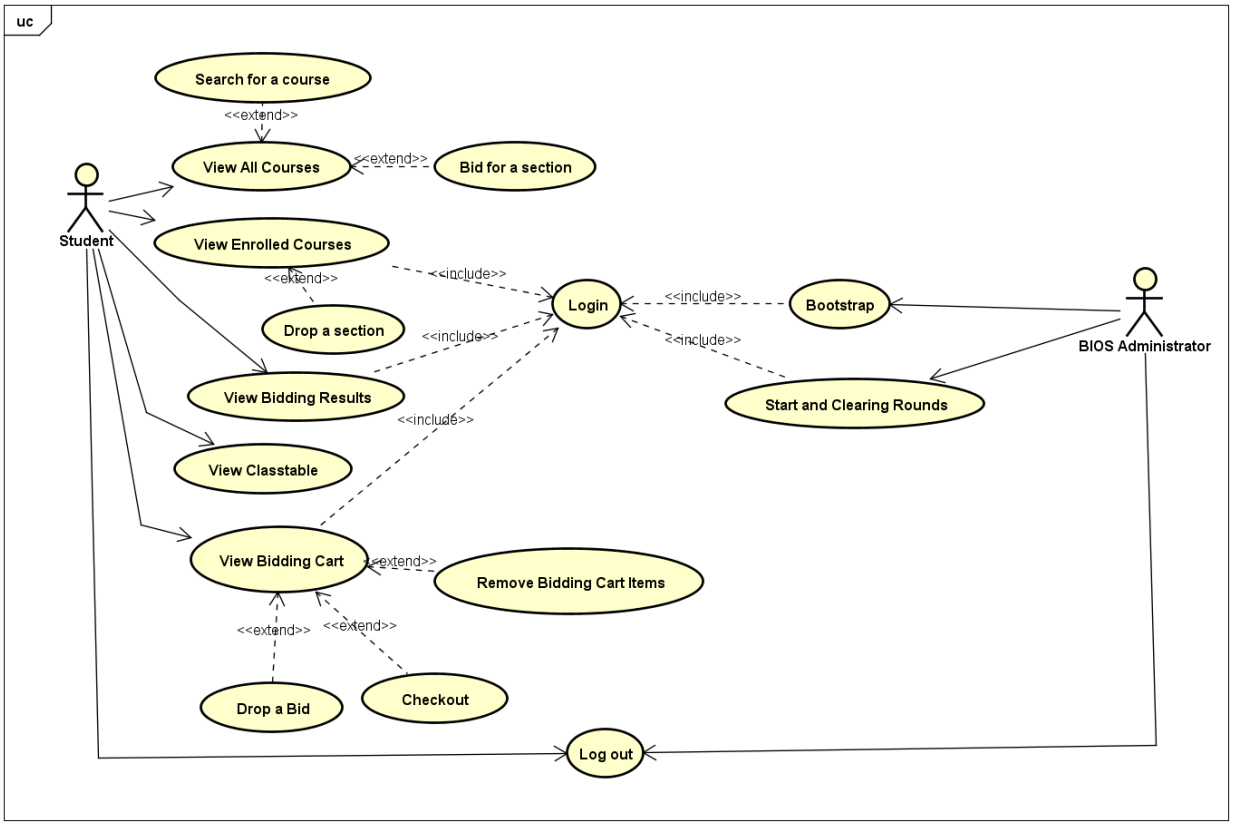
IS203 Software Engineering Technical Documents

G6T3
Team Members:

He Yongsheng Wilson
Tan Ming Kwang
Eugene Tan Wei Hong
Cristabel Lau Yuit Theng
Quek Yew Kit

Use Case Diagram



Use Case Description

Login/logout

- It allows user to login or logout to the BIOS system to bid for a course.
- All the pages are accessible only after the student have login to the system

View / search courses

- It displays a list of courses that can be bidded based on the bidding rounds.
- Student are allowed to search for a course by course name and course code

Bid for a section

- Student can bid for a section with a maximum of 5 course.

Drop a bid

- Student can drop his bid after he have checkout all his bids

View Enrolled our courses

- Student can view his/her enrolled course after he/she successfully bidded for the course

Bootstrap system

- It allows administrator to bootstrap the system by providing all the necessary data in the zip file. It inserts all the data prior to the start of round. After bootstrapping the system, the bidding round start automatically.

Start / Clearing rounds

- Administrator can start round after the end of each bidding round. Administrator can stop the round which perform clearing logic to calculate the list of students successfully bidded for the course.

View Bidding Cart / Checkout

- Student can display his bidding cart after he have bidded from the course. It displays the list of bids that user have not checkout yet. Student can checkout the list of courses he added by entering the eDollars amount
- Student can check out on the same page

View bidding results

- This display the bidding results to the user after the end of each round

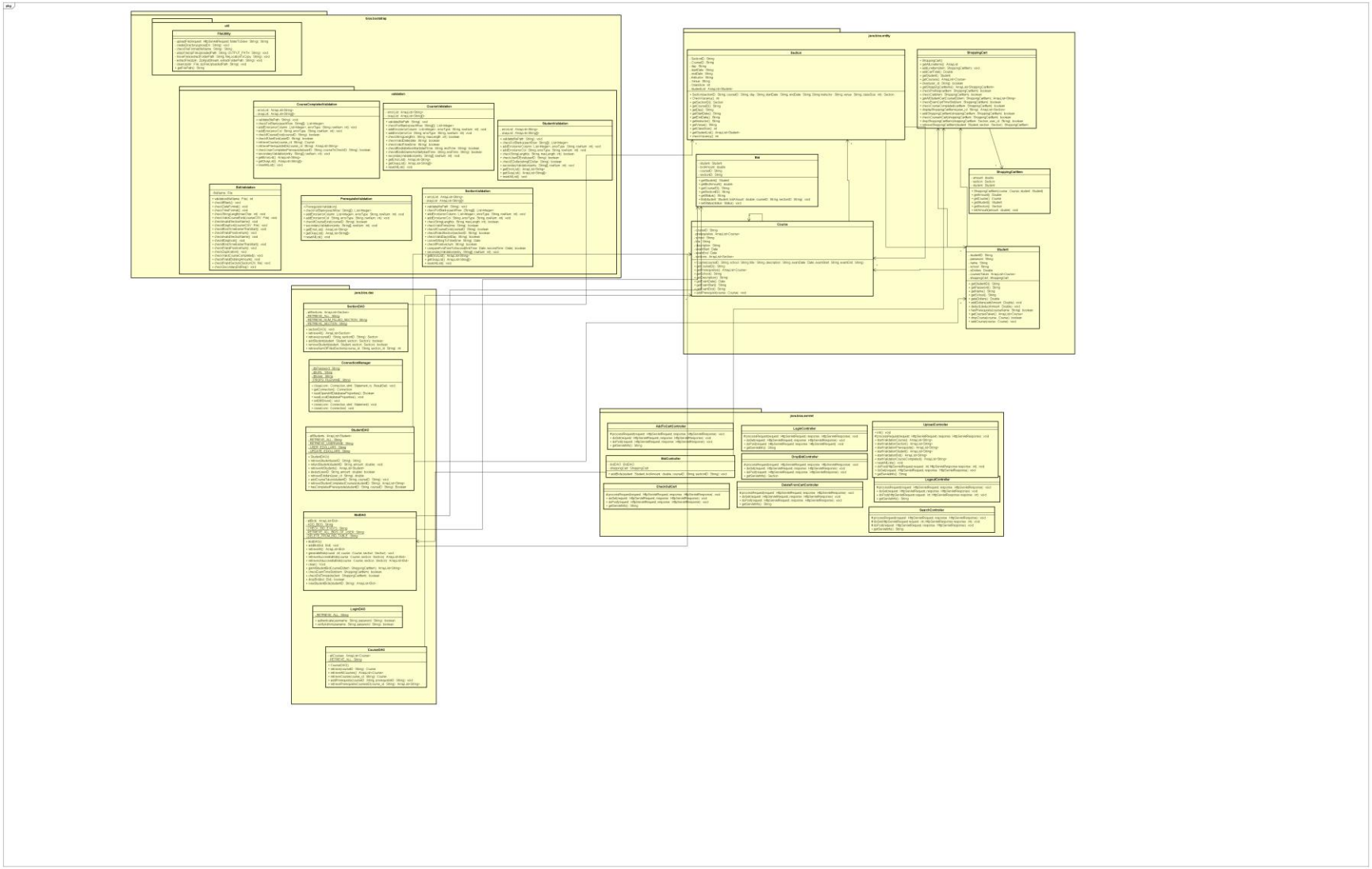
View class timetable

- This display the timetable of the student which shows enrolled, pending bidding results and bids not yet checked out from the system.

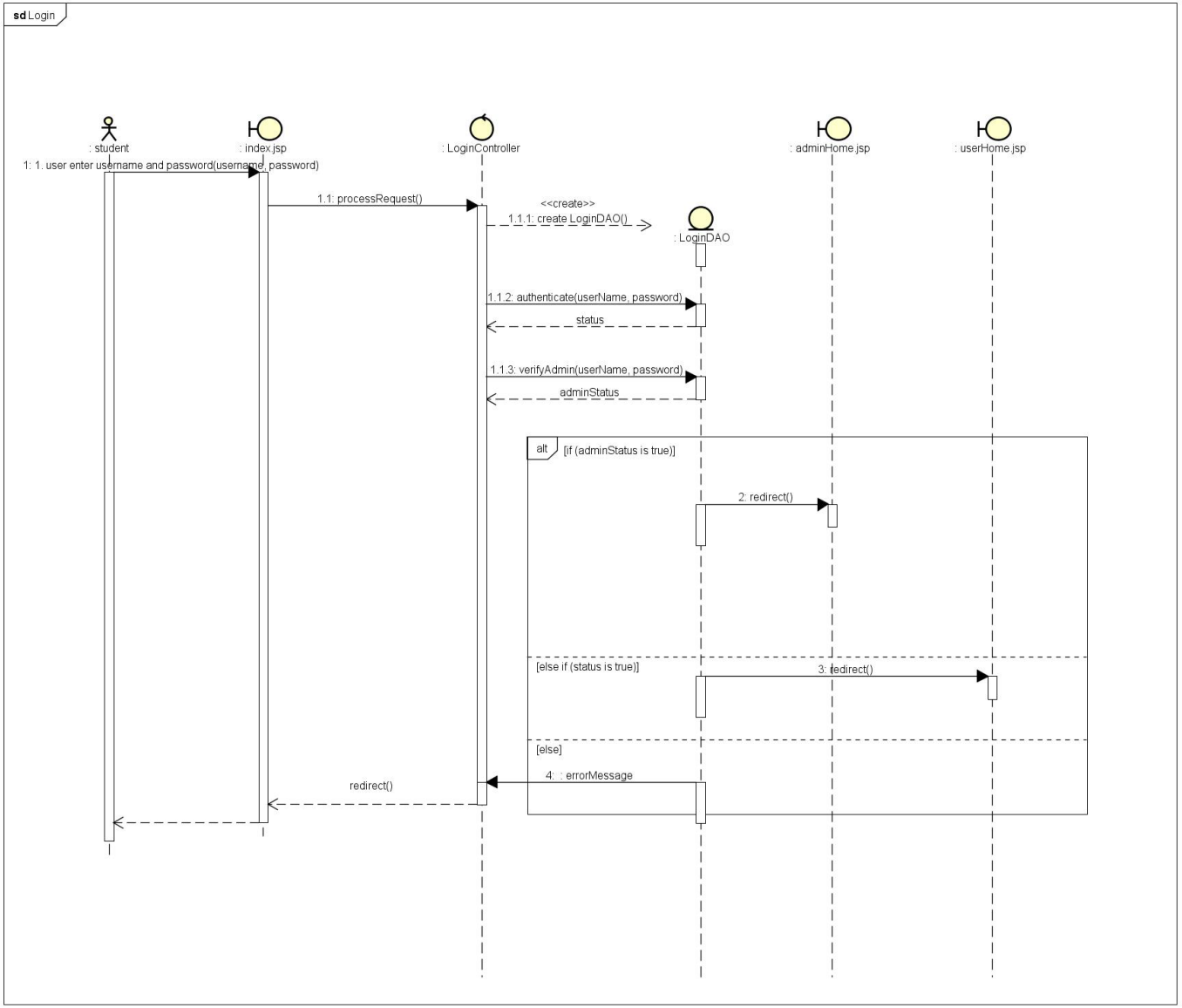
View bidding status

- This display the list of courses bidded by the user. It also shows the result of all the bid by the student with status: Pending, Enrolled, Rejected.

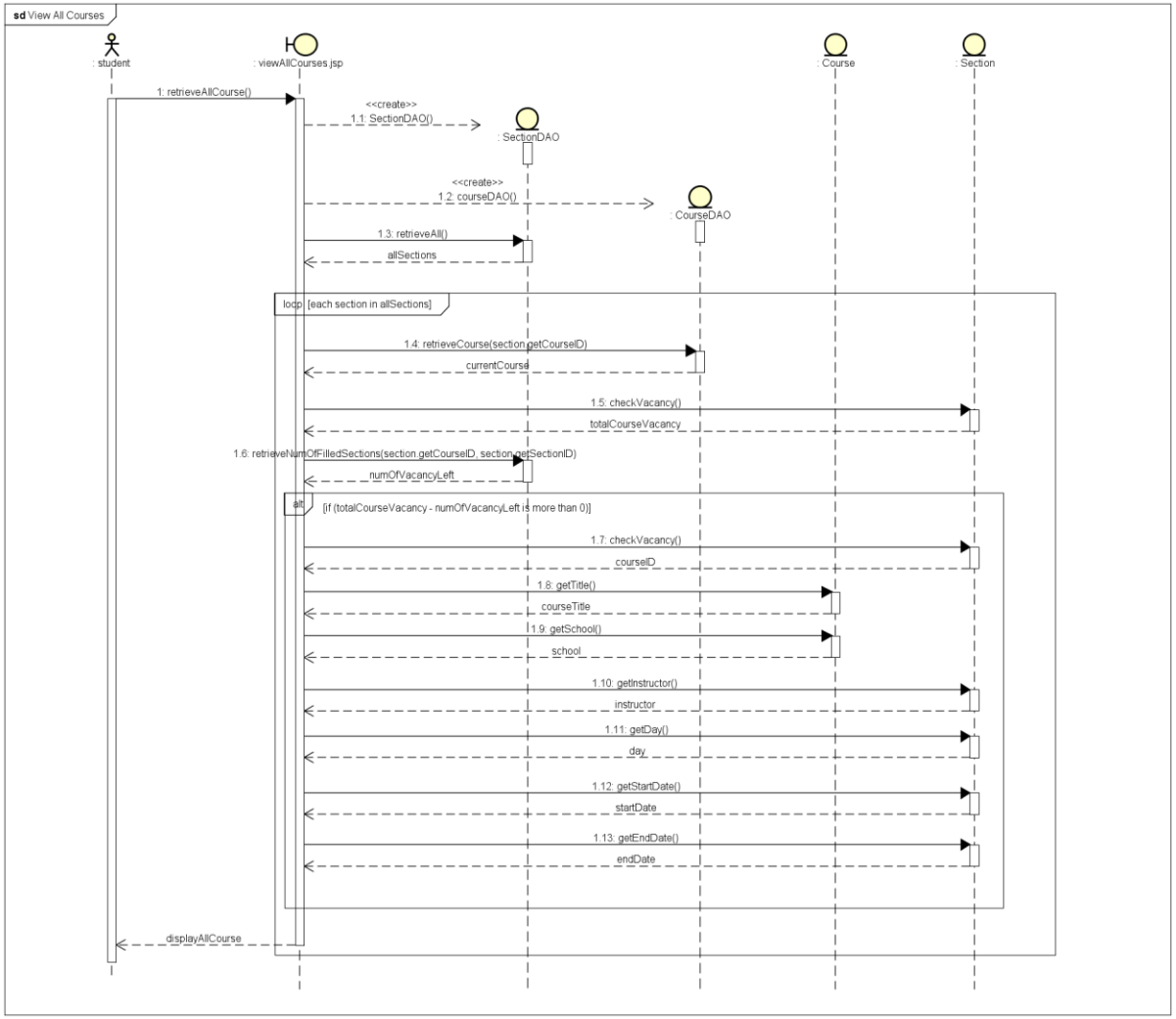
Class Diagram



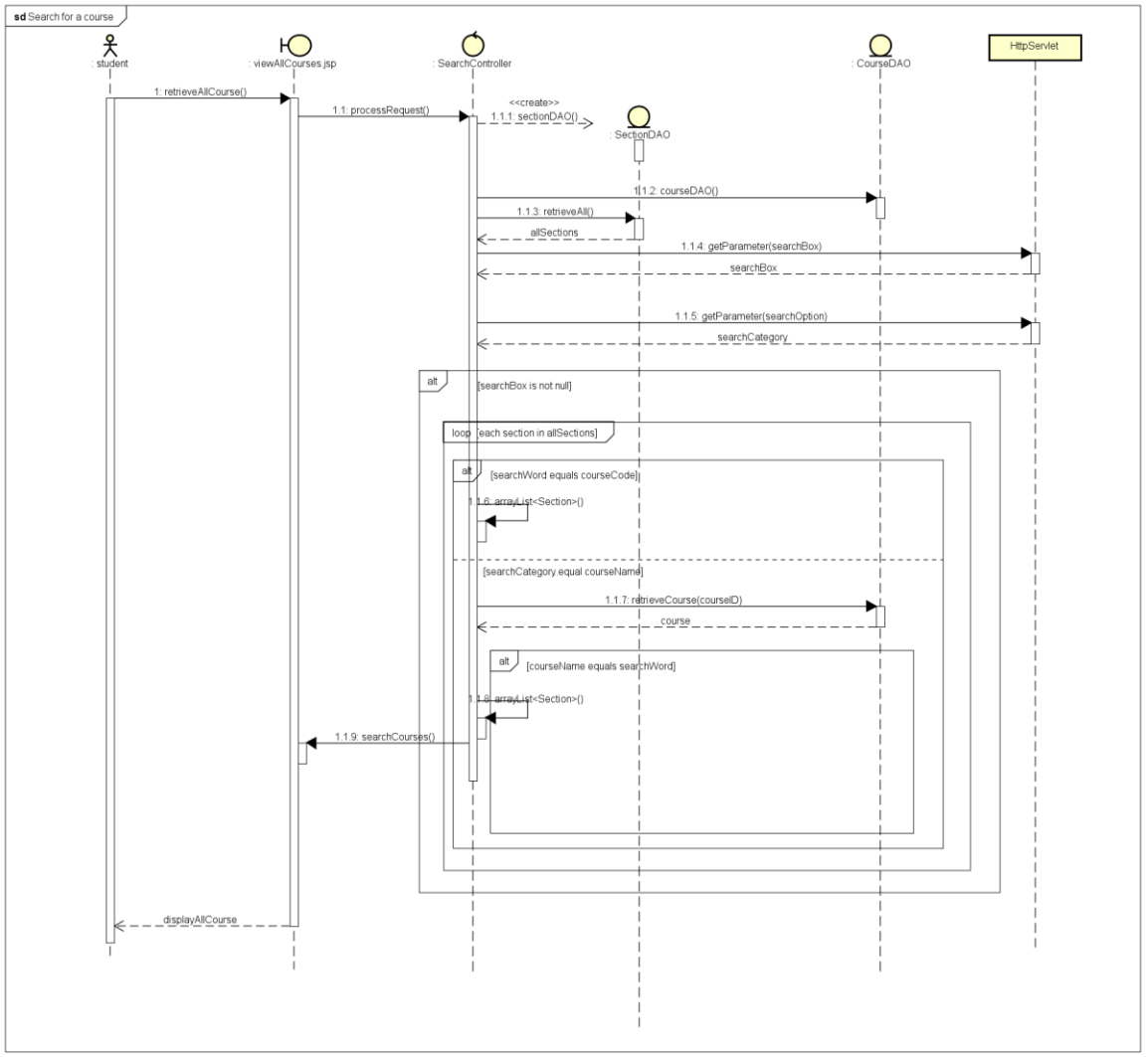
Sequence Diagram



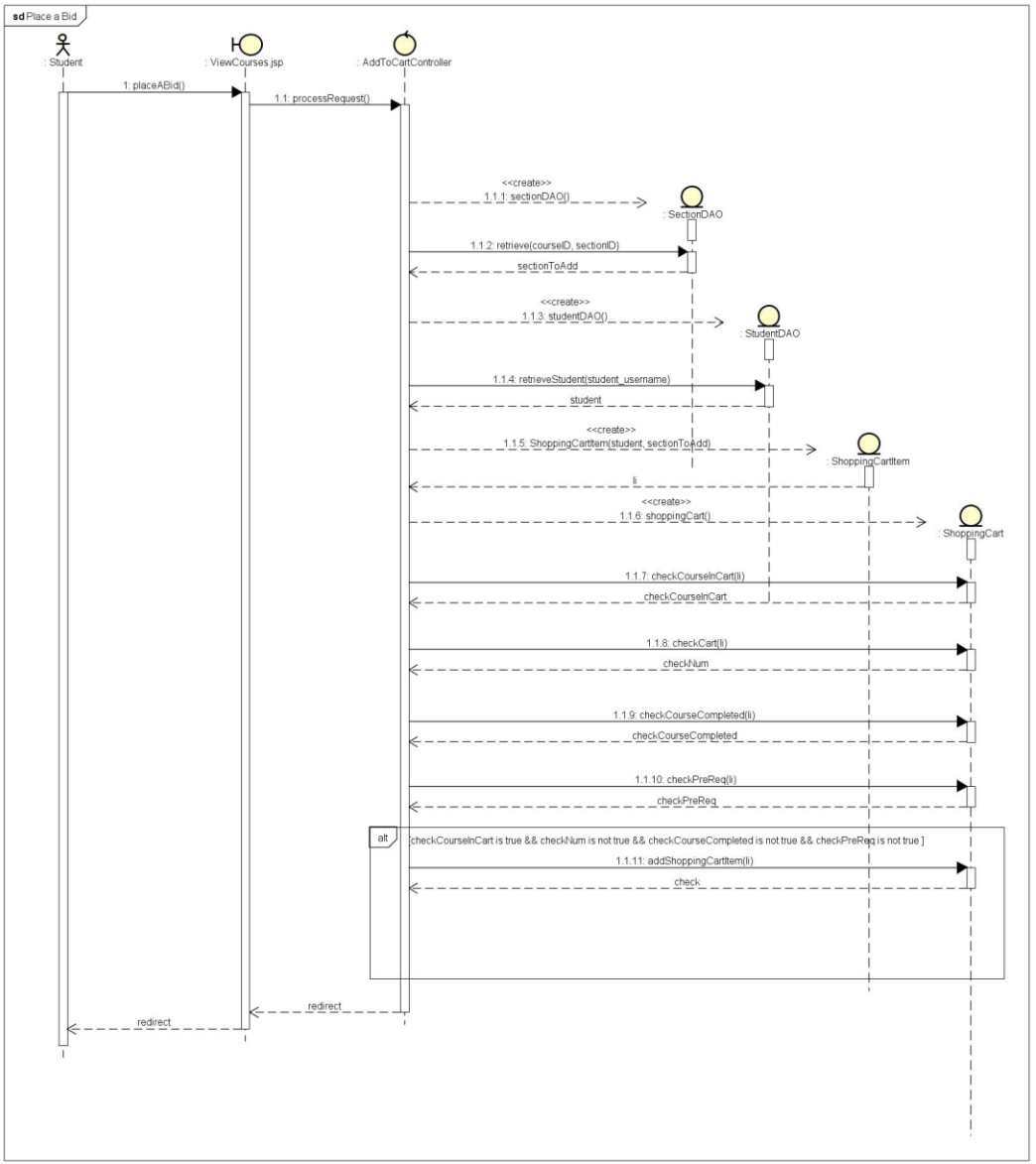
View all courses



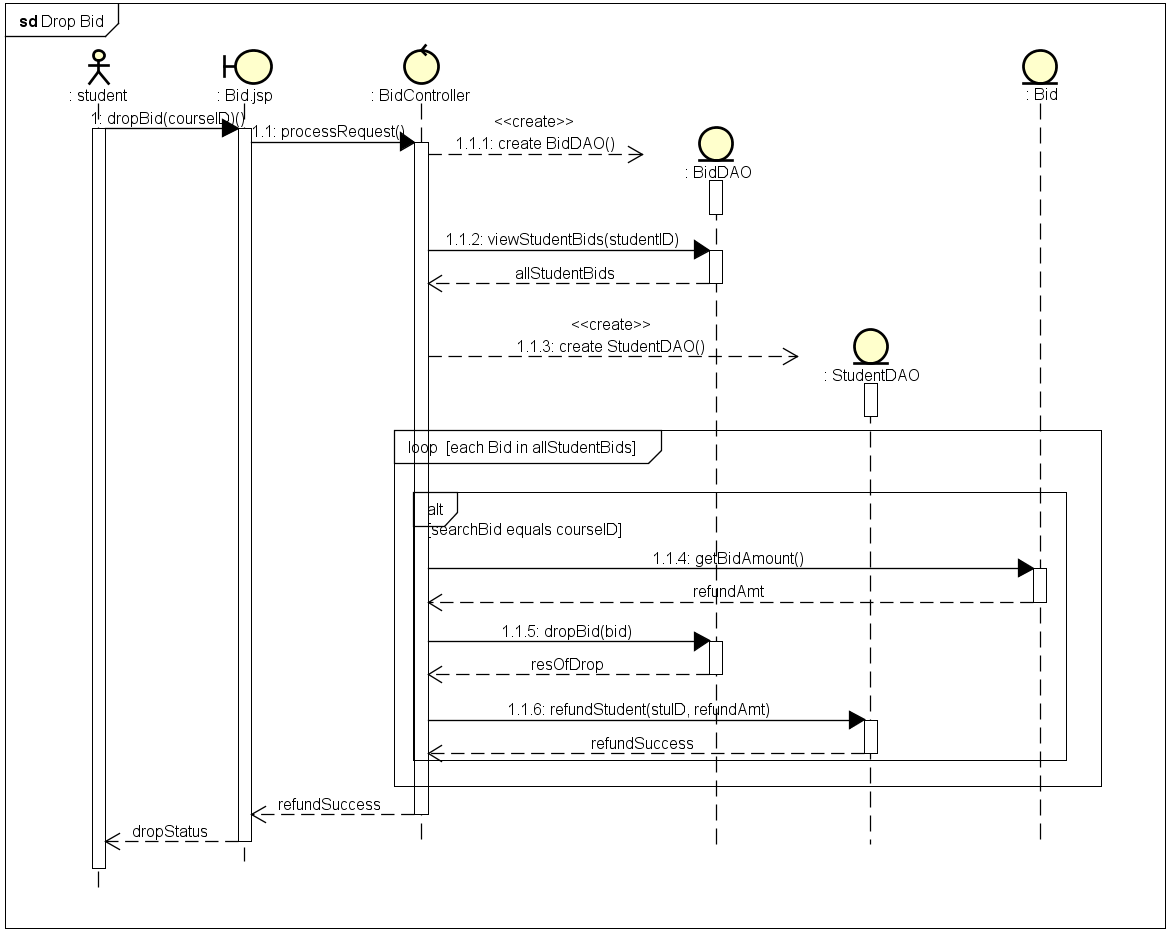
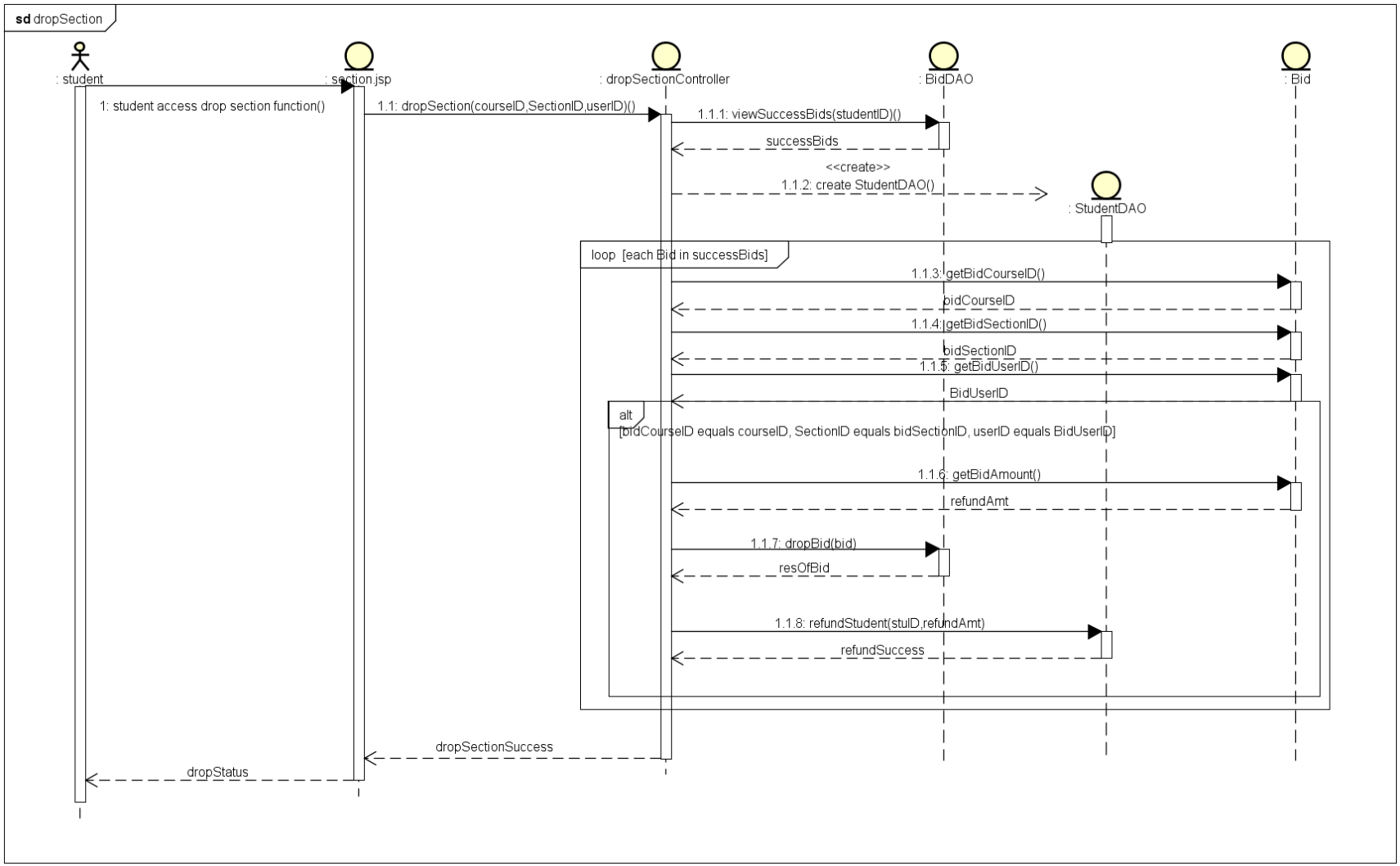
Search for a course



Place a Bid


sd Place a Bid
: Student
: ViewCourses.jsp
: AddToCartController
1: placeABid()
1.1: processRequest()
<<create>>
1.1.1: sectionDAO()
: SectionDAO
1.1.2: retrieve(courseID, sectionID)
sectionToAdd
<<create>>
1.1.3: studentDAO()
: StudentDAO
1.1.4: retrieveStudent(student_username)
student
<<create>>
1.1.5: ShoppingCartItem(student, sectionToAdd)
: ShoppingCartItem
li
<<create>>
1.1.6: shoppingCart()
: ShoppingCart
1.1.7: checkCourseInCart(li)
checkCourseInCart
1.1.8: checkCart(li)
checkNum
1.1.9: checkCourseCompleted(li)
checkCourseCompleted
1.1.10: checkPreReq(li)
checkPreReq
alt
[checkCourseInCart is true && checkNum is not true && checkCourseCompleted is not true && checkPreReq is not true]
1.1.11: addShoppingCartItem(li)
check
redirect
redirect

Drop a bid


sd Drop Bid
: student
: Bid.jsp
: BidController
: Bid
1: dropBid(courseID)()
1.1: processRequest()
<<create>>
1.1.1: create BidDAO()
: BidDAO
1.1.2: viewStudentBids(studentID)
allStudentBids
<<create>>
1.1.3: create StudentDAO()
: StudentDAO
loop [each Bid in allStudentBids]
alt
[searchBid equals courseID]
1.1.4: getBidAmount()
refundAmt
1.1.5: dropBid(bid)
resOfDrop
1.1.6: refundStudent(stuID, refundAmt)
refundSuccess
refundSuccess
dropStatus

Drop a section