StudyBook

Design Document, version 1

March 30, 2012

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Group Number: 4-2

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Richard Sween

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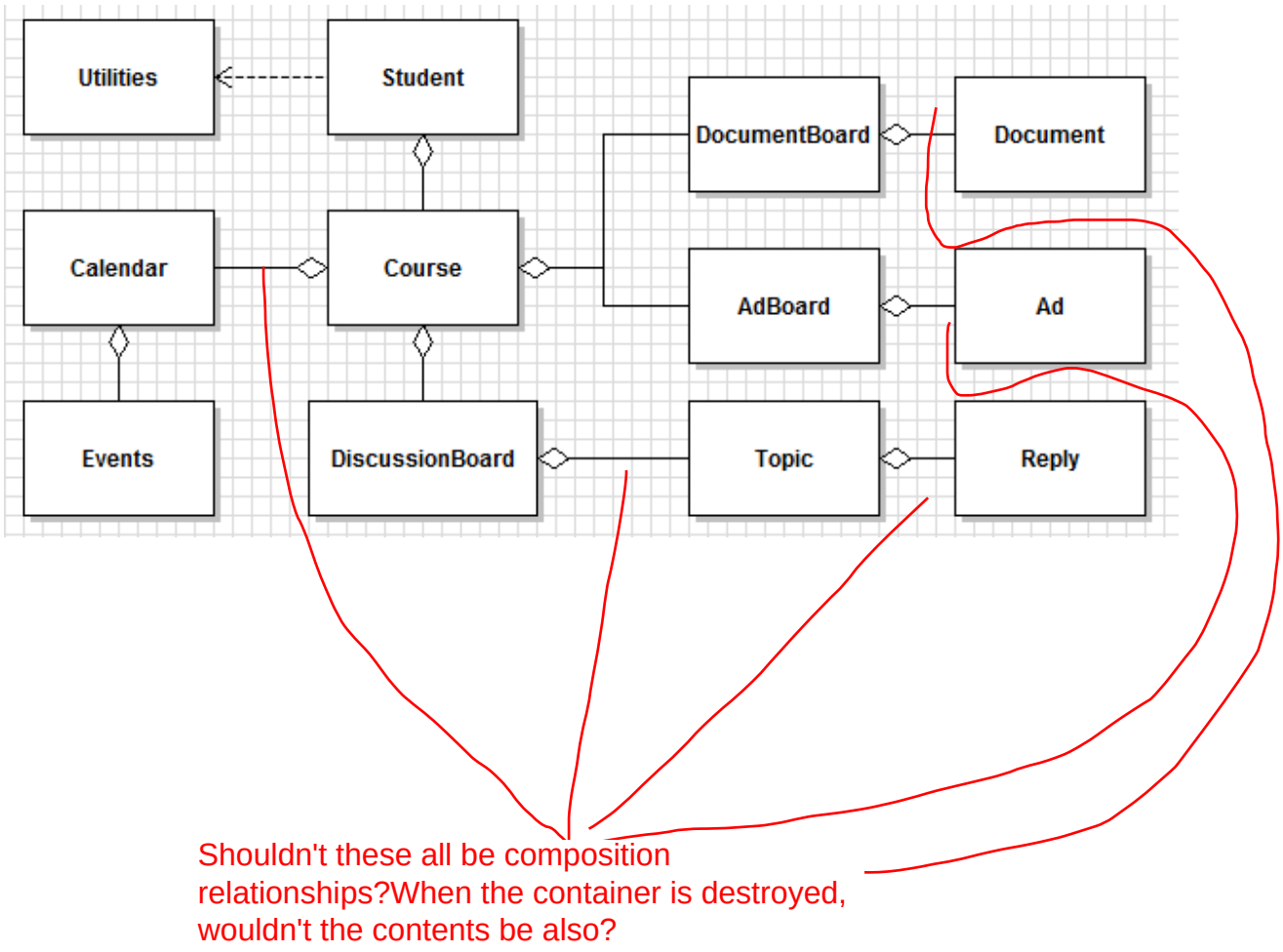
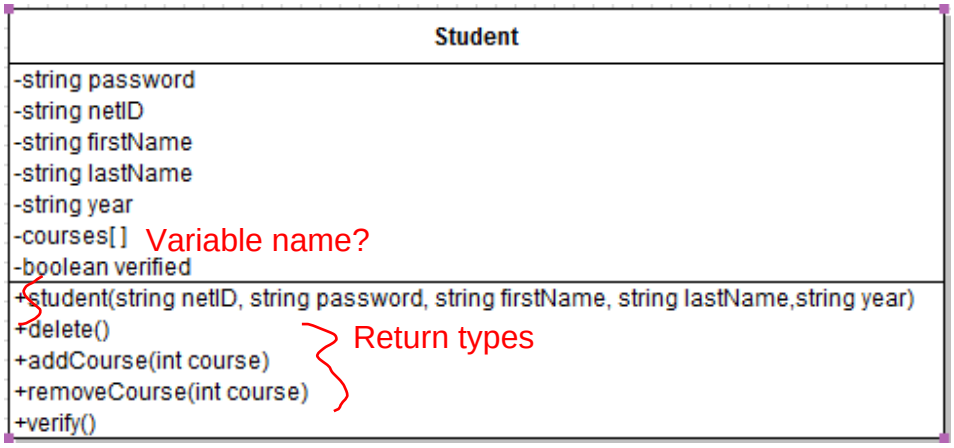
1. Overview Class Diagram



2. Detailed Class Diagrams

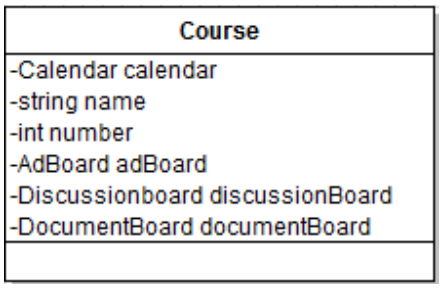
2.1. Data Classes

2.1.1. Student



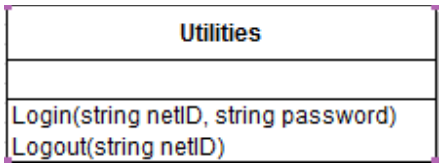
- student(string netID, string password, string firstName, string lastName,string year) : Constructor. Creates a new student in the database with the attributes given in the parameters.
- delete() : Deletes the student from the database permanently.
- addCourse(int course): Adds a course to the student's courses[]. The course to be added is specified by the course number passes as a parameter to the method.
- removeCourse(int course): Deletes a course from the student's courses[]. The course to be deleted is specified by the course number passes as a parameter to the method.
- verify() : Returns a boolean value as to whether the student is valid by sending an email with a randomly generated code to the student's msstate email account. If the student then enters the correct code, the method returns a True value.

2.1.2. Course



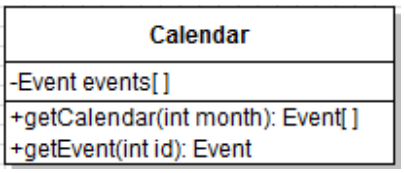
Constructor? Load from database methods?

2.1.3. Utilities



- Login(string netID, string password) : Queries the database for the student's password depending on the netID. Logs a student into the application and starts a new session provided the username and password are correct. Else, returns an error message.
- Logout(string netID) : Terminates the student's current session and logs out the student.

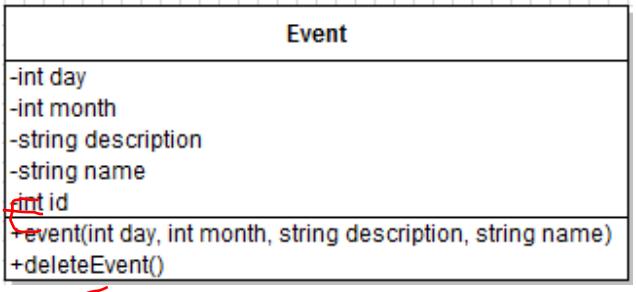
2.1.4. Calendar



- getCalendar(int month) : Returns an array of Events with the matching month integer.
- getEvent(int id) : Returns the event matching the given id number.

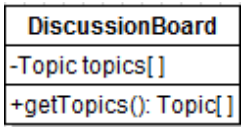
Constructor?

2.1.5. Event



- event(int day, int month, string description, string name) : Constructor. Creates an event with the given data and generates an id number.
- deleteEvent(int id): Deletes the event from the database.

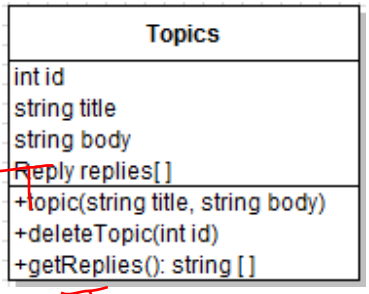
2.1.6. DiscussionBoard



- getTopics(): Returns an array of topics held in the Discussion board.

Constructor?

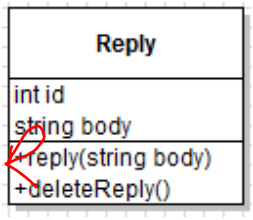
2.1.7. Topic



- topic(string title, string body) : Constructor. Creates a topic with the given data and generates a unique id number.
- getReplies(): Returns the Reply array as an array of strings.

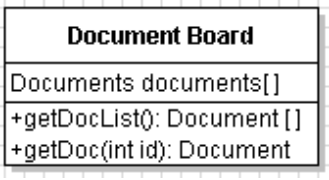
deleteTopic?

2.1.8. Reply



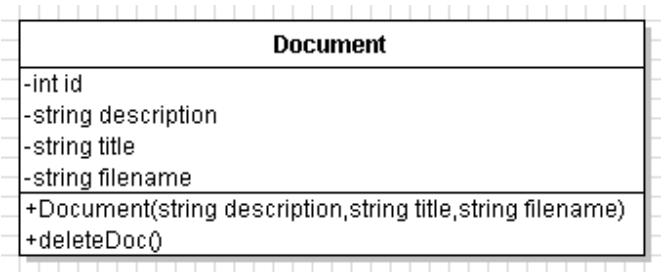
- reply(string body) : Constructor. Creates a reply with the given data and generates a unique id number.
- deleteReply() : Deletes the reply from the database.

2.1.9. DocumentBoard



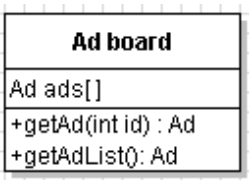
- getDocList() : Returns an array of Documents from the database.
- getDoc(int id) : Returns the Document with the specified id number from the database.

2.1.10. Document



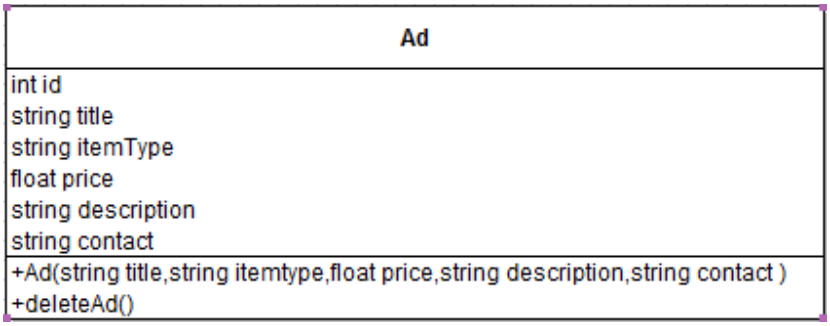
- Document(string description, string title, string filename) : Constructor. Creates up a document with a title, filename, and description.
- deleteDoc() : Deletes the specified document from the database.

2.1.11. AdBoard



- getAd(int id) : The getAd function returns the ad with the specified id number.
- getAdList() : The getAdList returns an array of Ads.

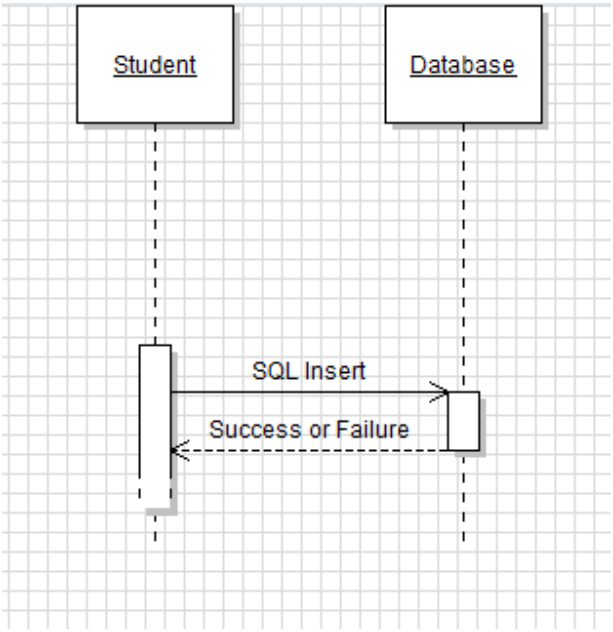
2.1.12. Ad



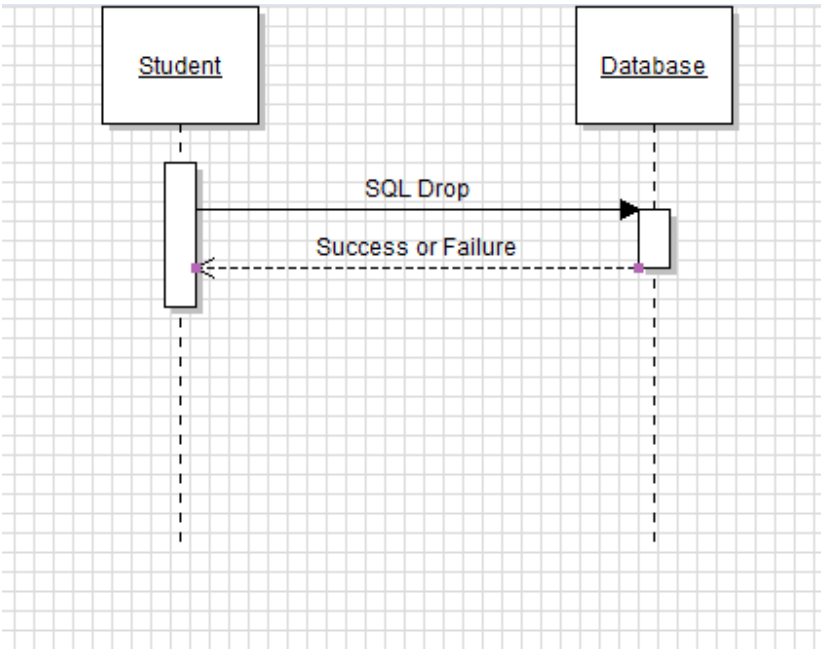
- Ad(string title, string itemtype, float price, string description, string contact) : Constructor. Creates a new ad in the database.
- deleteAd() : Deletes the ad from the database.

3. Sequence Diagrams

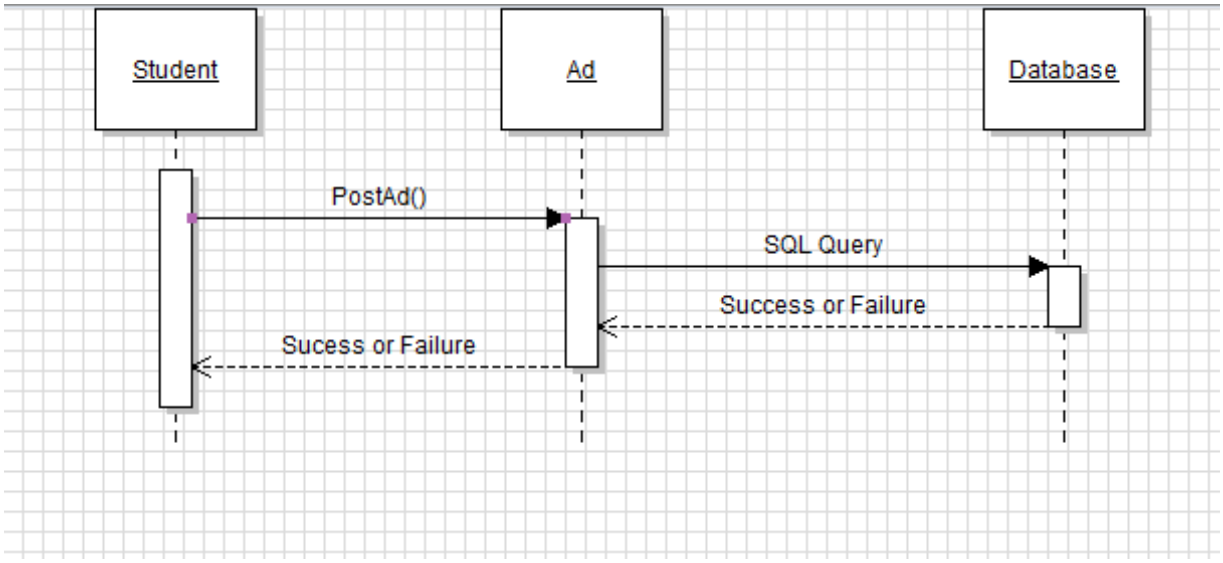
3.1. Add Course



3.2. Remove Course

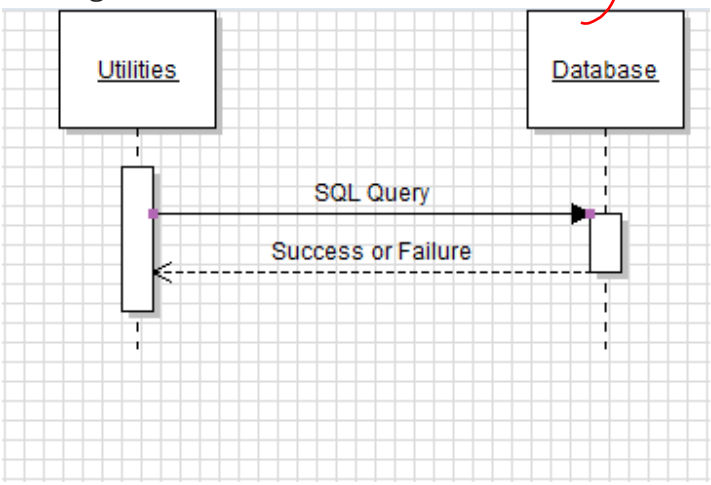


3.3. Post Ad


Student
Ad
Database
PostAd()
SQL Query
Success or Failure
Sucess or Failure

No Login diagrams

3.4. Login



Appendix A: Database Design

("*" = Primary Key, "#" = Foreign Key)

A.1 USER table
*NETID
#COURSENUMBER
NAME
YEAR
PASSWORD

A.2 COURSE table
*COURSENUMBER
NAME

A.3 DOCUMENT table
***DOCUMENTID
#COURSENUMBER
TITLE
FILENAME
FILE
DESCRIPTION

A.4 TOPIC table
*TOPICID
#COURSENUMBER
#REPLYID
TITLE
BODY

A.5 REPLY table
*REPLYID
BODY

A.6 AD table
*ADID
#COURSENUMBER
TITLE
TYPE
PRICE
DESCRIPTION
CONTACT

A.7 EVENT table
***EVINTID
#COURSENUMBER
DAY
MONTH
NAME
DESCRIPTION

Appendix B: Initial Task and Role Assignments

- Presentation Assignments:
  - Requirements - Chris Freels
  - Design - Naveen Neelakandan
  - Final - Douglas Gorman

- Current Task Assignments:
  - Registration, Login/Logout, Document Board– Naveen Neelakandan
  - Advertisement Board, Web layout – Douglas Gorman
  - Calender, Discussion Board– ChrisFreels