety requirements, security requirements, and software quality attributes that are necessary for the proposed solution. Section 6, "Other Requirements", describes all other requirements of a proposed solution not described in the rest of the requirement document. The appendix, "Issues List," contains a list of remaining conflicts and open issues that are pending resolution.

2 Overall Description

2.1 Product Perspective

Eduvise is a software system that is currently being designed by LeapDesigns for the Faculty of Education academic advising office at the University of Victoria. Eduvise will be a new and self-contained system that improves, augments, and partially automates the entirely manual academic advising process that is currently in place at the Faculty of Education academic advising office. Eduvise aims to increase academic advisor efficiency by allowing academic advisors to access student documents and records with ease. Additionally it aims to allow both students and academic advisors to view a student's academic progress and performance. Eduvise will store documents pertaining to a student's academic advising, and allow an academic advisor to view, modify, and append information to each student's profile and the contained student Eduvise documents.

2.2 Product Features

The features that Eduvise provides are:

i. Searching

The searching feature will allow an academic advisor to find UVic student profiles, professor information, and course information.

ii. Adding Academic Advising Documents

Eduvise will allow an academic advisor to upload academic advising documents to its database and will allow a referee to upload reference letters to its database.

iii. Academic Advising Document Modification

An academic advisor will be able to, through Eduvise, modify academic advising documents for their advising needs.

iv. Academic Advising Document Exporting

An academic advisor and students will have the ability to export academic advising documents through Eduvise.

v. Academic Advising Document Viewing by Students

A student will have access to view a limited selection of academic advising documents within the Eduvise database.

vi. Academic Advising Document Viewing by Academic Advisors

An academic advisor will have access to view every academic advising document stored in Eduvise's database and every student record stored in UVic's internal records database.

vii. Degree Planning

Eduvise will allow the use of academic advising documents and student records to assist students in planning their degree with an academic advisor.

viii. Authentication

Eduvise will authenticate users using UVic's NetLink credentials.

2.3 User Classes and Characteristics

2.3.1 Academic Advisor

The academic advisor user class consists of every academic advisor in the Faculty of Education. An academic advisor will use Eduvise to support their interactions with students. An academic advisor currently accesses student documents through a manual process which limits the academic advisor's efficiency. An academic advisor currently has no interaction with a software system for advising, but typically has some experience with other office-related software. An academic advisor will require some initial training to use Eduvise.

2.3.2 Student

The student class consists of university students enrolled (currently or in the past three years) in any program in the Faculty of Education at UVic. A student will be able to track their degree progress and track progress towards goals set by an academic advisor. Currently, a student only has access to a physical transcript to track their degree progress. A student will be able to use Eduvise, including any features and capabilities available to them, without any previous knowledge, training, or experience related to Eduvise.

2.3.3 Referee

The referee class consists of professionals overlooking the students' work experience. A referee will provide a reference letter for a student to an academic advisor by submitting the reference letter to Eduvise. A direct, secure submission method for the reference letter will prevent a student from viewing or altering the reference letter unless permitted to do so by an academic advisor.

2.4 Operating Environment

Eduvise will operate to support the Faculty of Education academic advising office at UVic, provide a way for students to access their own degree progress and course performance, and allow referees to directly and securely submit documents to the academic advising office. Eduvise will be accessible to students using a variety of devices from outside UVic. Eduvise will operate on the existing hardware and operating systems in use by the Faculty of Education. The hardware and operating system specifications are outlined in section 4.2 Hardware Interfaces and section 4.3 Software Interfaces.

2.5 Design and Implementation Constraints

Storage: Student profiles and documents must be accessible for at least 3 years after a student has either graduated or last been enrolled in a Faculty of Education program.

External Application Interface: Continuous access to UVic's internal student records database for student records is required. Continuous access to UVic's NetLink authentication server is required.

Authentication System: Access to Eduvise must be authenticated through the use of a user's NetLink credentials.

Information Security Policy: UVic has information security and privacy policies [1] to protect its students' information, which must be followed. These policies are described in detail in section 5.3 Security Requirements.

2.6 Assumption and Dependencies

Database Connection: Eduvise depends on access to UVic's internal records database for access to student records and professor and course information. Eduvise depends on access to UVic's NetLink authentication server for authentication.

Current Records Transfer: Every physical academic advising document currently stored by an academic advisor will need to be uploaded to the new Eduvise database.

3 System Features

In section three, any reference to a student or an academic advisor pertains exclusively to a student or an academic advisor within the Faculty of Education at UVic. For further information on the roles of a student or an academic advisor in the report, refer to section 2.3 User Classes and Characteristics.

3.1 Models

3.1.1 Use Case Model

This use case model outlines all the use cases identified by Leap Designs for the three user classes of Eduvise. In the following sections, all the individual use cases will be analyzed in depth.

To simplify the use case model, Leap Designs omitted "includes" relationships between all use cases and the "Log In" use case with the exception of the "Submit Referral" use case. However, within our use cases there still exists the assumption that all the specified use cases do include the "Log In" use case.

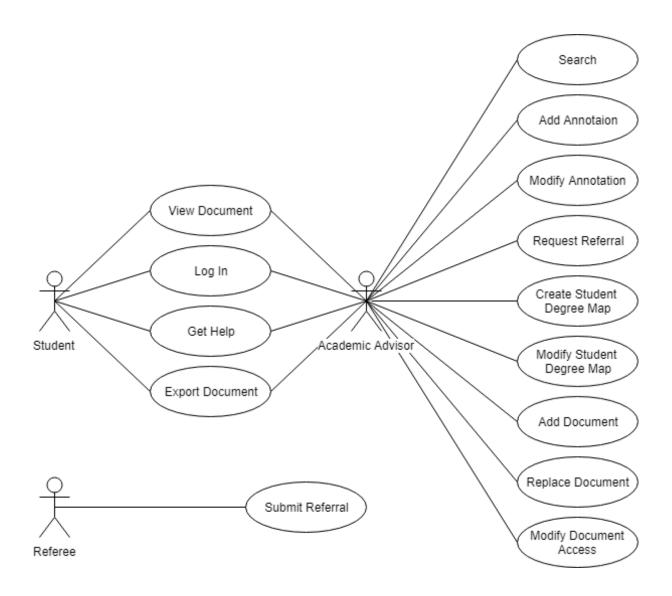


Figure 1: Use Case Model

3.1.2 Data Dictionary

The Data Dictionary defines all data that is contained within the context diagram, DFD level 1, and DFD level 2

DFD level 2	
Annotated Document	Document from a student profile with attached annotations from an
Annolated Document	academic advisor.
Annotations	Text based notes attached to a document on a student's profile.
Approval Request	An email sent to an academic advisor notifying them a referee has
Approvar Request	submitted a reference letter.
Authorization	Response from the NetLink authentication server on the validity of a
7 to mon Zanon	set of credentials.
Authorization Request	Request for credential authorization sent to the NetLink authentication
	server
Authorization Notifica-	UI update for an academic advisor following a successful login
tion	attempt.
Course and Professor	Search results corresponding to a course or professor
Search Results	, ç ,
Credentials	The NetLink ID and password of the user logging in.
Degree Plan	The degree plan includes classes to take by term, goals, and addi-
0	tional comments
Degree Plan Changes	Text information into the student degree plan template on a student's
	profile.
Document	Files that are associated with a specific student.
Document Approval	Approval of a reference letter sent by an academic advisor
Document Changes	Changes to a document including degree plan changes, annotations,
	and document approval
Export Request	A request to export a document from a specific student profile.
Non-existent Student	Student Identification with no prior association to a student profile
Identification	within Eduvise
Reference Letter	A document submitted by a referee
Referral Submission Re-	A request sent by an academic advisor to tell Eduvise to send a
quest	submission link to a referee
	Keywords identifying a student, professor, or class. Examples would
Search Query	include names, NetLink IDs, student numbers, course codes, or
	faculty.

Search Results	A list of all students, professors, and classes that meet the search
Jedicii kesulis	criteria.
Selected Student Profile	A student profile chosen by an academic advisor after a search
Student Degree Plan	A pdf document that contains a degree plan designed by an academic
Student Degree Flan	advisor in Eduvise
Student Identification	Student name and NetLink ID required to locate a student profile
Student Info	All student info corresponding to a specific student identification
Student into	located in the Eduvise Internal Database (D2)
Student Profile	A UI Screen with a student's profile information.
Student Records	All student info corresponding to a specific student identification
Student Records	located in the UVic Internal Records Database (D1)
Student View Request	An authorized request from a student after successful login to view
Student view Request	their own profile.
Submission Link	A link allowing a referee to submit a reference letter into Eduvise

Table 2: Data Dictionary

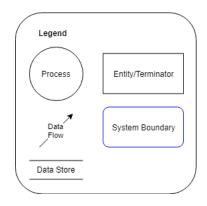


Figure 2: Data Flow Diagram Legend

3.1.3 Data Flow Diagrams

This legend is used for the context diagram, data flow diagram (DFD) level 1, and DFD level 2.

3.1.3.1 Context Diagram

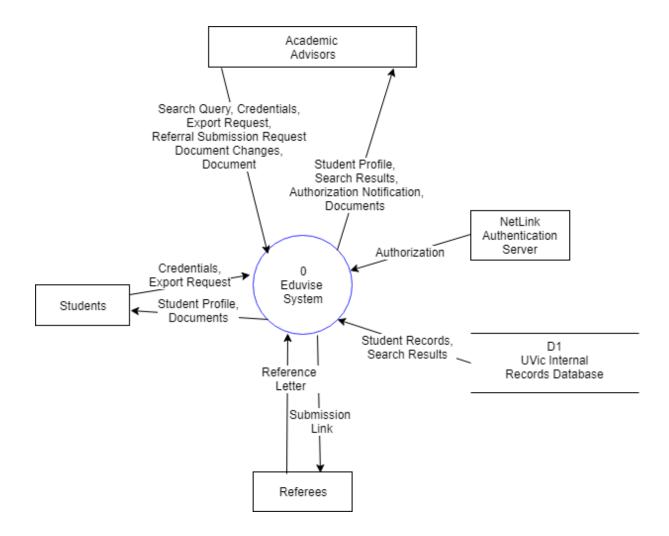


Figure 3: Context Diagram

3.1.3.2 DFD Level 1

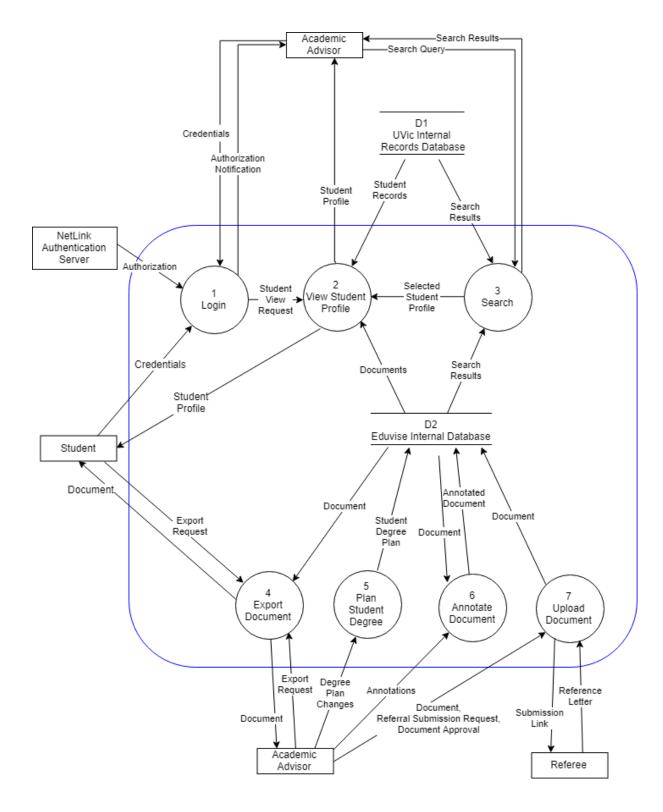


Figure 4: Data Flow Diagram Level 1

3.1.3.3 DFD Level 2 Overview

This is the overview of DFD level 2, The red lines indicate the split of the four zoomed in quadrants on the following four pages in the following order: top left, top right, bottom left, bottom right.

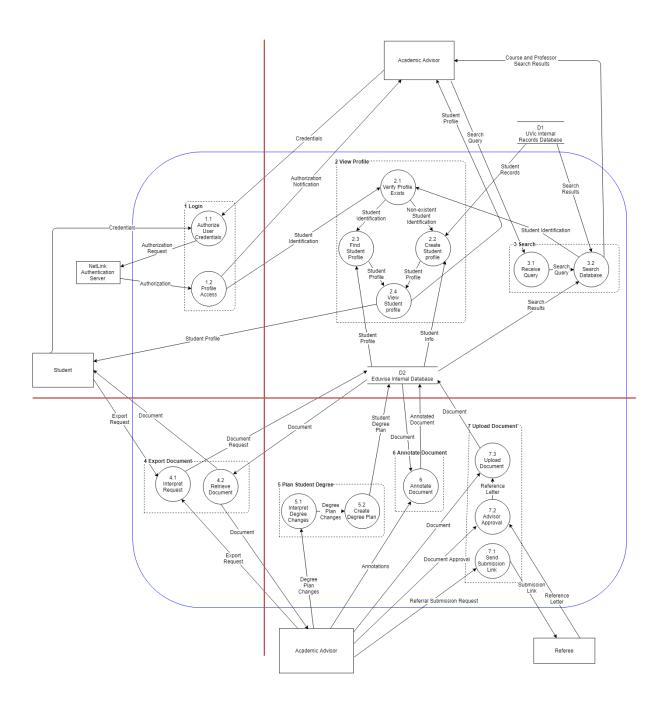


Figure 5: Data Flow Diagram Level 2

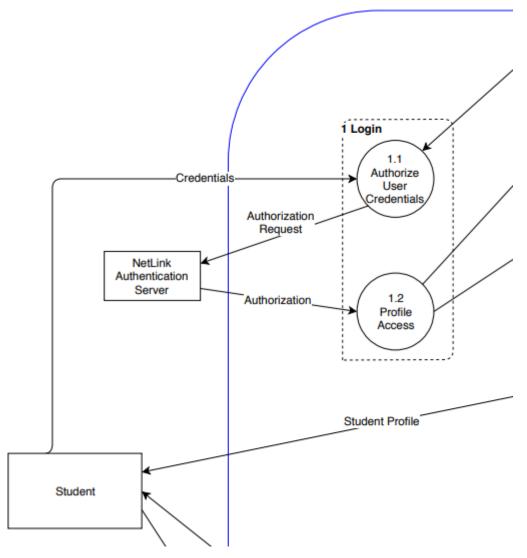


Figure 6: DFD Level 2: Top Left

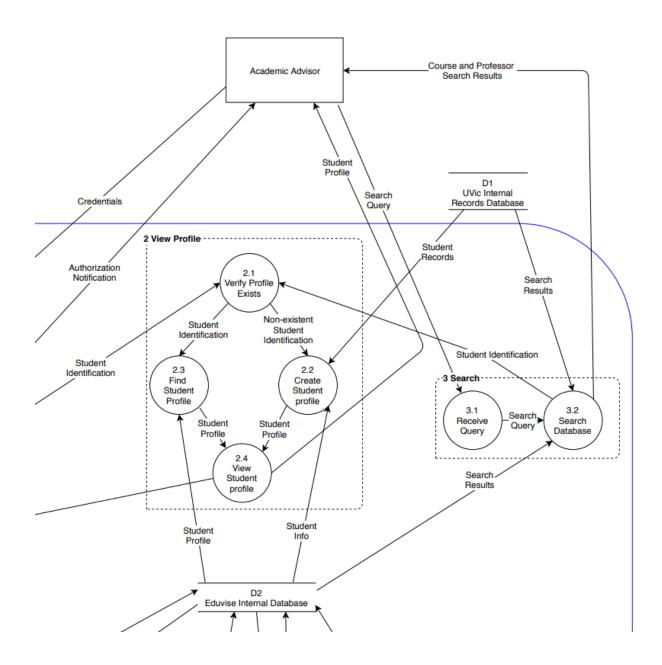


Figure 7: DFD Level 2: Top Right

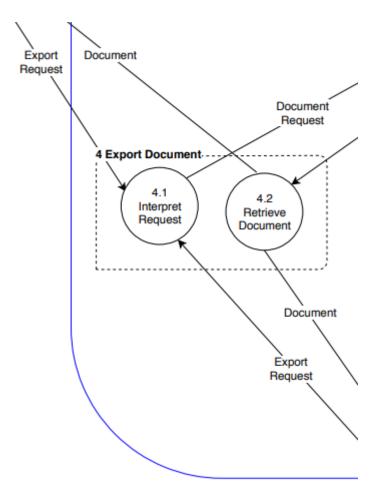


Figure 8: DFD Level 2: Bottom Left

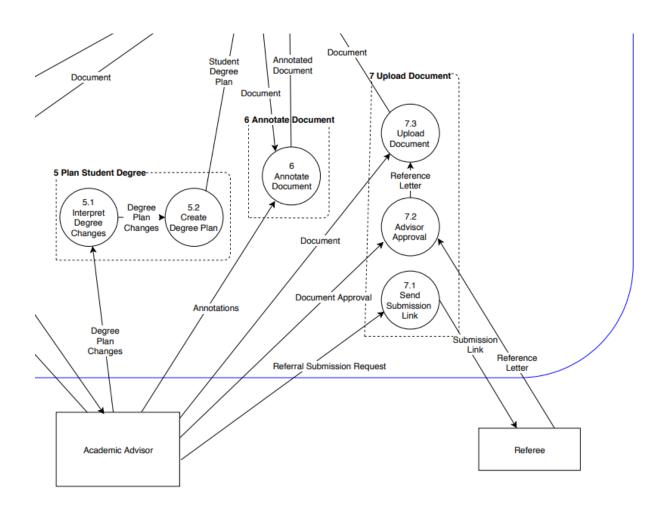


Figure 9: DFD Level 2: Bottom Right

3.1.4 Entity Relationship Diagram

The Entity Relationship Diagram shows the connections between the different entities involved in Eduvise.

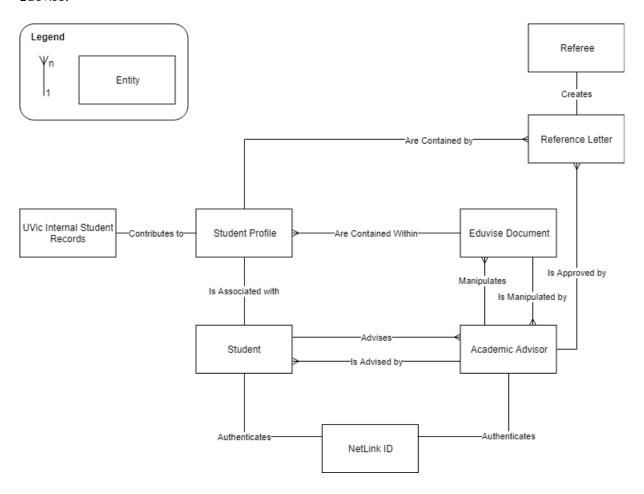


Figure 10: Entity Relationship Diagram

3.2 Searching

3.2.1 Description and Priority

The searching feature should be effective at finding a specific student profile, professor profile, or course overview stored by Eduvise or the UVic internal records database. This feature should allow an academic advisor to locate information using a variety of keywords and phrases that are related to the document they are trying to find. A search will return every student profile, professor profile, and course overview that pertains to the search query.

Priority: High

3.2.2 Functional Requirements

- REQ-1.1: An academic advisor must be able to search for each student profile by name, NetLink ID, or student number.
- REQ-1.2: An academic advisor must be able to search for each professor profile by name, faculty, or courses taught.
- REQ-1.3: An academic advisor must be able to search for each course overview by course code, course number, or department.
- REQ-1.4: An academic advisor must be able to expand or limit search results by using a search filter that restricts the search results to any combination of student profiles, professor profiles, and course overviews.

3.2.3 Use cases

3.2.3.1 UC-1.1: Searching

Description This use case outlines steps taken by an academic advisor to search for a student document located in the Eduvise database or a student record located in the UVic internal records database.

Actors	User (academic advisor)
Preconditions	User is logged in to EduviseUser is on the home page
	1 User inputs search query.
	2 User may optionally select one or more filters to limit the search to some combination of student profiles, professor profiles, and course overviews.
Steps	3 User selects submit query option.
	4 Query results are listed on the page.
	5 User selects desired query result from the list.
	6 The selected item is expanded and displayed on the page.
Success conditions	Selected item is presented to the user
	4.1 User does not find desired search results
Alternate path	4.2 Use case starts from step 1 with the desired record type and a different search query.
Requirements	REQ-1.1-1.3,6.2

Table 3: Use Case 1.1 - Searching

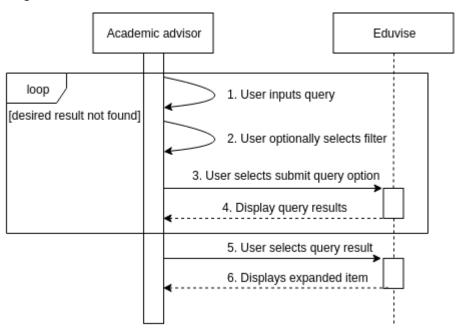


Figure 11: Sequence Diagram 1.1 - Searching

3.3 Adding Academic Advising Documents

3.3.1 Description and Priority

The adding academic advising documents feature will allow an academic advisor to upload new academic advising documents pertaining to a student. It will also allow a referee to securely submit a reference letter for a student at the request of an academic advisor.

Priority: High

3.3.2 Functional Requirements

- REQ-2.1: An academic advisor must be able to upload one or more academic advising documents pertaining to a student.
- REQ-2.2: A referee must be able to submit a reference letter for a student. (see EIR-4.1)
- REQ-2.3: When uploading one or more academic advising documents pertaining to a student (see REQ-2.1), an academic advisor must be able to choose whether or not the student will have access to view each uploaded document.

3.3.3 Use cases

3.3.3.1 UC-2.1: Adding Academic Advising Document

Description This use case outlines the steps taken by an academic advisor to add an academic advising document to the profile of a student.

Actors	User (academic advisor)
Preconditions	User is logged in to EduviseUser is viewing a student profile
Steps	 User selects the option to add a new academic advising document. User is prompted to select a document from the user's computer. User selects document from their computer to be added to Eduvise. User enters document name and selects whether the student will have access to view the document. User selects option to submit document to Eduvise. The document is displayed in the student's profile.
Success conditions	The correct document has been added to the student's profile.
Alternate path	4.1 User cancels adding document4.2 Selected document is discarded and no changes are made to the student's profile.
Requirements	REQ-2.1

Table 4: Use Case 2.1 - Adding Academic Advising Document

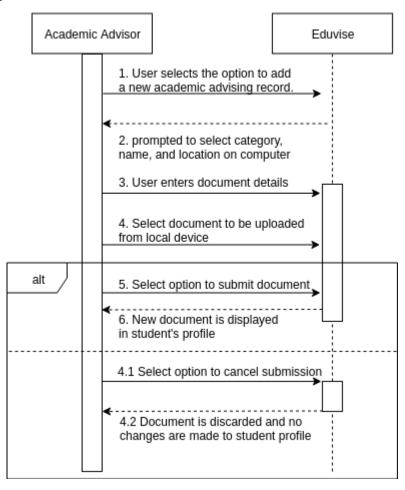


Figure 12: Sequence Diagram 2.1 - Adding Academic Advising Document

3.3.3.2 UC-2.2: Requesting Referral

Description This use case outlines the steps taken by an academic advisor to request a referee for a referral. This use case includes UC-2.3 for the referee to submit the referral.

Actors	User (academic advisor)
Preconditions	User is logged in to EduviseUser is viewing a student profile
	1 User selects the option to create a referral submission.
	2 User is prompted for email address of the referee.
	3 User inputs the required referee contact information.
	4 User selects option to submit the referral request to the email address specified.
	5 User is notified via email when the response is received.
Steps	6 User selects a link to the referral document found in the email notification.
	7 User is redirected to the referral document in Eduvise.
	8 User examines the response from the referee and selects the option to approve the referral document.
	9 The referral document is added to the student's profile.
Success conditions	The referral document has been correctly added to Eduvise.
	8.1 User does not accept the referral document and selects option to not accept the response
	8.2 User is prompted whether they would like to send another request.
Alternate path	8.3 User selects option to resend the request.
, mornare pain	8.4 User is prompted to enter a response message to the referee.
	8.5 User inputs a response to the referee.
	8.6 Use case continues at step 4.
Requirements	EIR-4.1

Table 5: Use Case 2.2 - Requesting Referral

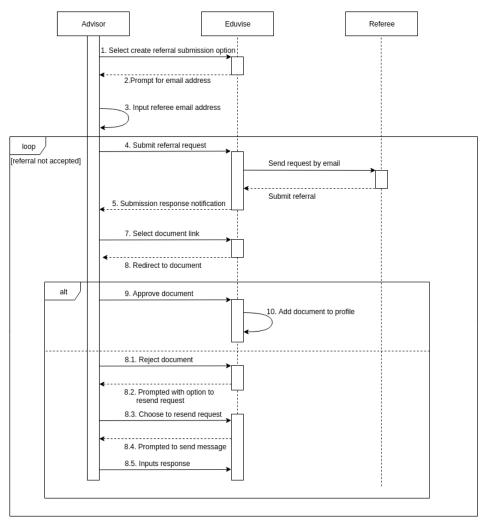


Figure 13: Sequence Diagram 2.2 - Requesting Referral

3.3.3.3 UC-2.3: Submitting Referral

Description This use case outlines the steps taken by a referee to submit a referral document in response to a referral request made by an academic advisor.

Actors	User (referee)
Preconditions	 User has received a referral submission email User has a referral document on their local computer
Steps	 User follows the link in the referral submission request to the referral submission page. User is shown the referral submission page. User selects the option to submit a referral document. User is prompted to select a document. User selects the document to submit as a referral. User is prompted to confirm their document submission. User selects the confirm submission option to send the referral to Eduvise. User receives a referral submission confirmation email.
	O Osci receives a referral submission commination email.
Success conditions	The referral document has been submitted to Eduvise for approval and the designated academic advisor is notified via email.
Alternate path	6.1 User cancels submitting the document6.2 Use case continues at step 2.
Requirements	EIR-4.1

Table 6: Use Case 2.3 - Submitting Referral

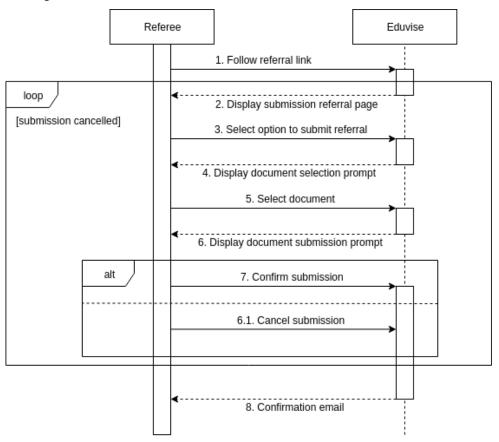


Figure 14: Sequence Diagram 2.3 - Submitting Referral

3.4 Academic Advising Document Modification

3.4.1 Description and Priority

The academic advising document modification feature will allow an academic advisor to update and annotate existing academic advising documents. An academic advisor has daily interactions with student documents involving updating and editing these documents. These changes are the result of the academic advisor meeting with a student, acquiring new information, or communication with another academic advisor.

Priority: High

3.4.2 Functional Requirements

REQ-3.1: An academic advisor must be able to replace an existing academic advising document with a newer version.

REQ-3.2: An academic advisor must be able to add new annotations on an academic advising document.

REQ-3.3: An academic advisor must not be able to modify an academic advising document at the same time as any other academic advisor.

REQ-3.4: An academic advisor must be able to modify existing annotations on an academic advising document.

REQ-3.5: An academic advisor must be able to modify access to an existing academic advising document from the student to which it pertains. (see REQ-2.3)

3.4.3 Use cases

3.4.3.1 UC-3.1: Replacing Academic Advising Document

Description This use case outline the steps taken by an academic advisor when replacing an academic advising document with an updated version of the same academic advising document.

Actors	User (academic advisor)
Preconditions	User is logged in to Eduvise.User is viewing the profile of a student.
Steps	 User selects the option to replace an academic advising document. User selects which academic advising document to replace. File upload screen is brought up. User locates and selects document on their local computer. User submits document to Eduvise. Eduvise prompts user if they are sure they want to replace the selected document with the uploaded one. User selects option to confirm. User is brought to student's profile where the old document is replaced with the newly submitted document.
Success conditions	The old document is no longer visible and the new document is added to the student's profile.
Alternate path	6.1 User selects cancel option6.2 Uploaded document is discarded and selected document remains.
Requirements	REQ-3.1

Table 7: Use Case 3.1 - Replacing Academic Advising Document

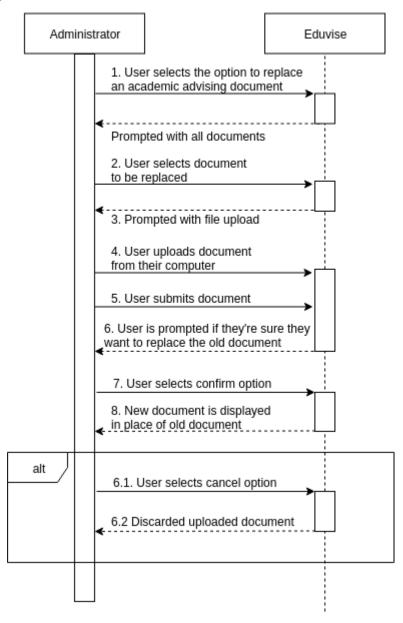


Figure 15: Sequence Diagram 3.1 - Replacing Academic Advising Document

3.4.3.2 UC-3.2: Adding Annotation

Description This use case outlines the steps taken by an academic advisor to add an annotation to an academic advising document.

Actors	User (academic advisor)
Preconditions	 User is logged in to Eduvise. User is viewing an academic advising document on a student's profile.
Steps	1 User selects the "add annotation" option.
	2 Eduvise displays an empty text box.
	3 User enters the annotation into the text box.
	4 User clicks submit and the annotation is added.
	5 Document is reloaded and displayed.
Success conditions	The annotation has been correctly added to the document.
Alternate path	None
Requirements	REQ-3.2

Table 8: Use Case 3.2 - Adding Annotation

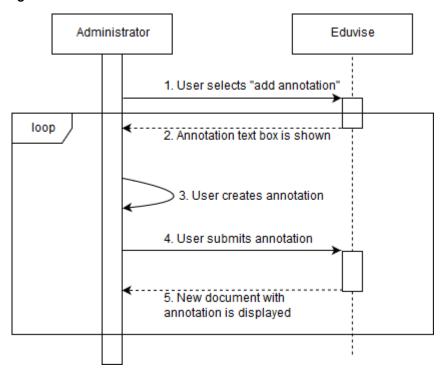


Figure 16: Sequence Diagram 3.2 - Adding Annotation

3.4.3.3 UC-3.3: Modifying Annotation

Description This use case outlines the steps taken by an academic advisor to modify an existing annotation on an academic advising document.

Actors	User (academic advisor)
Preconditions	 User is logged in to Eduvise. User is viewing an academic advising document on a student's profile.
Steps	 User requests to view all annotations on the document. The document is shown in annotation mode. User selects the annotation to be modified. The annotation turns into a text box. User inputs annotation modifications. User selects option to submit annotation modifications. Document is reloaded with new annotation.
Success conditions	The new annotation is correctly visible on the document.
Alternate path	5.1 User selects cancel option5.2 Document is displayed and old annotation is unchanged.
Requirements	REQ-3.4

Table 9: Use Case 3.3 - Modifying Annotation

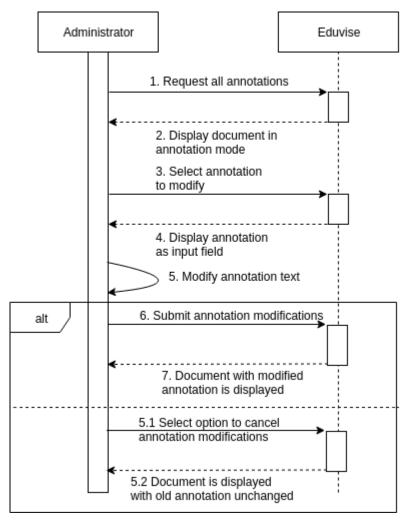


Figure 17: Sequence Diagram 3.3 - Modifying Annotation

3.4.3.4 UC-3.4: Modifying Document Access

Description Some documents in Eduvise may not be permitted to be viewed by the student the document pertains to. The visibility of a document must be able to be changed at any time, to rectify a mistake in the initial visibility permissions or for any other reason. This use case outlines the steps taken by an academic advisor to change document access.

Actors	User (academic advisor)
Preconditions	User is logged in to Eduvise.User is viewing the profile of a student.
Steps	 User selects the change document visibility option next to the desired document. User selects option to commit change to document visibility. User is taken back to student profile.
Success conditions	The correct document has the requested visibility option.
Alternate path	2.1 User selects cancel option2.2 No changes are made to the document visibility.2.3 User is taken back to student profile.
Requirements	REQ-3.5

Table 10: Use Case 3.4 - Modifying Document Access

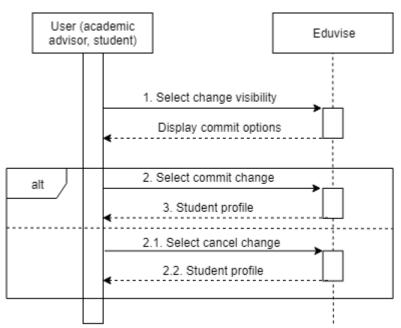


Figure 18: Sequence Diagram 3.4 - Modifying Document Access

3.5 Academic Advising Document Export

3.5.1 Description and Priority

The academic advising document export feature will allow a student or an academic advisor to export chosen documents that they have access to in a printable or readable format.

Priority: Medium

3.5.2 Functional Requirements

REQ-4.1: An academic advisor must be able to export one or more documents pertaining to a student in an easily printable or otherwise readable format.

REQ-4.2: A student must be able to export one or more documents that they have access to view in an easily printable or otherwise readable format.

3.5.3 Use cases

3.5.3.1 UC-4.1: Document Exporting

Description This use case outlines the steps taken by an academic advisor or a student to export an academic advising document to their local computer. A user can only export an academic advising document that is visible to that user.

Actors	User (academic advisor, student)
Preconditions	User is logged in to Eduvise.User is viewing the profile of a student.
Steps	 User selects a document to export. An options menu is displayed related to the selected document. User selects the option to export the document.
	4 A window appears for the user to navigate in order to specify where the document will be saved to their local computer.
	5 User selects the desired location where the document is to be exported.
	6 User submits desired export location.
	7 The document is exported to the chosen location.
Success conditions	The correct document has been exported to their local computer.
Alternate path	None
Requirements	REQ-4.1,4.2

Table 11: Use Case 4.1 - Document Exporting

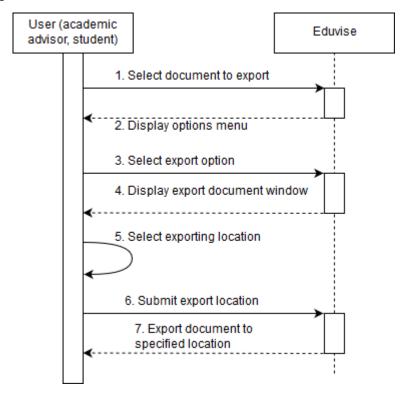


Figure 19: Sequence Diagram 4.1 - Document Exporting

3.6 Academic Advising Document Viewing By Students

3.6.1 Description and Priority

A student will need access to view only documents that they have been granted access to view (see REQ-2.3, REQ-3.4). Students should also be able to check on their current degree status and progress towards graduation via Eduvise.

Priority: Low

3.6.2 Functional Requirements

- REQ-5.1: A student must be able to view their progress towards graduation, including specific goals for the student that have been set with an academic advisor.
- REQ-5.2: A student must be able to view only the documents which they have been granted access to view. (see REQ-2.3, REQ-3.4)
- REQ-5.3: A student must not be able to view any document pertaining to a different student.
- REQ-5.4: A student must be able to view each academic advising document accessible to that student without necessarily being within the UVic telecommunication network.

3.6.3 Use cases

3.6.3.1 UC-5.1: Document Viewing

Description This use case outlines the steps taken by an academic advisor or a student to view an academic advising document. A user can only view an academic advising document that is visible to that user.

Actors	User (academic advisor, student)
Preconditions	User is logged in to Eduvise.User is viewing the profile of a student.
Steps	1 User selects a document from the student profile.2 The selected document is displayed in the browser.
Success conditions	The user has viewed the correct document.
Alternate path	None
Requirements	REQ-5.2,6.3

Table 12: Use Case 5.1 - Document Viewing

Sequence Diagram

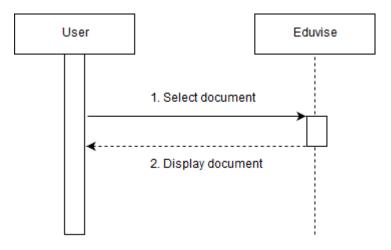


Figure 20: Sequence Diagram 5.1 - Document Viewing

3.6.3.2 UC-5.2: Getting Help

Description This use case outlines the steps taken by an academic advisor or a student to receive help about correctly using Eduvise.

Actors	User (academic advisor, student)
Preconditions	User is logged in to Eduvise.
Steps	1 User selects the help button.
	2 Help window is displayed on the user's page.
	3 User navigates help window to locate section related to the user's current query.
	4 User selects the desired section from the help window.
	5 The detailed info of the selected section is displayed.
Success conditions	The user receives correct information about their current query.
Alternate path	3.1 User cannot find useful information about current query
	3.2 User contacts Eduvise technical expert using contact information in the
	help window.
Paguiraments	EID 1 1 NIED 4 2
Requirements	EIR-1.1, NFR-4.2

Table 13: Use Case 5.2 - Getting Help

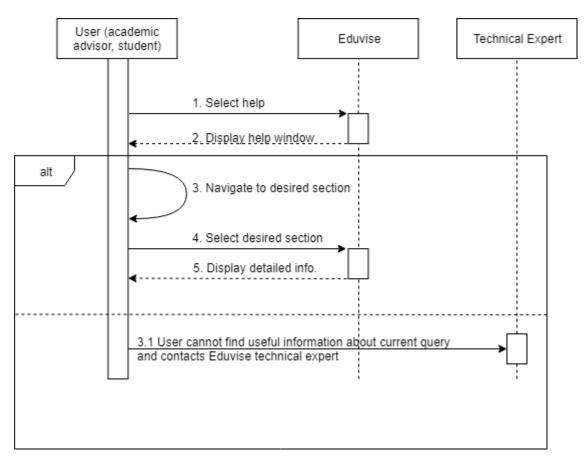


Figure 21: Sequence Diagram 5.2 - Getting Help

3.7 Academic Advising Document Viewing By Academic Advisors

3.7.1 Description and Priority

An academic advisor should be able to view each academic advising document in Eduvise. Priority: High

3.7.2 Functional Requirements

- REQ-6.1: An academic advisor must be able to view each student's progress towards graduation.
- REQ-6.2: An academic advisor must be able to view the average score achieved by all students in each class on a term-by-term basis, and be able to view the instructor(s) of each class on a term-by-term basis.
- REQ-6.3: An academic advisor must be able to view each annotation added to each document by any academic advisor (see REQ-3.2).
- REQ-6.4: An academic advisor must be able to view all correspondence between each student and each academic advisor.

3.7.3 Use cases

3.7.3.1 UC-6.1: Document Viewing

Refer to Use Case 1 under Academic Advising Document Viewing By Students 3.6.3.1

3.7.3.2 UC-6.2: Getting Help

Refer to Use Case 2 under Academic Advising Document Viewing By Students 3.6.3.2

3.8 Student Degree Planning

3.8.1 Description and Priority

An academic advisor can assist a student by helping to set academic goals for the student. These academic goals often take the form of notes that outline a set of criteria which the student is aiming to complete. An academic advisor can also help a student by mapping out a degree plan on a template calendar. The degree plan will show a student which courses should be taken each term to complete their degree.

Priority: Low

3.8.2 Functional Requirements

REQ-7.1: An academic advisor must be able to add, view and edit progress towards specific goals for each student.

REQ-7.2: An academic advisor must be able to create and modify a personalized degree plan for each student.

3.8.3 Use cases

3.8.3.1 UC-7.1: Creating Student Degree Map

Description This use case outlines the steps taken by an academic advisor to create a new degree map on a student's profile for degree planning with that student.

Actors	User (academic advisor)
Preconditions	User is logged in to Eduvise.User is viewing the profile of a student.
Steps	 User selects the option to create a new student degree map. An empty degree template is produced for the user. User selects the desired term from the template. User selects from a list of classes to add to the term. User repeats step 3 and 4 for each desired term. User selects option to submit student degree map. User is shown a degree map on the the student's profile
Success conditions	The desired degree map is produced and saved to the student's profile.
Alternate path	5.1 User cancels creation of degree map5.2 New student degree map is discarded and no changes are made to the student profile.
Requirements	REQ-7.2

Table 14: Use Case 7.1 - Creating Student Degree Map

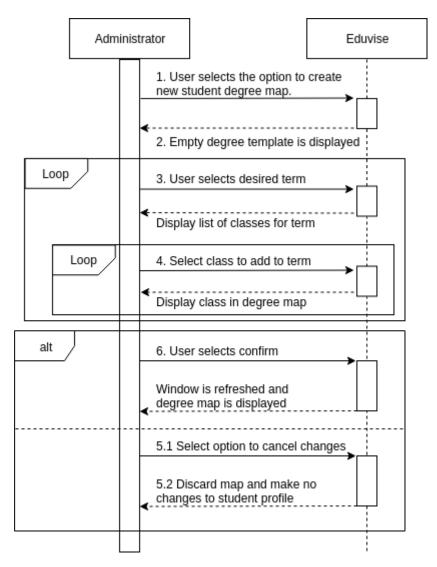


Figure 22: Sequence Diagram 7.1 - Creating Student Degree Map

3.8.3.2 UC-7.2: Modifying Student Degree Map

Description This use case outlines the steps taken by an academic advisor to modify an student's existing degree map.

Actors	User (academic advisor)
Preconditions	 User is logged in to Eduvise. User is viewing a student's degree map
Steps	 User selects the option to modify the student's degree map. User selects the class from the degree map that they wish to change. User changes or deletes the selected class. User selects option to save changes to the degree map. The degree map on the the student's profile is updated and displayed
Success conditions	The student's degree map has been updated correctly in Eduvise.
Alternate path	4.1 User cancels changes to degree map4.2 No changes are made to the student degree map and original degree map remains.
Requirements	REQ-7.1 EIR-4.1

Table 15: Use Case 7.2 - Modifying Student Degree Map

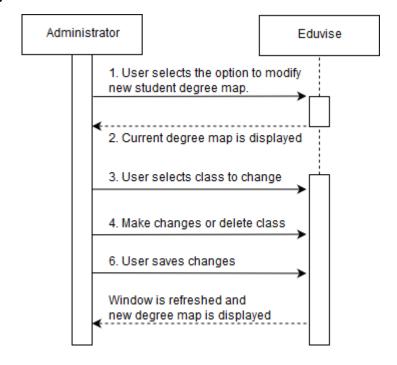


Figure 23: Sequence Diagram 7.2 - Modifying Student Degree Map

3.9 Authentication

3.9.1 Description and Priority

The authentication feature will verify a student or an academic advisor's identity. The authentication feature will prevent others from accessing Eduvise.

Priority: High

3.9.2 Functional Requirements

REQ-8.1: A student or academic advisor must be granted access to the documents that they have permission to access only after authenticating their identity by providing their UVic NetLink credentials.

3.9.3 Use cases

3.9.3.1 UC-8.1: Logging in

Description To ensure data integrity and confidentiality, as well as ensure authentic usage of the service, users of Eduvise must first use login functionality to gain access to Eduvise. This login feature will remain consistent with other UVic services by using the user's existing NetLink ID and password to access Eduvise. An academic advisor or student must use this feature for access, but referees can receive limited access to Eduvise through the process outlined in UC-2.3.

Actors	User (academic advisor, student)
Preconditions	User has a valid NetLink ID (account)
Steps	 User navigates to the Eduvise login page. User inputs NetLink ID and NetLink password. User submits credentials for verification. User is taken to the user's Eduvise home page.
Success conditions	The user credentials are successfully verified and the user's home page is displayed to the user.
Alternate path	3.1 User credentials are not verified3.2 User is notified that credentials have not been verified.3.3 The use case restarts at step 1.
Requirements	None

Table 16: Use Case 8.1 - Logging in

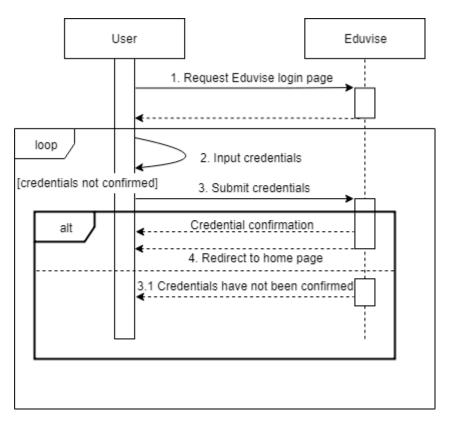


Figure 24: Sequence Diagram 8.1 - Logging in

4 External Interface Requirements

4.1 User Interfaces

EIR-1.1: A user must always have access to any support information required to operate Eduvise.

4.2 Hardware Interfaces

EIR-2.1: Eduvise must be accessible on any device required by the Faculty of Education's academic advising office. These devices are the following:

- 2009 20" iMacs
- 2011 21.5" iMacs
- 2011 27" iMacs
- 2013 27" iMacs

4.3 Software Interfaces

EIR-3.1: Eduvise must have access to UVic's NetLink authentication server for authentication.

EIR-3.2: Eduvise must be able to access the following information about each student from the UVic internal records database:

- Name
- Student number
- Contact information (home address, email address, and phone number)
- UVic academic transcript
- Academic transcripts from other institutions
- Medical records

EIR-3.3: Eduvise must be accessible on the following operating systems:

- Windows 7
- Windows 10
- OS X 10.4 and above
- macOS 10.12 and above

EIR-3.4: Eduvise must support the importing, viewing, and exporting of files with each of the following file types:

• .doc

- .docx
- .odt
- .txt
- .pdf

4.4 Communications Interfaces

EIR-4.1: An academic advisor must be able to provide to a referee a method to submit a reference letter to Eduvise. This method must not provide access to any document stored by Eduvise. (see REQ-2.2)

5 Other Non-Functional Requirements

5.1 Performance Requirements

5.1.1 Capacity

At any given time, UVic has approximately 4000 students [2] who are currently enrolled in or have at some point in the past three years been enrolled in the Faculty of Education.

NFR-1.1: Eduvise must support storage of every academic advising document pertaining to each student in the Faculty of Education.

NFR-1.2: Eduvise must support concurrent access from at least 200 users.

5.1.2 Speed

- NFR-1.3: A request for authentication of any user must be approved or declined within three seconds.
- NFR-1.4: A request to view any academic advising document must be given a response within three seconds.
- NFR-1.5: Changes made more than 10 seconds before an academic advising document is accessed must be reflected at the time of access.

5.2 Safety Requirements

NFR-2.1: Eduvise must backup all records and documents for data restoration in case of data loss or corruption.

5.3 Security Requirements

- NFR-3.1: Eduvise must comply to BC's Freedom of Information and Protection of Privacy Act (FIPPA). [3]
- NFR-3.2: Eduvise must comply to UVic's Protection of Privacy Policy. [4]
- NFR-3.3: Eduvise must comply to UVic's Records Management Policy. [5]

NFR-3.4: No software system that is not Eduvise may have access to any academic advising document stored by Eduvise.

NFR-3.5: A student must not be able to access any academic advising document of any student other than themselves.

5.4 Software Quality Attributes

5.4.1 Usability

Eduvise must be easy and intuitive to use, so it can be used by both technical and non-technical personnel.

NFR-4.1: An academic advisor must require no more than two hours of initial training in the use of Eduvise from technical experts before they are able to correctly access, modify, and export any academic advising document.

NFR-4.2: An academic advisor must require no more than two hours of support per month in the use of Eduvise from technical experts.

NFR-4.3: Every student must require no training in the use of Eduvise from technical experts before they are able to correctly access and export any academic advising record that they have access to view.

5.4.2 Availability

NFR-4.5: An academic advisor must be guaranteed to have access to Eduvise on each weekday (Monday, Tuesday, Wednesday, Thursday, and Friday) from 7:00 am to 6:00 pm PST, with 99.9% uptime during these times.

5.4.3 Testability

NFR-4.6: Unit test coverage of Eduvise must be at least 70%.

6 Other Requirements

OREQ-1: Each academic advising document must be accessible for a minimum of 3 years from the last date that the student the document pertains to is enrolled in any program at UVic.

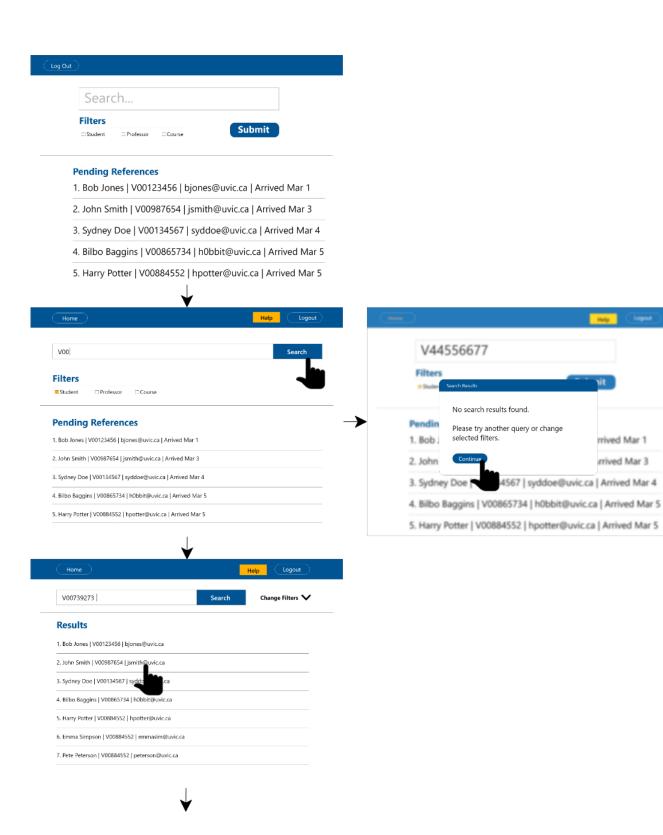
7 User Interface Mock-ups

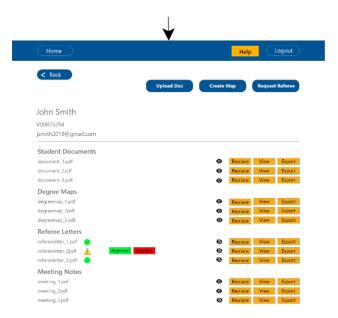
This section presents user interface mock-ups of scenarios based on the use cases presented in section 3. Each scenario references a single use case and the main flow of the use case flows downwards on the left, with alternate paths branching on the right.

7.1 Searching

References UC-1.1

This scenario outlines the steps taken to search for a student profile. In this scenario, an academic advisor first selects the "student" check-box so that only the students are searched. Then the advisor inputs the student number of the student to be searched. If the no student is found, then a message will be shown notifying the user. If the student is found, the user clicks on the corresponding result and is taken to the student's profile page.

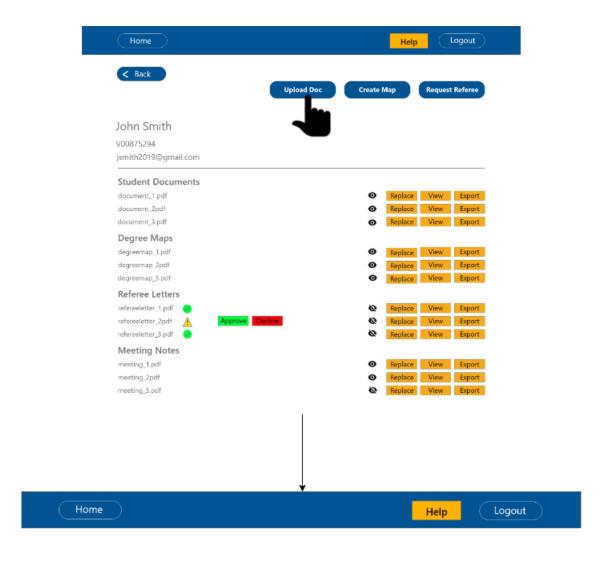


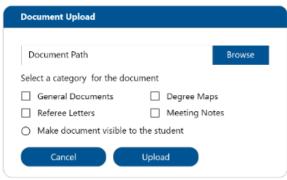


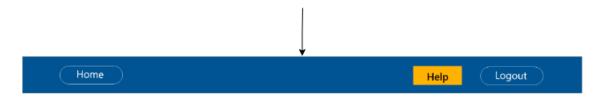
7.2 Adding Academic Advising Document

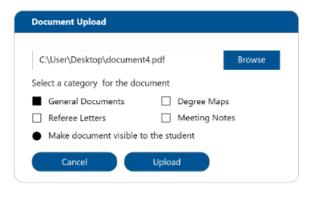
References UC-2.1

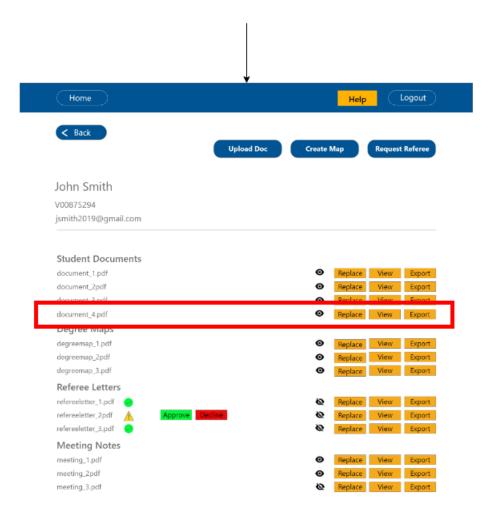
This scenario outlines the steps taken when an academic advisor uploads a document to a student profile. From the student profile advisor view page, the advisor clicks the "Upload Doc" button which pulls up a modal with a file path field, a file category check box, and a visibility setting. Once the advisor has input all information, they select upload and the file appears in the student's profile.







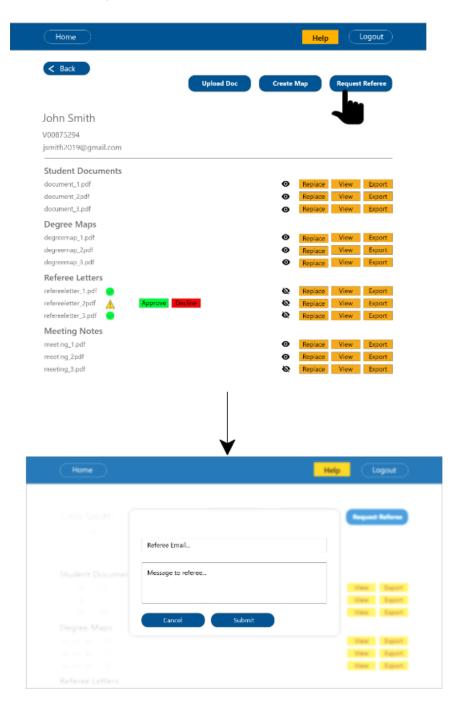




7.3 Requesting Referral

References UC-2.2

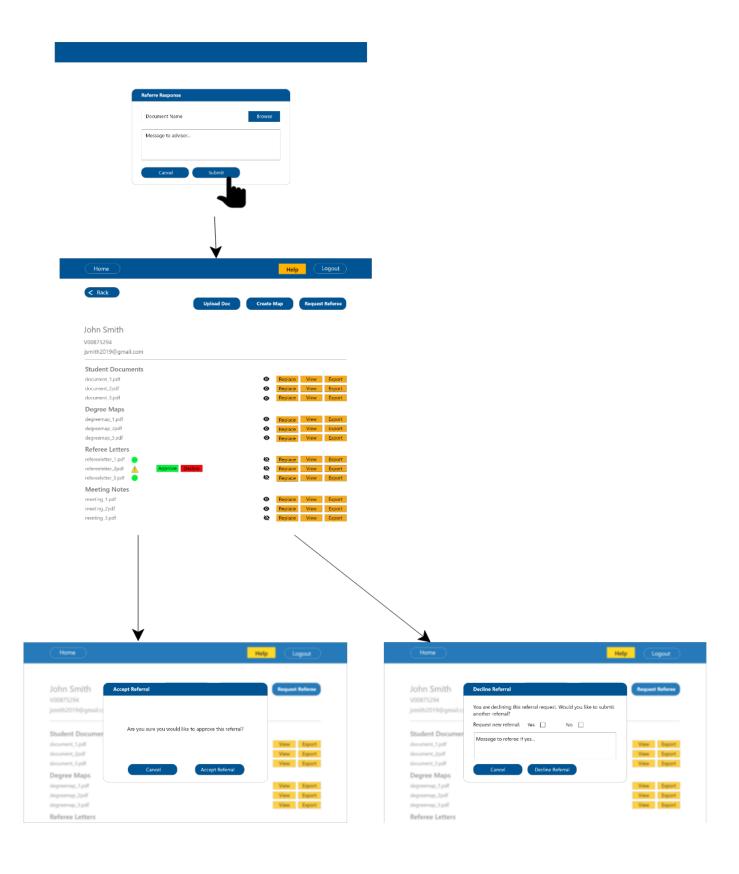
This scenario outlines the steps taken when a academic advisor requests a reference letter from referee. From the student profile advisor view page the advisor clicks on the "Request Referee" button which pulls up a modal with an email and message input field for the advisor to fill out and once submitted is sent to the referee.



7.4 Submitting Referral

References UC-2.3

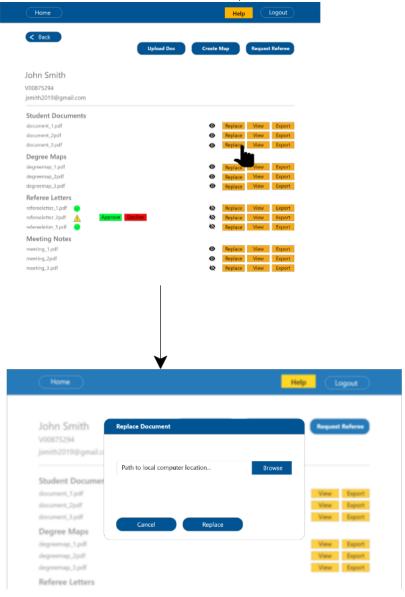
This scenario outlines the steps taken when a referee submits a reference letter and the approval process. First, the referee opens the submission link sent by the advisor and this brings the referee to the Eduvise system. From here they can send a document and write a message back to the advisor. The advisor can approve the reference letter which brings up a confirmation modal they can accept or decline. An alternate path occurs if the reference letter is declined the advisor gets a modal to request a new referral and send a message back to the referee



7.5 Replacing Academic Advising Document

References UC-3.1

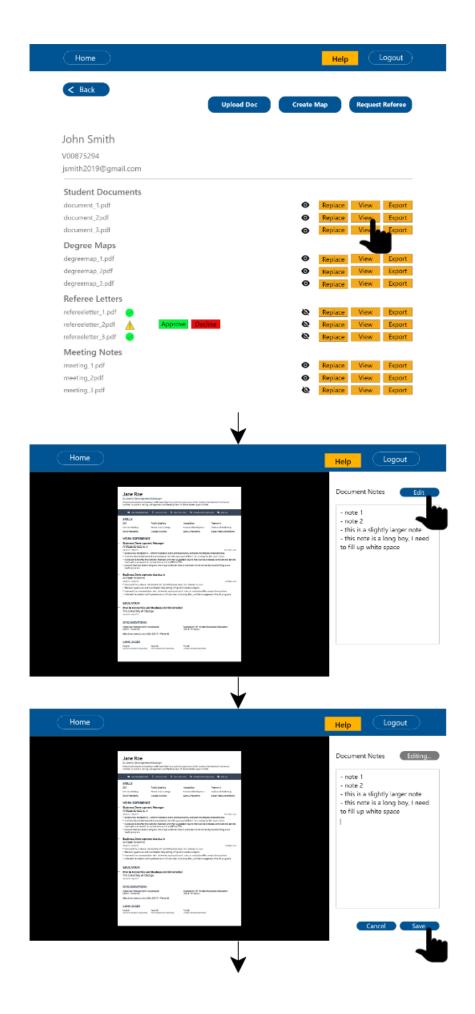
This scenario outlines the steps taken when a advisor replaces a document on a student's profile. From the student profile screen the advisor can click the "replace" button on a document. This action brings up a modal to browse for the new document to replace the old document.

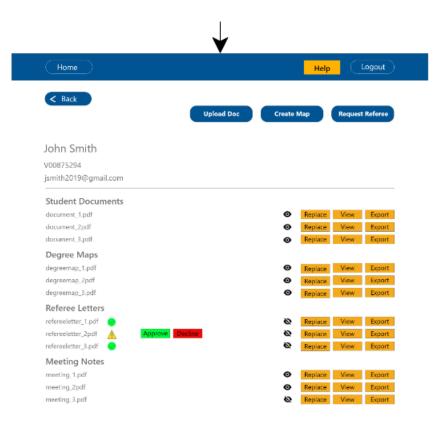


7.6 Adding Annotation

References UC-3.2

This scenario outlines the steps taken to add an annotation to a student's academic advising document. In this scenario, an academic advisor is already a student's profile page, so they first locate the document on the student's profile that they want to annotate, and click the "View" button. When viewing the document, the advisor then clicks the "Edit" button in the "Document Notes" section to edit the document's related annotations. The advisor then types in the new annotation into the text box. Finally, the advisor clicks either the cancel or save button to accept or reject to changes made to the document notes. The user is then taken back to the student's profile page when either option is selected.

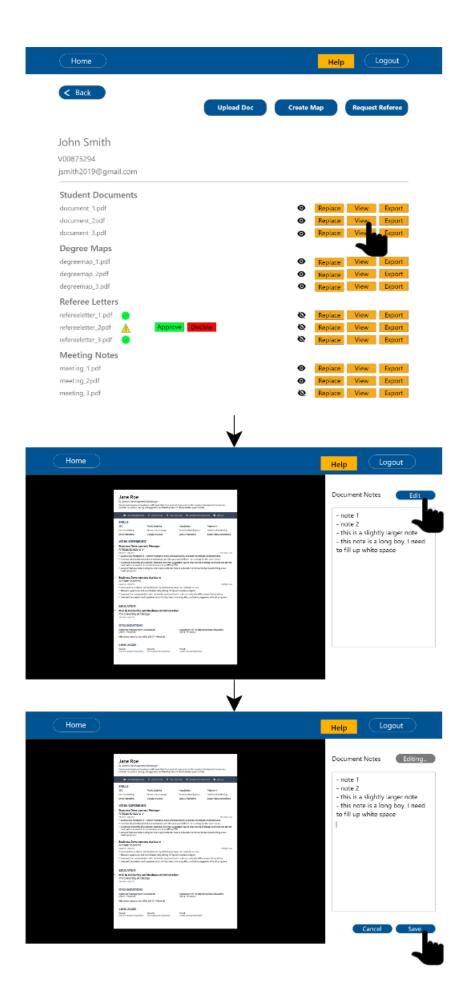




7.7 Modifying Annotation

References UC-3.3

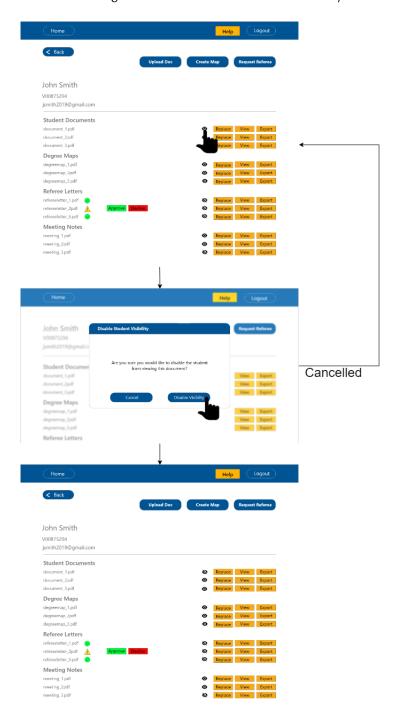
This scenario outlines the steps taken by an advisor to modify an already existing annotation. From a student's profile screen, an advisor can click view on any document they wish to annotate. From the document viewing screen the advisor can click on the edit button to bring up the note editor. Once modification of annotations is made the advisor can save the annotations associated with the document.



7.8 Modifying Document Access

References UC-3.4

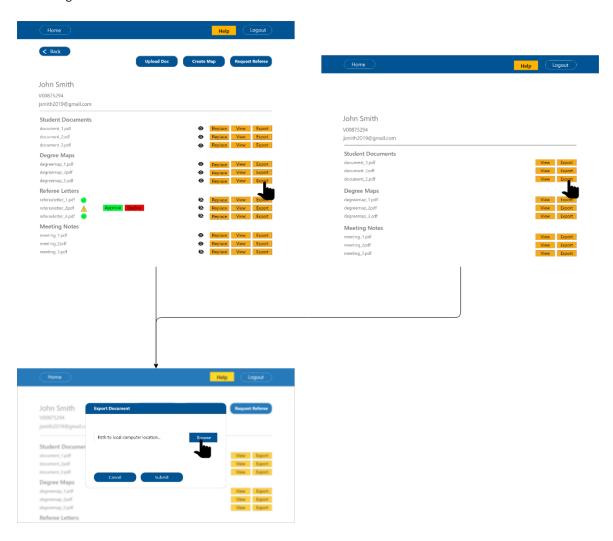
This scenario outlines the steps taken by an advisor to modify the visibility of a document. From a student's profile screen, an advisor can click the "eye" symbol on any document they wish to make invisible to a student. The advisor will be prompted with a confirm dialog box and after confirming the chosen document will no longer be visible to the student and the "eye" icon will be crossed out.



7.9 Document Exporting

References UC-4.1

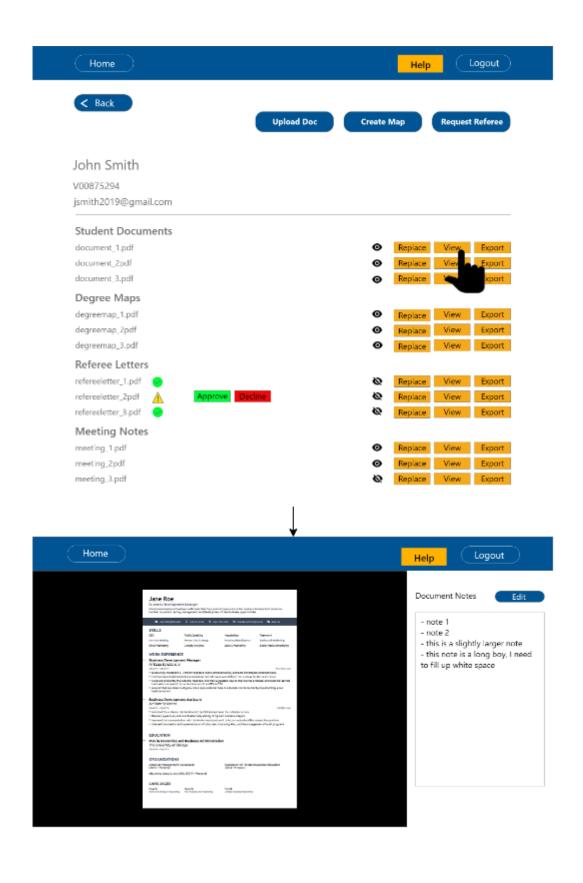
This scenario shows the steps needed for a user to export a document to their computer. The user can either be an academic advisor or student, with the steps being functionally the same. On a student's profile page the advisor or student simply clicks export and a menu will pop up allowing the user to select a file path on their computer. Upon clicking browse the file system of the user's computer will open allowing the user to navigate to a location. After selecting a location the user clicks submit and the document will be saved to their chosen location.



7.10 Document Viewing

References UC-5.1

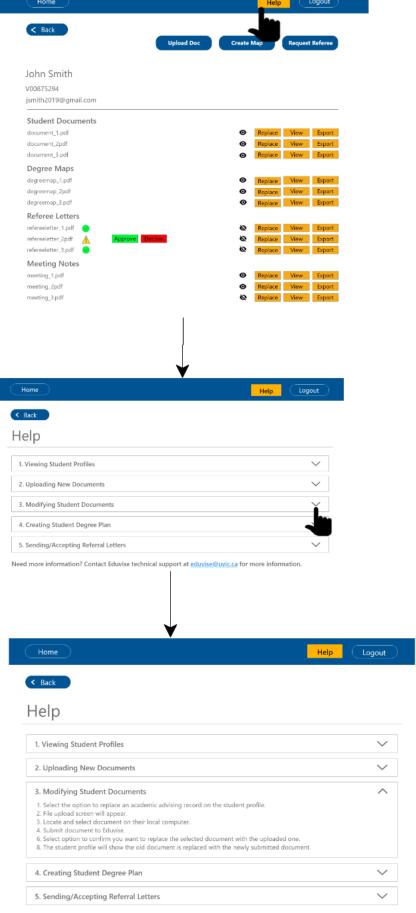
This scenario outlines the steps taken to view an academic advising document related to a student's profile. In this scenario the user is already on a student's profile, either their own profile if the user is a student, or some student as a result of a search query. The user then clicks on the "View" button of the desired document and is then taken to the document viewing page.



7.11 Getting Help

References UC-5.2

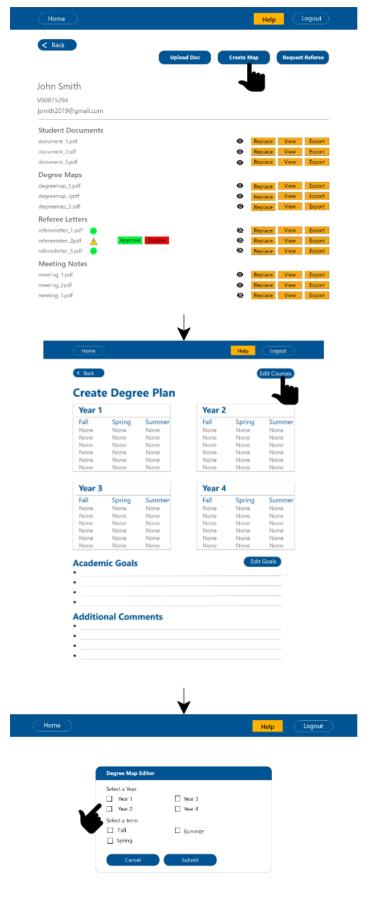
This scenario outlines the steps taken by an advisor getting help. From the student profile screen there is a help button shown which the advisor can click. On click the advisor is brought to the help screen with the options of help within the following five categories: Viewing Student Profiles, Uploading Documents, Modifying Student Documents, Creating Student Degree Plan, and Sending/Accepting Referral Letters. By clicking on one of these five options a drop down of steps becomes visible. If these options are unable to help the student an email address for additional help is available.



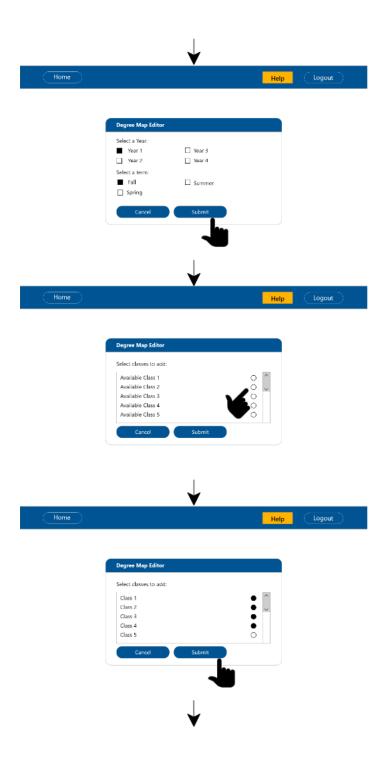
7.12 Creating Student Degree Map

References UC-7.1

This scenario outlines the steps taken by an advisor when creating a new student degree map. In this scenario the advisor is already on a student's profile, and the first step is to click the "Create Map" button. When the advisor is taken to the "Create Degree Plan" screen with an newly created, empty degree map, the advisor will click the "Edit Courses" button and is taken to a screen to select the term to add courses for. After the advisor selects a term, the "Submit" button is pressed to continue to the screen to add classes to the selected term. The advisor then goes through a list of classes for that term and selects the classes for the degree map during that term. The advisor then clicks the "Submit" button to submit the chosen classes for the selected term and is taken back to the "Create Degree Plan" page. The user repeats this process for all the required terms for the student. When all terms have been completed the advisor clicks the "Save Map" button to submit the new degree map to Eduvise.





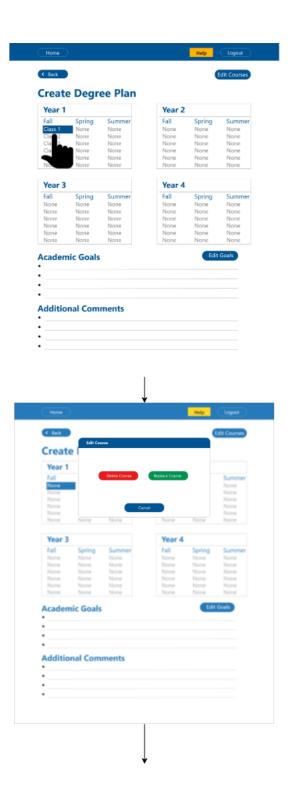


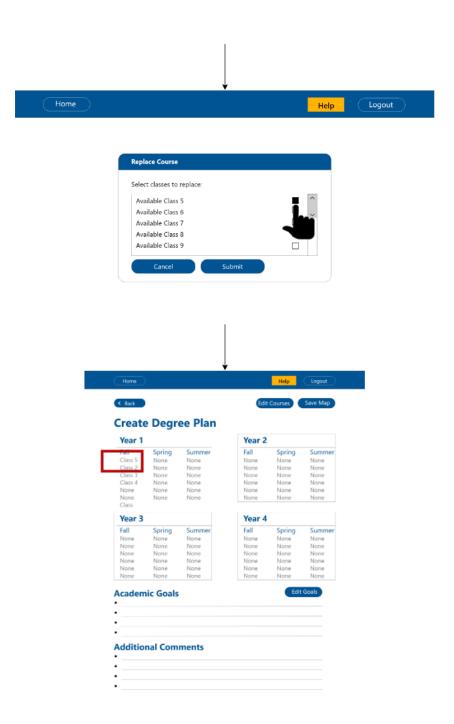


7.13 Modifying Student Degree Map

References UC-7.2

This scenario outlines the steps taken by an advisor when editing an existing student degree map. In this scenario, the advisor is is already viewing the document they wish to edit. The advisor selects one of the courses and is prompted with a modal dialog asking if they will delete the course or replace it. If they select replace, they are provided with a list of courses available for that term. The advisor selects one of the courses, and the course is updated on the student degree plan.





7.14 Logging in

References UC-8.1

This scenario outlines the steps taken to log into the Eduvise system. In this scenario the advisor or student first enters their Netlink ID and password into the input form, and then presses the submit button. There are two end states, on the left is the academic advisor home page, and on the right is the student home page.



References

[1] University of Victoria, "Protection of privacy and access to information - university of victoria." https://www.uvic.ca/vpfo/departments/privacy/policies-and-procedures/index.php, 2019. [Online; accessed 05-February-2019].

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- [3] BC Legislature, "Freedom of information and protection of privacy act." http://www.bclaws.ca/Recon/document/ID/freeside/96165_00, 1996. [Online; accessed 05-February-2019].
- [4] University of Victoria, "Protection of privacy policy." https://www.uvic.ca/universitysecretary/assets/docs/policies/GV0235.pdf, 2019. [Online; accessed 05-February-2019].
- [5] University of Victoria, "Records management policy." https://www.uvic.ca/universitysecretary/assets/docs/policies/IM7700.pdf, 2019. [Online; accessed 05-February-2019].