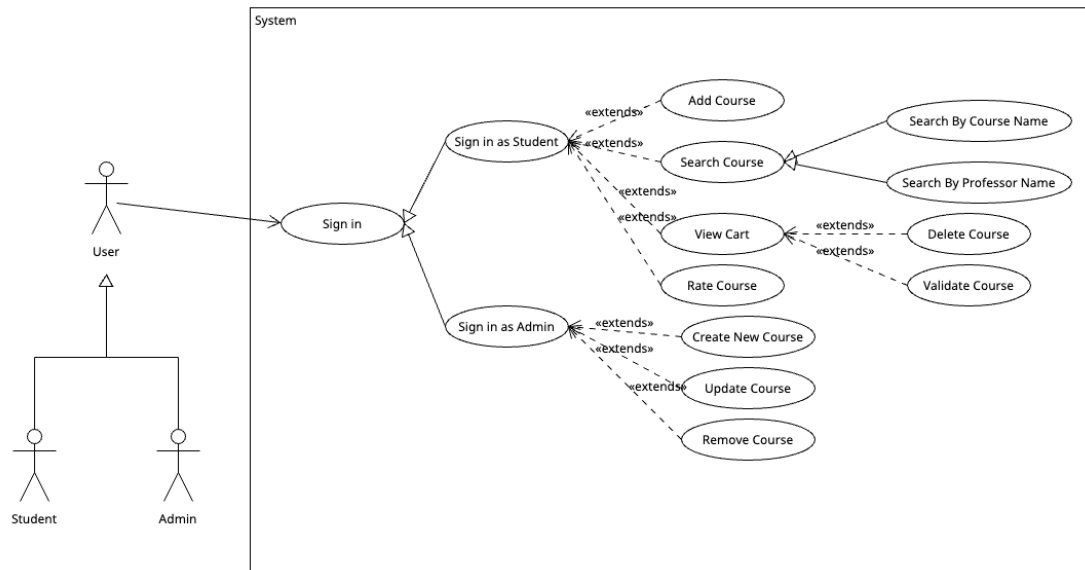


Project UML Diagrams

1. Use Case Diagram



Description of Use Cases:

UC Reference Number	Use Case Name	Overview	Related Use Cases	Actors	Pre Conditions	Post Conditions
UC1	Sign in	Allows a user to sign in to the system using their credentials.	Sign in as Student, Sign in as Admin	User (Student, Admin)	The user must have a valid account.	The user is authenticated and signed in.
UC2	Sign in as Student	Allows a student to sign in to the system using their credentials.	Sign in	Student	The student must have a valid account.	The student is authenticated and signed in.
UC3	Sign in as Admin	Allows an admin to sign in to the system using their credentials.	Sign in	Admin	The admin must have a valid account.	The admin is authenticated and signed in.
UC4	Add Course	Allows a student to add a course to their cart.	/	Student	The student is signed in and viewing courses.	The course is added to the cart.
UC5	Search Course	Allows a user to search for courses by name or professor.	/	Student	The user is signed in and viewing courses.	The search results are displayed.
UC6	View Cart	Allows a student to view the courses in their cart.	Validate Course, Delete Course	Student	The student is signed in.	The cart contents are displayed.
UC7	Rate Course	Allows a student to rate a completed course.	/	Student	The student has completed the course.	The course rating is updated.
UC8	Create New Course	Allows an admin to add a new course to the system.	/	Admin	The admin is signed in.	The new course is added to the system.
UC9	Update Course	Allows an admin to update details of an existing course.	/	Admin	The admin is signed in.	The course details are updated.
UC10	Remove Course	Allows an admin to remove a course from the system.	/	Admin	The admin is signed in.	The course is removed from the system.
UC11	Delete Course	Allows a student to delete a course from their cart.	View Cart	Student	The student is viewing their cart.	The course is removed from the cart.
UC12	Validate Course	Allows a student to validate their course schedule for conflicts.	View Cart	Student	The student is viewing their cart.	The course schedule is validated.
UC13	Search by Course Name	Allows a user to search for courses by course name.	Search Course	Student	The user is signed in and viewing courses.	The search results for course name are displayed.
UC14	Search by Professor Name	Allows a user to search for courses by professor name.	Search Course	Student	The user is signed in and viewing courses.	The search results for professor name are displayed.

The following is a clearer version

UC Reference Name/Number: UC1: Sign in	
Overview	Allow a user to sign in to the system using their credential.
Related use cases:	Sign in as Student, Sign in as Admin
Actors:	User (Student, Admin)
Pre Conditions	The user must have a valid account.
Post Conditions	The user is authenticated and signed in.

UC Reference Name/Number: UC2: Sign in as Student	
Overview	Allows a student to sign in to the system using their credentials.
Related use cases:	Sign in, Add Course, Search Course, View Cart, Rate Course
Actors:	Student
Pre Conditions	The student must have a valid account.
Post Conditions	The student is authenticated and signed in.

UC Reference Name/Number: UC3: Sign in as Admin	
Overview	Allows an admin to sign in to the system using their credentials.
Related use cases:	Sign in, Create New Course, Update Course, Remove

	Course
Actors:	Admin
Pre Conditions	The admin must have a valid account.
Post Conditions	The admin is authenticated and signed in.

UC Reference Name/Number: UC4: Add Course	
Overview	Allows a student to add a course to their cart.
Related use cases:	Sign in as Student
Actors:	Student
Pre Conditions	The student is signed in and viewing courses.
Post Conditions	The course is added to the cart.

UC Reference Name/Number: UC5: Search Course	
Overview	Allows a student to search for courses by name or professor.
Related use cases:	Sign in as Student, Search By Course Name, Search By Professor Name
Actors:	Student
Pre Conditions	The student is signed in.
Post Conditions	The search results are displayed.

UC Reference Name/Number: UC6: View Cart	
Overview	Allows a student to view the courses in their cart.
Related use cases:	Sign in as Student, Delete Course, Validate Course
Actors:	Student
Pre Conditions	The student is signed in.
Post Conditions	The cart contents are displayed.

UC Reference Name/Number: UC7: Rate Course	
Overview	Allows a student to rate a completed course.
Related use cases:	Sign in as Student
Actors:	Student
Pre Conditions	The student has completed the course.
Post Conditions	The course rating is updated.

UC Reference Name/Number: UC8: Create New Course	
Overview	Allows an admin to add a new course to the system.
Related use cases:	Sign in as Admin
Actors:	Admin
Pre Conditions	The admin is signed in.
Post Conditions	The new course is added to the system.

UC Reference Name/Number: UC9: Update Course	
Overview	Allows an admin to update details of an existing course.
Related use cases:	Sign in as Admin
Actors:	Admin
Pre Conditions	The admin is signed in.
Post Conditions	The course details are updated.

UC Reference Name/Number: UC10: Remove Course	
Overview	Allows an admin to remove a course from the system.
Related use cases:	Sign in as Admin
Actors:	Admin
Pre Conditions	The admin is signed in.
Post Conditions	The course is removed from the system.

UC Reference Name/Number: UC11: Delete Course	
Overview	Allows a student to delete a course from their cart.
Related use cases:	View Cart
Actors:	Student
Pre Conditions	The student is viewing their cart.
Post Conditions	The course is removed from the cart.

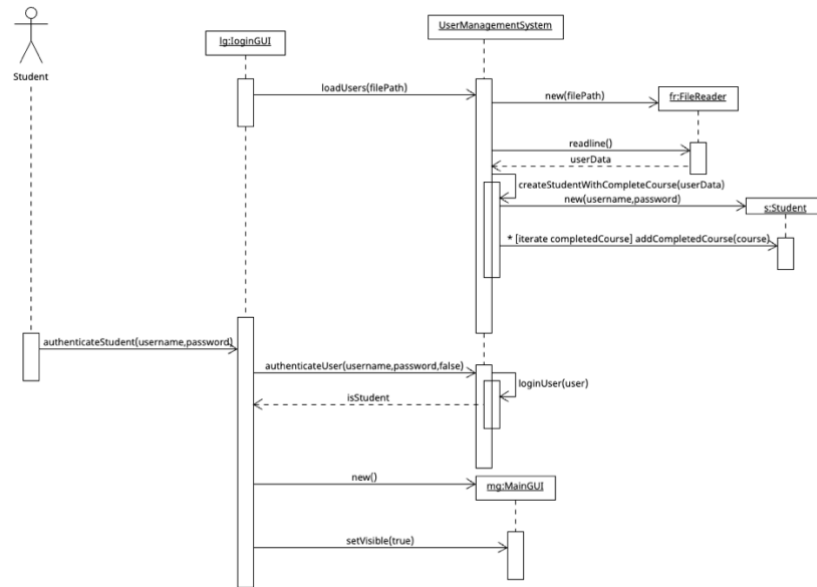
UC Reference Name/Number: UC12: Validate Course	
Overview	Allows a student to validate their course schedule for conflicts.
Related use cases:	View Cart
Actors:	Student
Pre Conditions	The student is viewing their cart.
Post Conditions	The validation result of the course schedule is shown.

UC Reference Name/Number: UC13: Search by Course Name	
Overview	Allows a student to search for courses by course name.
Related use cases:	Search Course
Actors:	Student
Pre Conditions	The student is searching for courses.
Post Conditions	The search results for course name are displayed.

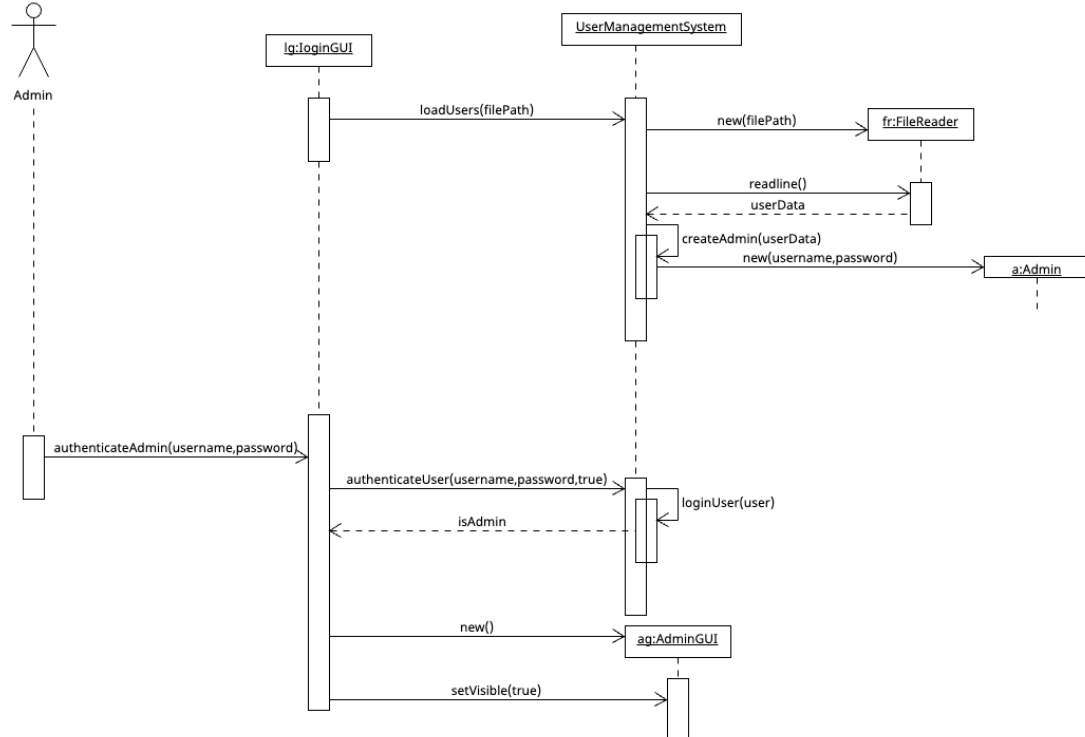
UC Reference Name/Number: UC14: Search by Professor Name	
Overview	Allows a student to search for courses by professor name.
Related use cases:	Search Course
Actors:	Student
Pre Conditions	The student is searching for courses.
Post Conditions	The search results for professor name are displayed.

2. Sequence Diagrams

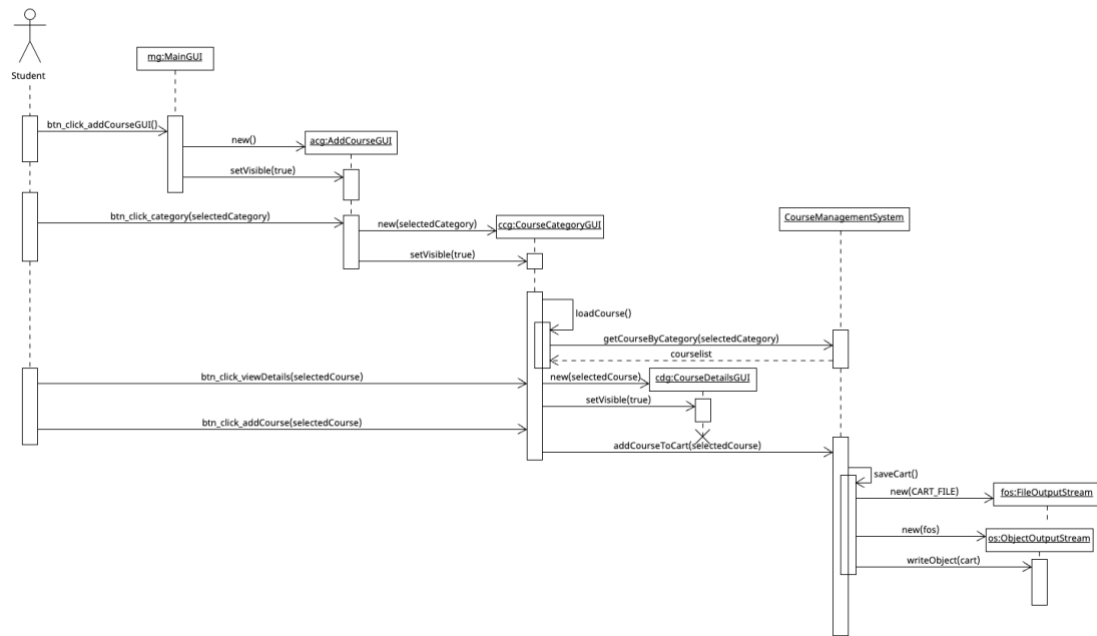
Login Student



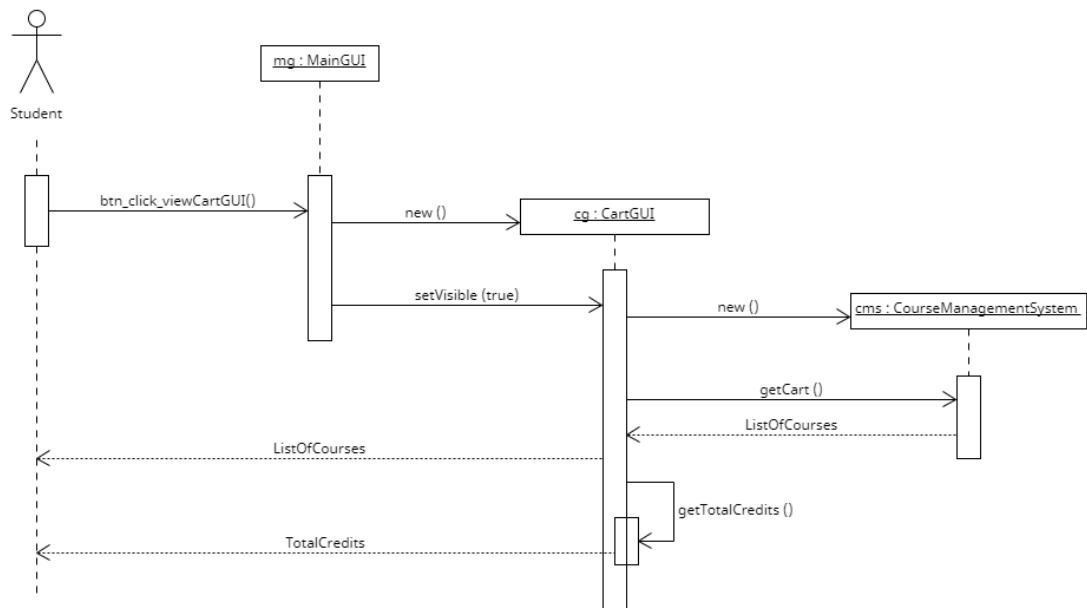
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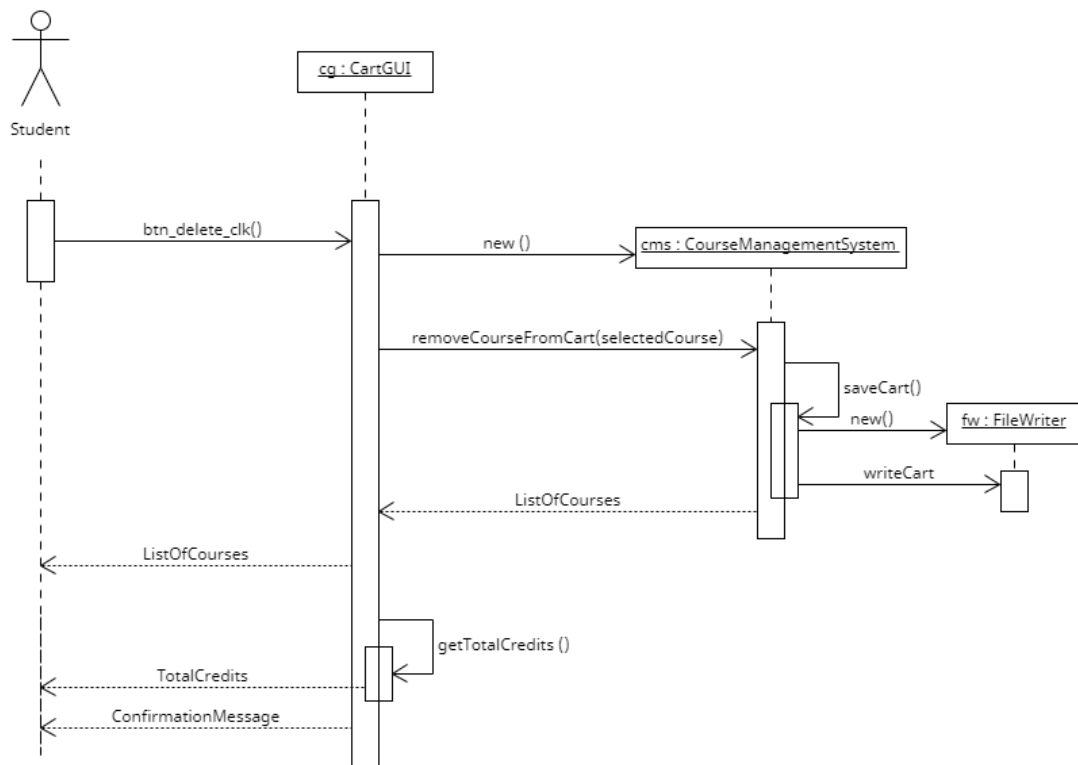
Add Course



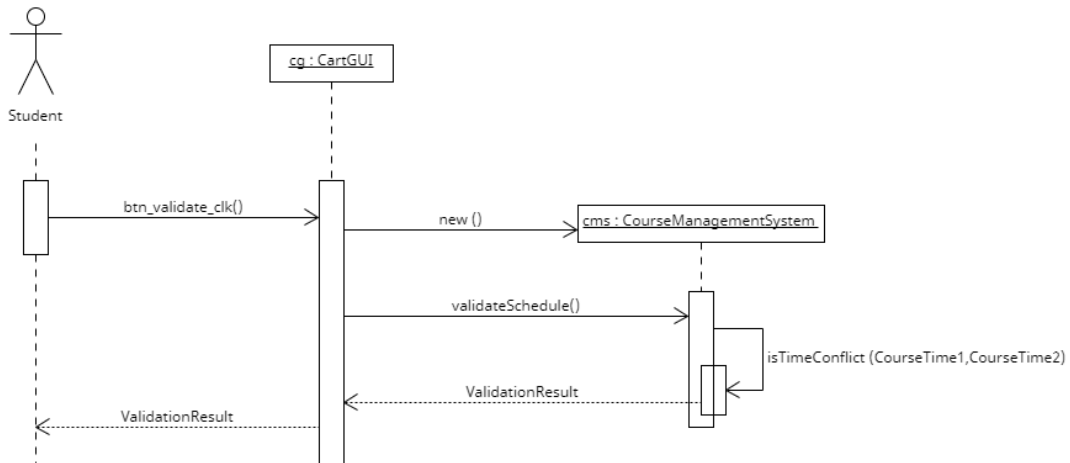
View Cart



Delete Course

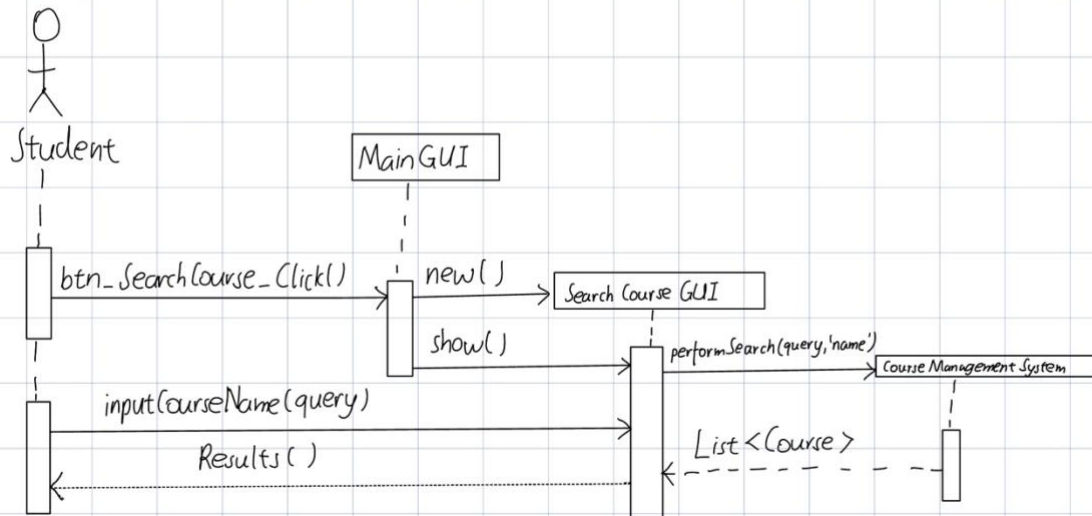


Validate Course



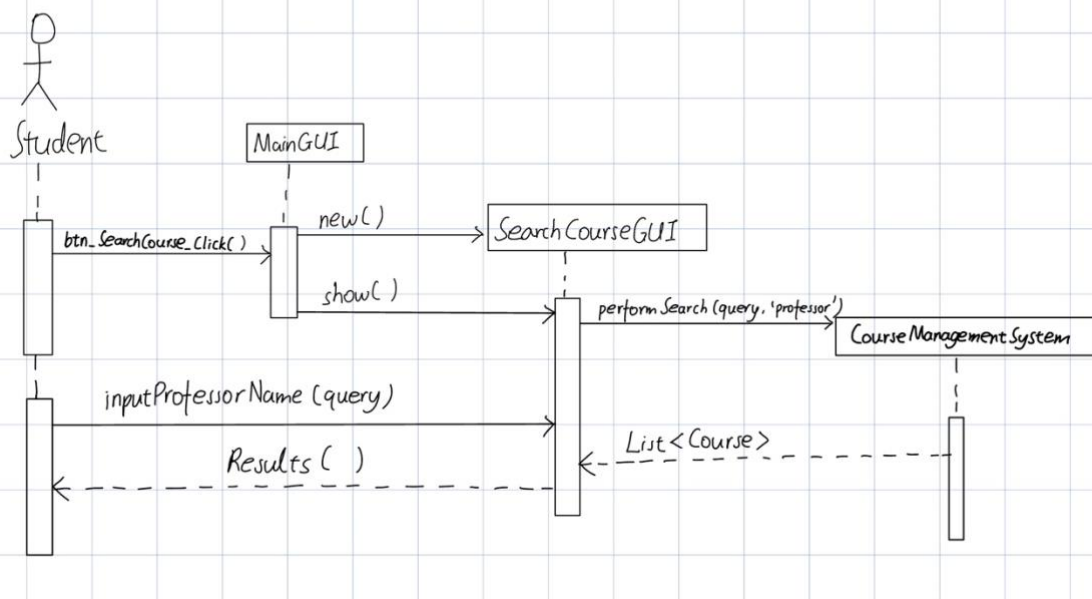
Search Course By Name

Search By Course Name:

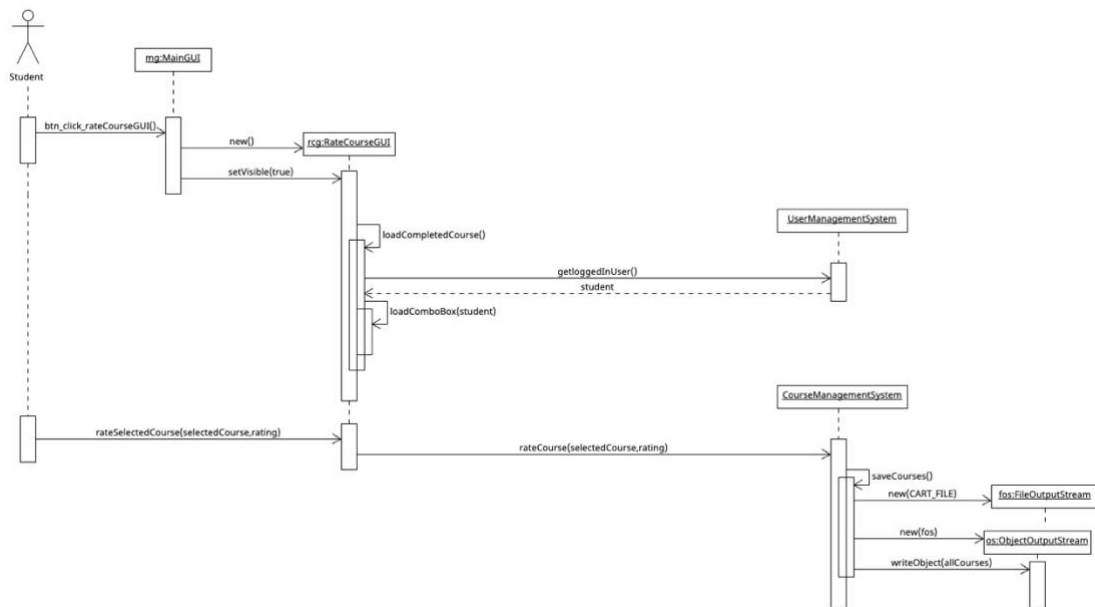


Search Course By Professor

Search By Professor Name:

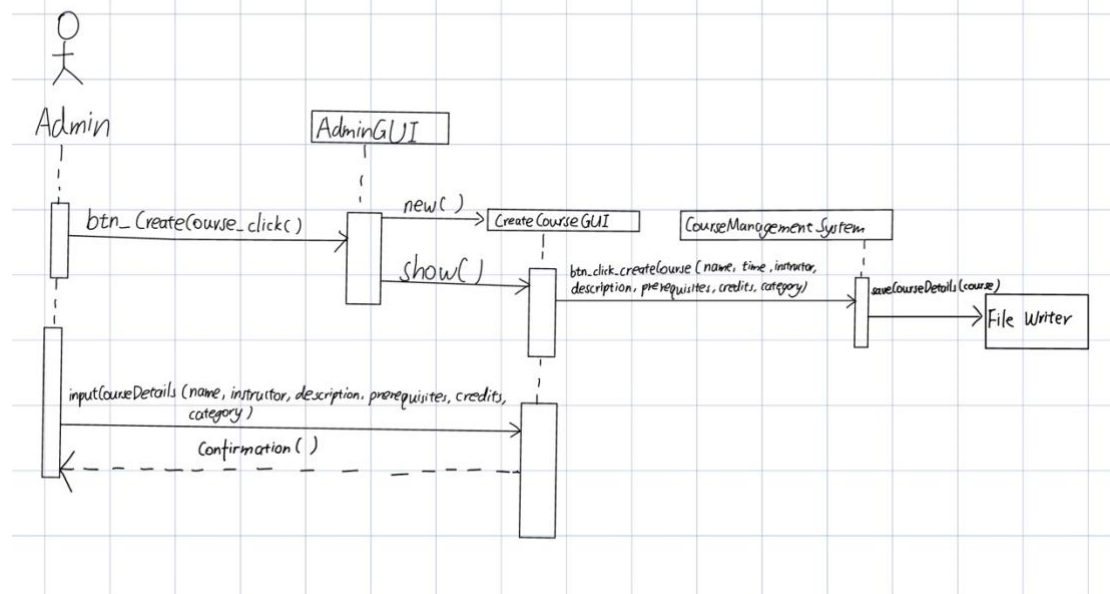


Rate Course:



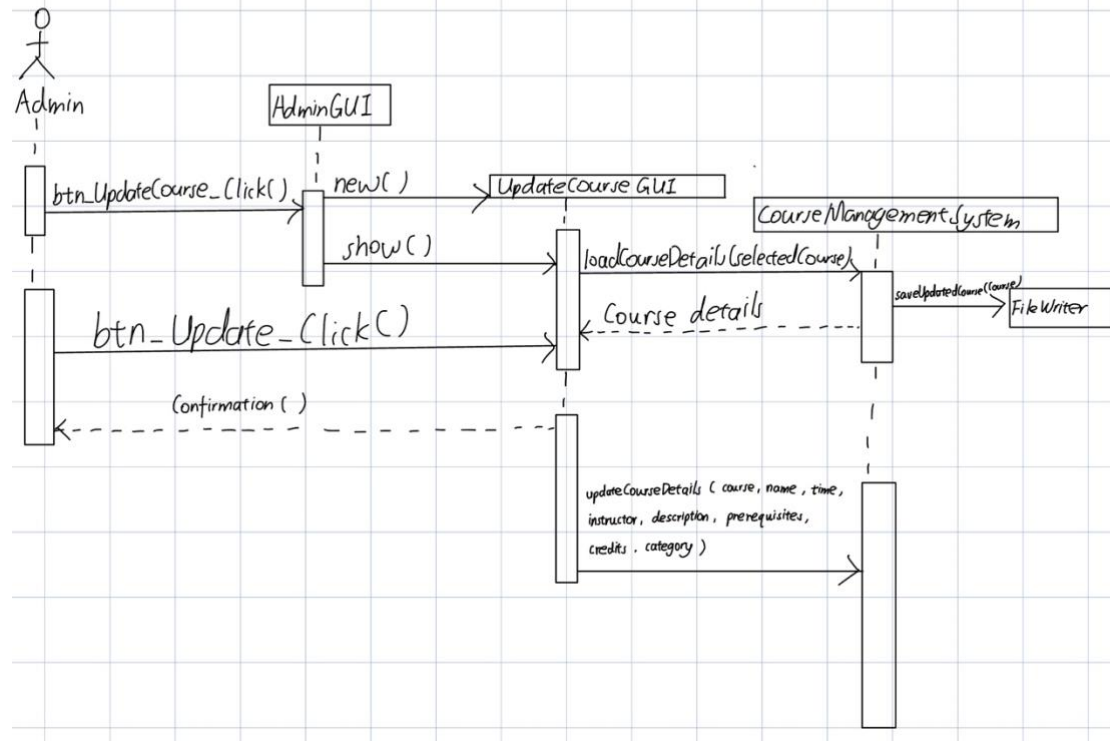
Create Course

Create Course:

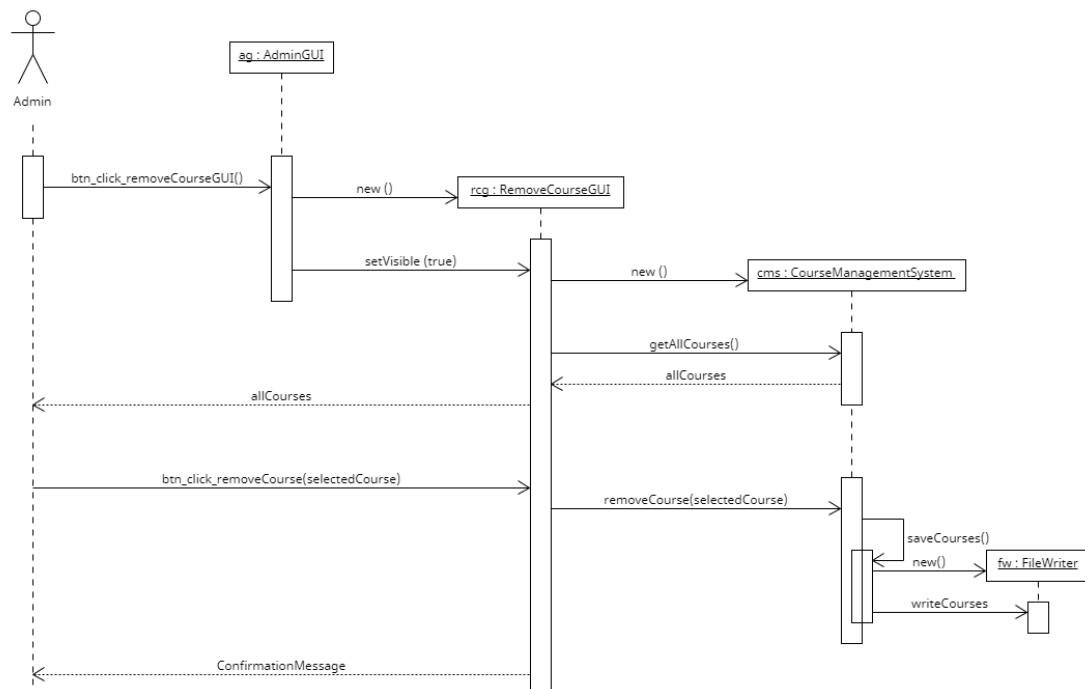


Update Course

Update Course:



Remove Course



3. Class Diagram (On the next page)

