

javadoc

Class Gradebook

java.lang.Object
javadoc.Gradebook

```
public abstract class Gradebook
extends java.lang.Object
```

Gradebook class provides methods to create the initial gradebook to store courses User interface will use gradebook to set the active course and add/delete courses

Author:

group9

Constructor Summary

Constructors

Constructor and Description
Gradebook (java.lang.String gbName) Constructor

Method Summary

Methods

Modifier and Type	Method and Description
void	addCourse (Course newCourse) addCourse method allows user to add a new course to the gradebook
java.lang.String	courseExists (Course course) courseExists checks to see if given course is a valid course in the course list
void	delCourse (Course toDelete) delCourse allows user to delete a course currently in the course list
void	setActiveCourse (Course course) setActiveCourse sets the course the user wants to work with

Methods inherited from class java.lang.Object

equals, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructor Detail

Gradebook

```
public Gradebook(java.lang.String gbName)
```

Constructor

Parameters:

gbName -

Throws:

main.java.ca.uwo.csd.cs2212.team9.InvalidInfoException

Method Detail

setActiveCourse

```
public void setActiveCourse(Course course)
    throws main.java.ca.uwo.csd.cs2212.team9.ElementNotFoundException
```

setActiveCourse sets the course the user wants to work with

Parameters:

ActiveCourse - the active course to set

Throws:

main.java.ca.uwo.csd.cs2212.team9.InvalidInfoException

main.java.ca.uwo.csd.cs2212.team9.ElementNotFoundException

addCourse

```
public void addCourse(Course newCourse)
    throws main.java.ca.uwo.csd.cs2212.team9.InvalidInfoException
```

addCourse method allows user to add a new course to the gradebook

Parameters:

addCourse -

Throws:

main.java.ca.uwo.csd.cs2212.team9.InvalidInfoException

courseExists

```
public java.lang.String courseExists(Course course)
```

courseExists checks to see if given course is a valid course in the course list

Parameters:

course - course to look for in list

delCourse

```
public void delCourse(Course toDelete)
    throws main.java.ca.uwo.csd.cs2212.team9.ElementNotFoundException
```

delCourse allows user to delete a course currently in the course list

Parameters:

toDelete - course to delete from list

Throws:

main.java.ca.uwo.csd.cs2212.team9.ElementNotFoundException

Package [Class](#) [Use](#) [Tree](#) [Deprecated](#) [Index](#) [Help](#)

[Prev Class](#) [Next Class](#) [Frames](#) [No Frames](#) [All Classes](#)

Summary: [Nested](#) | [Field](#) | [Constr](#) | [Method](#) Detail: [Field](#) | [Constr](#) | [Method](#)

javadoc

Class Course<BinaryTree>

java.lang.Object

javadoc.Course<BinaryTree>

Type Parameters:

BinaryTree -

public abstract class **Course<BinaryTree>**
extends java.lang.Object

Course is a class that will be used to create a new Course within the Gradebook program

Author:
group 9

Constructor Summary

Constructors

Constructor and Description
Course (java.lang.String code, java.lang.String title, java.lang.String term) Constructor

Method Summary

Methods

Modifier and Type	Method and Description
void	addDeliverable (main.java.ca.uwo.csd.cs2212.team9.Deliverable del) Adds a deliverable to the course, requiring a unique deliverable name.
void	addStudent (main.java.ca.uwo.csd.cs2212.team9.Student student) Adds give student to the class list, requiring a unique student number and email address.
void	email () Email Student allows user to email a student with generated report attached
void	exportGrades () Export Grades allows user to export a list of the grades for current course
void	genReport (main.java.ca.uwo.csd.cs2212.team9.Student student) Generates a Report for a student with grade average information
java.lang.String	getCode () Gets the course code for specified course
java.util.LinkedList<main.java.ca.uwo.csd.cs2212.team9.Deliverable>	getDeliverables () Returns a list of the deliverables currently assigned to the student
BinaryTree	getStudentList () Gets the list of students currently in active course
java.lang.String	getTerm () Gets the term for specified course
java.lang.String	getTitle () Gets the course title for specified course
void	importGrades () Import Grades allows user to import a list of grades for a current course
void	importStudents () Imports class list from a CSV file
boolean	isActive () Gets the currently selected course
void	removeDeliverable (java.lang.String name) Removes the deliverable specified by name from the course.

void	removeStudent (java.lang.String studentNumber) Removes the specified student from the class list
void	setActive (boolean active)
void	setCode (java.lang.String code) Changes course code for specific course to given string
void	setTerm (java.lang.String term) Changes the term the course is in
void	setTitle (java.lang.String title) Changes the title for particular course

Methods inherited from class java.lang.Object

equals, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructor Detail

Course

```
public Course(java.lang.String code,
              java.lang.String title,
              java.lang.String term)
    throws main.java.ca.uwo.csd.cs2212.team9.InvalidInfoException
```

Constructor

Parameters:

code -

title -

term -

Throws:

main.java.ca.uwo.csd.cs2212.team9.InvalidInfoException

Method Detail

isActive

```
public boolean isActive()
```

Gets the currently selected course

Returns:

the courses status

getCode

```
public java.lang.String getCode()
```

Gets the course code for specified course

Returns:

the course code

getDeliverables

```
public java.util.LinkedList<main.java.ca.uwo.csd.cs2212.team9.Deliverable> getDeliverables()
```

Returns a list of the deliverables currently assigned to the student

Returns:

the deliverables

getTerm

```
public java.lang.String getTerm()
```

Gets the term for specified course

Returns:

the course term

getTitle

```
public java.lang.String getTitle()
```

Gets the course title for specified course

Returns:

the course title

getStudentList

```
public BinaryTree getStudentList()
```

Gets the list of students currently in active course

Returns:

the class list

setActive

```
public void setActive(boolean active)
```

Parameters:

active - the activity status to set

setCode

```
public void setCode(java.lang.String code)
    throws main.java.ca.uwo.csd.cs2212.team9.InvalidInfoException
```

Changes course code for specific course to given string

Parameters:

code -

InvalidInfoException -

Throws:

main.java.ca.uwo.csd.cs2212.team9.InvalidInfoException

setTerm

```
public void setTerm(java.lang.String term)
    throws main.java.ca.uwo.csd.cs2212.team9.InvalidInfoException
```

Changes the term the course is in

Parameters:

term -

Throws:

main.java.ca.uwo.csd.cs2212.team9.InvalidInfoException

setTitle

```
public void setTitle(java.lang.String title)
    throws main.java.ca.uwo.csd.cs2212.team9.InvalidInfoException
```

Changes the title for particular course

Parameters:

title -

Throws:

main.java.ca.uwo.csd.cs2212.team9.InvalidInfoException

addDeliverable

```
public void addDeliverable(main.java.ca.uwo.csd.cs2212.team9.Deliverable del)
    throws main.java.ca.uwo.csd.cs2212.team9.InvalidInfoException
```

Adds a deliverable to the course, requiring a unique deliverable name.

Parameters:

del - the deliverable to add

Throws:

main.java.ca.uwo.csd.cs2212.team9.InvalidInfoException

addStudent

```
public void addStudent(main.java.ca.uwo.csd.cs2212.team9.Student student)
    throws main.java.ca.uwo.csd.cs2212.team9.InvalidInfoException
```

Adds give student to the class list, requiring a unique student number and email address.

Parameters:

student - the student to add to the list

Throws:

main.java.ca.uwo.csd.cs2212.team9.InvalidInfoException

email

```
public void email()
```

Email Student allows user to email a student with generated report attached

exportGrades

```
public void exportGrades()
```

Export Grades allows user to export a list of the grades for current course

genReport

```
public void genReport(main.java.ca.uwo.csd.cs2212.team9.Student student)
```

Generates a Report for a student with grade average information

Parameters:

student - Given student to generate report for

importGrades

```
public void importGrades()
```

Import Grades allows user to import a list of grades for a current course

importStudents

```
public void importStudents()
```

Imports class list from a CSV file

removeDeliverable

```
public void removeDeliverable(java.lang.String name)
    throws main.java.ca.uwo.csd.cs2212.team9.ElementNotFoundException
```

Removes the deliverable specified by name from the course.

Parameters:

name - the name of the deliverable to remove.

Throws:

main.java.ca.uwo.csd.cs2212.team9.ElementNotFoundException

removeStudent

```
public void removeStudent(java.lang.String studentNumber)
```

Removes the specified student from the class list

Parameters:

number - the student number of the student to remove

[Package](#) [Class](#) [Use](#) [Tree](#) [Deprecated](#) [Index](#) [Help](#)

[Prev Class](#) [Next Class](#) [Frames](#) [No Frames](#) [All Classes](#)

Summary: [Nested](#) | [Field](#) | [Constr](#) | [Method](#) Detail: [Field](#) | [Constr](#) | [Method](#)

javadoc

Class Student

java.lang.Object
javadoc.Student

```
public abstract class Student
extends java.lang.Object
```

Student class is used to create a new student with given student information Allows user to edit and retrieve student information Allows user to calculate course, assignment, and exam averages Allows user to add a new deliverable to the student's record

Author:

team9

Constructor Summary

Constructors

Constructor and Description
Student (java.lang.String firstName, java.lang.String lastName, java.lang.String number, java.lang.String email) Constructor

Method Summary

Methods

Modifier and Type	Method and Description
void	addDeliverable () AddDeliverable adds a new deliverable to current student
double	calcAssignAvg () calcAssignAvg calculates the assignment average for current student uses grade information to calculate
double	calcCourseAvg () calcCourseAvg calculates the course average for current student uses grade information to calculate
double	calcExamAvg () calcExamAvg calculates the exam average for current student uses grade information to calculate

void	delDeliverable() delDeliverable deletes a deliverable from current student
double	getAssignAvg() getAssignAvg returns the assignment average for current student
double	getCourseAvg() getCourseAvg returns the course average for current student
java.lang.String	getEmail() getEmail returns the email address for current student
double	getExamAvg() getExamAvg returns the exam average for current student
java.lang.String	getFirstName() getFirstName returns the current student's first name
java.lang.String	getLastName() getLastName returns the current student's last name
java.lang.String	getNumber() getNumber returns the current student's student number
void	setEmail (java.lang.String email) setEmail sets the email address of current student to given email checks validity of email address given
void	setFirstName (java.lang.String firstName) setFirst name sets the first name of the student to given name checks validity of given name
void	setLastName (java.lang.String lastName) setLastName sets the last name of student to given name checks validity of given name
void	setNumber (java.lang.String number) setNumber sets the student's student number to given number checks validity of given number

Methods inherited from class java.lang.Object

equals, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructor Detail

Student

```
public Student(java.lang.String firstName,
               java.lang.String lastName,
               java.lang.String number,
               java.lang.String email)
    throws main.java.ca.uwo.csd.cs2212.team9.InvalidInfoException
```

Constructor

Parameters:

firstName - the students first name

lastName - the students last name

number - the students unique student number

email - the students unique email address

Throws:

main.java.ca.uwo.csd.cs2212.team9.InvalidInfoException

Method Detail

getAssignAvg

```
public double getAssignAvg()
```

getAssignAvg returns the assignment average for current student

Returns:

the students assignment average

getCourseAvg

```
public double getCourseAvg()
```

getCourseAvg returns the course average for current student

Returns:

the students course average

getEmail

```
public java.lang.String getEmail()
```

getEmail returns the email address for current student

Returns:

the students email address

getExamAvg

```
public double getExamAvg()
```

getExamAvg returns the exam average for current student

Returns:

the students exam average

getFirstName

```
public java.lang.String getFirstName()
```

getFirstName returns the current student's first name

Returns:

the first name of the student

getLastName

```
public java.lang.String getLastName()
```

getLastName returns the current student's last name

Returns:

the last name of the student

getNumber

```
public java.lang.String getNumber()
```

getNumber returns the current student's student number

Returns:

the students student number

setFirstName

```
public void setFirstName(java.lang.String firstName)
                        throws main.java.ca.uwo.csd.cs2212.team9.InvalidInfoException
```

setFirst name sets the first name of the student to given name checks validity of given name

Parameters:

firstName - the firstName to set

Throws:

main.java.ca.uwo.csd.cs2212.team9.InvalidInfoException

setLastName

```
public void setLastName(java.lang.String lastName)
                        throws main.java.ca.uwo.csd.cs2212.team9.InvalidInfoException
```

setLastName sets the last name of student to given name checks validity of given name

Parameters:

lastName - the lastName to set

Throws:

main.java.ca.uwo.csd.cs2212.team9.InvalidInfoException

setNumber

```
public void setNumber(java.lang.String number)
    throws main.java.ca.uwo.csd.cs2212.team9.InvalidInfoException
```

setNumber sets the student's student number to given number checks validity of given number

Parameters:

number - the number to set

Throws:

main.java.ca.uwo.csd.cs2212.team9.InvalidInfoException

setEmail

```
public void setEmail(java.lang.String email)
    throws main.java.ca.uwo.csd.cs2212.team9.InvalidInfoException
```

setEmail sets the email address of current student to given email checks validity of email address given

Parameters:

email - the email to set

Throws:

main.java.ca.uwo.csd.cs2212.team9.InvalidInfoException

calcCourseAvg

```
public double calcCourseAvg()
```

calcCourseAvg calculates the course average for current student uses grade information to calculate

Parameters:

courseAvg - calculates course average

calcAssignAvg

```
public double calcAssignAvg()
```

calcAssignAvg calculates the assignment average for current student uses grade information to calculate

Parameters:

assignAvg - calculates the assignment average

calcExamAvg

```
public double calcExamAvg()
```

calcExamAvg calculates the exam average for current student uses grade information to calculate

Parameters:

examAvg - calculates the exam average

addDeliverable

```
public void addDeliverable()
```

AddDeliverable adds a new deliverable to current student

delDeliverable

```
public void delDeliverable()
```

delDeliverable deletes a deliverable from current student

[Package](#) [Class](#) [Use](#) [Tree](#) [Deprecated](#) [Index](#) [Help](#)

[Prev Class](#) [Next Class](#) [Frames](#) [No Frames](#) [All Classes](#)

Summary: [Nested](#) | [Field](#) | [Constr](#) | [Method](#) Detail: [Field](#) | [Constr](#) | [Method](#)

javadoc

Class Deliverable

java.lang.Object
javadoc.Deliverable

```
public abstract class Deliverable
extends java.lang.Object
```

Class Deliverable contains all the methods needed to generate a new deliverable for a student Allows user to edit, update, and access deliverable names, types and grade weight/grade

Author:

team9

Constructor Summary

Constructors

Constructor and Description
Deliverable (java.lang.String name, java.lang.String type, double weight) Constructor

Method Summary

Methods

Modifier and Type	Method and Description
double	getGrade () getGrade returns the grade stored for the current student/deliverable
java.lang.String	getName () getName returns the name of the current deliverable
java.lang.String	getType () getType returns the type of the current deliverable
double	getWeight () getWeight returns the percentage of final mark current deliverable is worth
void	setGrade (double grade) setGrade sets the grade for the student for current deliverable
void	setName (java.lang.String name) setName sets the name of the current deliverable to given name

void	setType (java.lang.String type) setType sets the type of the current deliverable to given type
void	setWeight (double weight) setWeight sets the weight of the current deliverable to given weight

Methods inherited from class java.lang.Object

equals, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructor Detail

Deliverable

```
public Deliverable(java.lang.String name,  
                  java.lang.String type,  
                  double weight)
```

Constructor

Parameters:

name - the deliverable name
type - the type of the deliverable (Assignment, Exam)
weight - the grade weight of the deliverable

Throws:

main.java.ca.uwo.csd.cs2212.team9.InvalidInfoException

Method Detail

getGrade

```
public double getGrade()
```

getGrade returns the grade stored for the current student/deliverable

Parameters:

grade - return the grade

getName

```
public java.lang.String getName()
```

getName returns the name of the current deliverable

Returns:

the name

getType

```
public java.lang.String getType()
```

getType returns the type of the current deliverable

Returns:

the type

getWeight

```
public double getWeight()
```

getWeight returns the percentage of final mark current deliverable is worth

Returns:

the weight

setGrade

```
public void setGrade(double grade)
```

setGrade sets the grade for the student for current deliverable

Parameters:

name - the grade to set

setName

```
public void setName(java.lang.String name)
                    throws main.java.ca.uwo.csd.cs2212.team9.InvalidInfoException
```

setName sets the name of the current deliverable to given name

Parameters:

name - the name to set

Throws:

main.java.ca.uwo.csd.cs2212.team9.InvalidInfoException

setType

```
public void setType(java.lang.String type)
    throws main.java.ca.uwo.csd.cs2212.team9.InvalidInfoException
```

setType sets the type of the current deliverable to given type

Parameters:

type - the type to set

Throws:

main.java.ca.uwo.csd.cs2212.team9.InvalidInfoException

setWeight

```
public void setWeight(double weight)
    throws main.java.ca.uwo.csd.cs2212.team9.InvalidInfoException
```

setWeight sets the weight of the current deliverable to given weight

Parameters:

weight - the weight to set

Throws:

main.java.ca.uwo.csd.cs2212.team9.InvalidInfoException

[Package](#) [Class](#) [Use](#) [Tree](#) [Deprecated](#) [Index](#) [Help](#)

[Prev Class](#) [Next Class](#) [Frames](#) [No Frames](#) [All Classes](#)

[Summary](#): [Nested](#) | [Field](#) | [Constr](#) | [Method](#) [Detail](#): [Field](#) | [Constr](#) | [Method](#)
