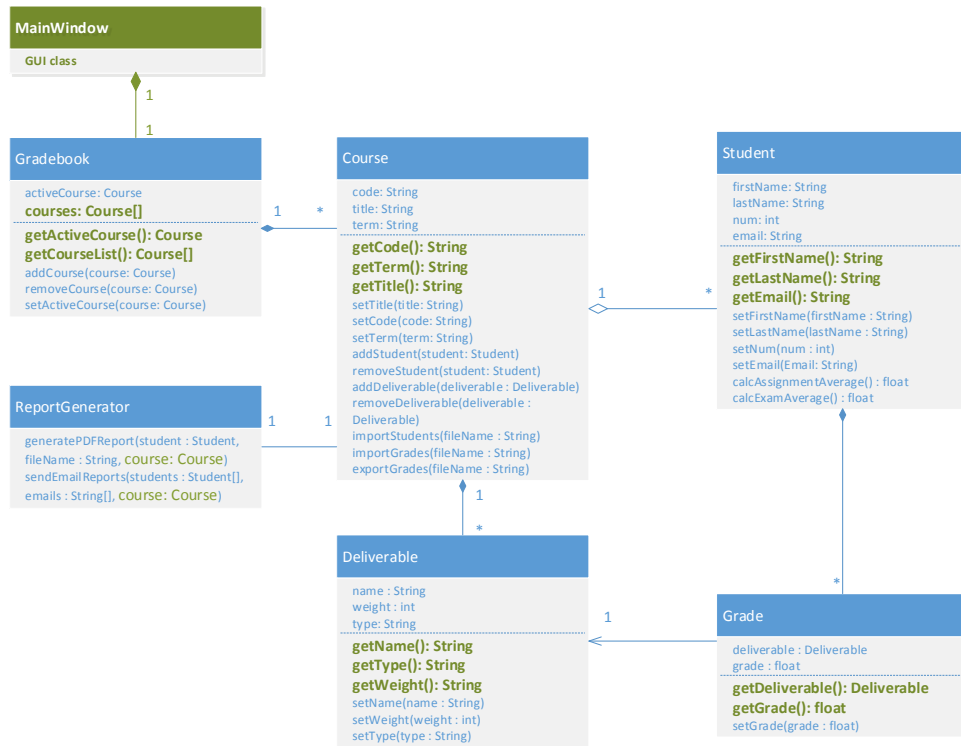


Computer Science 2212b
Team Assignment 2
Team 10

Due: February 28th, 2014 at 11:59 PM

Team Members:
Henrique Brighenti
Will Callaghan
Alex MacLean
Stephen Solis
Marcus Tonogai

SECTION 1: REVISED UML DIAGRAM



SECTION 2: REVISED USER STORIES

The screenshot displays the PivotalTracker interface for the 'Gradebook (Public)' project. The interface is divided into four main columns: DONE, CURRENT, BACKLOG, and EPICS.

- DONE** (14 Feb, Pts: 10):
 - courses The user can add a course (MT)
 - courses The user can delete a course (MT)
 - courses The user can change the code, title, or term of a course (MT)
 - courses The user can change the active course (MT)
 - startup and exit The user's data is retrieved and restored whenever the system is started (MT)
 - startup and exit The user's changes are stored prior to exiting the program (MT)
 - startup and exit The user can quit the application at any time (MT)
- CURRENT** (28 Feb - Current, Pts: 0 of 11):
 - courses, students The user can add a student to a course (MT) [Finish]
 - students The user can delete a student (MT) [Finish]
 - students The user can change the first name, last name, student number, or email address of a student (MT) [Finish]
 - deliverables The user can add a deliverable (MT) [Finish]
 - deliverables The user can delete a deliverable (MT) [Finish]
 - deliverables The user can change the name, weight, or type of a deliverable (MT) [Finish]
 - grades The user can view and edit student grades in a spreadsheet (MT) [Finish]
- BACKLOG** (14 Mar, Pts: 11):
 - grades The weighted average for each student is automatically displayed on the spreadsheet without requiring user interaction (MT) [Start]
 - user friendliness The user can go back to a previous screen at all times (WC) [Start]
 - students The user can import a list of students from a CSV file (HB) [Start]
 - grades The user can export grades from a course to a CSV file (AM) [Start]
 - grades The user can import grades into a course from a CSV file (MT) [Start]
 - students The user can select one or more students and send them an email containing a PDF report [Start]
 - students The user can generate a PDF report for a student (WC) [Start]
- EPICS** (show 1 done epic):
 - User Friendliness
 - Grades
 - Courses
 - Deliverables
 - Students

The URL at the bottom of the screenshot is: <https://www.pivotaltracker.com/s/projects/1003292#>

<https://www.pivotaltracker.com/s/projects/1003292>

Completed User Stories:

- User can add a course
 - o Hit the first icon underneath File menu in the top left or go to the courses menu and hit "Add Course"
- User can delete a course
 - o Hit the third icon underneath the File menu in the top left or go to the courses menu and hit "Delete Course"
- User can change the code, title, or term of a course
 - o The middle icon below the File and Courses menus will allow a user to edit a course or go to the Courses menu and click "Edit Course"
- User can change the active course
 - o Use the drop down menu in the top right to select an active course
- User's data is retrieved and restored whenever the system is started
 - o Courses previously added are in the spreadsheet area when program starts
- User's changes are stored prior to exiting the program
 - o No need to hit a save button!
- User can quit the application at any time
 - o Hit the red "x" button in the top left

SECTION 3: CLASS DESCRIPTIONS

Package	Class	Tree	Deprecated	Index	Help
Prev Package	Next Package	Frames	No Frames	All Classes	

Package ca.uwo.csd.cs2212.team10

Class Summary	
Class	Description
Course	Class representing a course with students and deliverables
Deliverable	Class representing a gradeable item to be completed by a student in a course
Grade	Class representing a student's grade for a particular deliverable
Gradebook	Class representing a gradebook with several courses
ReportGenerator	Class used to generate and send PDF reports
Student	Class representing a student in a course.

Package	Class	Tree	Deprecated	Index	Help
Prev Package	Next Package	Frames	No Frames	All Classes	

ca.uwo.csd.cs2212.team10

Class Course

java.lang.Object
ca.uwo.csd.cs2212.team10.Course

```
public class Course
extends java.lang.Object
```

Class representing a course with students and deliverables

Constructor Summary

Constructors
Constructor and Description
Course (java.lang.String code, java.lang.String title, java.lang.String term) Create a new course with the specified code, title, and term, and initially no students or deliverables

Method Summary

Methods	
Modifier and Type	Method and Description
void	addDeliverable (Deliverable deliverable) Adds a deliverable to the course
void	addStudent (Student student) Adds a student to the course
void	exportGrades (java.lang.String fileName) Exports list of grades to a CSV file.
java.lang.String	getCode () Gets course code
java.lang.String	getTerm () Gets term
java.lang.String	getTitle () Gets course title
void	importGrades (java.lang.String fileName) Imports list of grades from a CSV file.
void	importStudents (java.lang.String fileName) Imports list of students from a CSV file.

void	removeDeliverable (Deliverable deliverable)
	Removes a deliverable from the course
void	removeStudent (Student student)
	Removes a student from the course
void	setCode (java.lang.String code)
	Sets course code
void	setTerm (java.lang.String term)
	Sets term
void	setTitle (java.lang.String title)
	Sets course title

Methods inherited from class java.lang.Object

clone, equals, finalize, 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)
```

Create a new course with the specified code, title, and term, and initially no students or deliverables

Parameters:

code - Course code
 title - Title of course
 term - Term in which course is taught

Method Detail

setCode

```
public void setCode(java.lang.String code)
```

Sets course code

Parameters:

code - The code to set

setTerm

```
public void setTerm(java.lang.String term)
```

Sets term

Parameters:

term - The term to set

setTitle

```
public void setTitle(java.lang.String title)
```

Sets course title

Parameters:

title - The title to set

getCode

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

Gets course code

Returns:

Course code

getTerm

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

Gets term

Returns:

Term in which course is taught

getTitle

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

Gets course title

Returns:

Title of course

addStudent

```
public void addStudent(Student student)
```

Adds a student to the course

Parameters:

student - The student to add

removeStudent

```
public void removeStudent(Student student)
```

Removes a student from the course

Parameters:

student - The student to remove

addDeliverable

```
public void addDeliverable(Deliverable deliverable)
```

Adds a deliverable to the course

Parameters:

deliverable - The deliverable to add

removeDeliverable

```
public void removeDeliverable(Deliverable deliverable)
```

Removes a deliverable from the course

Parameters:

deliverable - The deliverable to remove

importStudents

```
public void importStudents(java.lang.String fileName)
                        throws java.io.IOException
```

Imports list of students from a CSV file. Throws an IOException if the file could not be read.

Parameters:

fileName - The name of the file to read

Throws:

java.io.IOException

importGrades

```
public void importGrades(java.lang.String fileName)
    throws java.io.IOException
```

Imports list of grades from a CSV file. Throws an IOException if the file could not be read.

Parameters:

fileName - The name of the file to read

Throws:

java.io.IOException

exportGrades

```
public void exportGrades(java.lang.String fileName)
    throws java.io.IOException
```

Exports list of grades to a CSV file. Throws an IOException if the file could not be written.

Parameters:

fileName - The name of the file to write

Throws:

java.io.IOException

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

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

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

ca.uwo.csd.cs2212.team10

Class Deliverable

java.lang.Object
ca.uwo.csd.cs2212.team10.Deliverable

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

Class representing a gradeable item to be completed by a student in a course

Constructor Summary

Constructors
Constructor and Description
Deliverable (java.lang.String name, java.lang.String type, int weight) Create a new deliverable with specified name, type, and weight

Method Summary

Methods	
Modifier and Type	Method and Description
java.lang.String	<code>getName()</code> Gets name of deliverable
java.lang.String	<code>getType()</code> Gets type of deliverable
int	<code>getWeight()</code> Gets weight of deliverable
void	<code>setName(java.lang.String name)</code> Sets name of deliverable
void	<code>setType(java.lang.String type)</code> Sets type of deliverable
void	<code>setWeight(int weight)</code> Sets weight of deliverable

Methods inherited from class java.lang.Object
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructor Detail

Deliverable

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

Create a new deliverable with specified name, type, and weight

Parameters:

name - The name of the deliverable

type - The type of deliverable

weight - The weight of the deliverable

Method Detail

setName

```
public void setName(java.lang.String name)
```

Sets name of deliverable

Parameters:

name - The name to set

setType

```
public void setType(java.lang.String type)
```

Sets type of deliverable

Parameters:

type - The type to set

setWeight

```
public void setWeight(int weight)
```

Sets weight of deliverable

Parameters:

weight - The weight to set

getName

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

Gets name of deliverable

Returns:

The name of the deliverable

getType

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

Gets type of deliverable

Returns:

The type of deliverable

getWeight

```
public int getWeight()
```

Gets weight of deliverable

Returns:

The weight of the deliverable

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

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All Classes

Summary: Nested | Field | Constr | Method
Detail: Field | Constr | Method

ca.uwo.csd.cs2212.team10

Class Grade

java.lang.Object
ca.uwo.csd.cs2212.team10.Grade

```
public class Grade
extends java.lang.Object
```

Class representing a student's grade for a particular deliverable

Constructor Summary

Constructors

Constructor and Description
Grade (Deliverable deliverable, float grade) Create a new grade for specified deliverable and with given grade

Method Summary

Methods

Modifier and Type	Method and Description
Deliverable	getDeliverable() Gets the deliverable
float	getGrade() Gets the grade
void	setGrade (float grade) Sets the grade

Methods inherited from class java.lang.Object

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

Constructor Detail

Grade

```
public Grade(Deliverable deliverable,  
            float grade)
```

Create a new grade for specified deliverable and with given grade

Parameters:

`deliverable` - Deliverable with which grade is associated
`grade` - Grade received by student

Method Detail

setGrade

```
public void setGrade(float grade)
```

Sets the grade

Parameters:

`grade` - The grade to set

getGrade

```
public float getGrade()
```

Gets the grade

Returns:

Grade received by student

getDeliverable

```
public Deliverable getDeliverable()
```

Gets the deliverable

Returns:

Deliverable with which grade is associated

ca.uwo.csd.cs2212.team10

Class Gradebook

java.lang.Object
ca.uwo.csd.cs2212.team10.Gradebook

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

Class representing a gradebook with several courses

Constructor Summary

Constructors

Constructor and Description

<code>Gradebook()</code> Create a new empty gradebook
--

Method Summary

Methods

Modifier and Type	Method and Description
void	<code>addCourse(Course course)</code> Adds a course to the gradebook
Course	<code>getActiveCourse()</code> Gets the active course
java.util.ArrayList<Course>	<code>getCourseList()</code> Gets the list of courses in the gradebook
void	<code>removeCourse(Course course)</code> Removes a course from the gradebook
void	<code>setActiveCourse(Course course)</code> Sets the active course.

Methods inherited from class java.lang.Object

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

Constructor Detail

Gradebook

```
public Gradebook()
```

Create a new empty gradebook

Method Detail

setActiveCourse

```
public void setActiveCourse(Course course)
```

Sets the active course. Throws an `IllegalArgumentException` if the given course is not in the gradebook.

Parameters:

`course` - The course to set as active

getActiveCourse

```
public Course getActiveCourse()
```

Gets the active course

Returns:

Course with which user is currently working

getCourseList

```
public java.util.ArrayList<Course> getCourseList()
```

Gets the list of courses in the gradebook

Returns:

List of all courses

addCourse

```
public void addCourse(Course course)
```

Adds a course to the gradebook

Parameters:

course - The course to add

removeCourse

```
public void removeCourse (Course course)
```

Removes a course from the gradebook

Parameters:

course - The course to add

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All Classes

Summary: Nested | Field | Constr | Method

Detail: Field | Constr | Method

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Summary: Nested | Field | Constr | Method
Detail: Field | Constr | Method

ca.uwo.csd.cs2212.team10

Class ReportGenerator

java.lang.Object
ca.uwo.csd.cs2212.team10.ReportGenerator

```
public class ReportGenerator
extends java.lang.Object
```

Class used to generate and send PDF reports

Constructor Summary

Constructors

Constructor and Description
<code>ReportGenerator()</code>

Method Summary

Methods

Modifier and Type	Method and Description
static void	<code>generatePDFReport(Student student, Course course, java.lang.String fileName)</code> Generates a PDF report for a student in a specified course.
static void	<code>sendEmailReports(Student[] students, Course course, java.lang.String[] emails)</code> Sends emails containing PDF reports for one or more students

Methods inherited from class java.lang.Object

`clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait`

Constructor Detail

ReportGenerator

```
public ReportGenerator()
```

Method Detail

generatePDFReport

```
public static void generatePDFReport(Student student,
                                     Course course,
                                     java.lang.String fileName)
    throws java.io.IOException
```

Generates a PDF report for a student in a specified course. Throws an IOException if the file could not be written.

Parameters:

`student` - The requested student
`course` - The course the student is in
`fileName` - The filename

Throws:

`java.io.IOException`

sendEmailReports

```
public static void sendEmailReports(Student[] students,
                                     Course course,
                                     java.lang.String[] emails)
```

Sends emails containing PDF reports for one or more students

Parameters:

`students` - An array of requested students
`course` - The course the students are in
`emails` - An array of the email addresses to send to

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

ca.uwo.csd.cs2212.team10

Class Student

java.lang.Object
ca.uwo.csd.cs2212.team10.Student

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

Class representing a student in a course.

Constructor Summary

Constructors
Constructor and Description
Student (java.lang.String firstName, java.lang.String lastName, int num, java.lang.String email) Create a new Student object with the specified attributes and initially no grades

Method Summary

Methods	
Modifier and Type	Method and Description
java.lang.String	<code>getEmail()</code> Sets student's email
java.lang.String	<code>getFirstName()</code> Gets student's first name
java.lang.String	<code>getLastName()</code> Gets student's last name
int	<code>getNum()</code> Gets student number
void	<code>setEmail(java.lang.String email)</code> Sets student's email
void	<code>setFirstName(java.lang.String firstName)</code> Sets student's first name
void	<code>setLastName(java.lang.String lastName)</code> Sets student's last name
void	<code>setNum(int num)</code>

Sets student number

Methods inherited from class java.lang.Object

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

Constructor Detail

Student

```
public Student(java.lang.String firstName,
               java.lang.String lastName,
               int num,
               java.lang.String email)
```

Create a new Student object with the specified attributes and initially no grades

Parameters:

firstName - Student's first name

lastName - Student's last name

num - Student number

email - Student's email address

Method Detail

setFirstName

```
public void setFirstName(java.lang.String firstName)
```

Sets student's first name

Parameters:

firstName - The first name to set

setLastName

```
public void setLastName(java.lang.String lastName)
```

Sets student's last name

Parameters:

lastName - The last name to set

setNum

```
public void setNum(int num)
```

Sets student number

Parameters:

num - The student number to set

setEmail

```
public void setEmail(java.lang.String email)
```

Sets student's email

Parameters:

email - The email to set

getFirstName

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

Gets student's first name

Returns:

Student's first name

getLastName

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

Gets student's last name

Returns:

Student's last name

getNum

```
public int getNum()
```

Gets student number

Returns:

Student number

getEmail

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

Sets student's email

Returns:

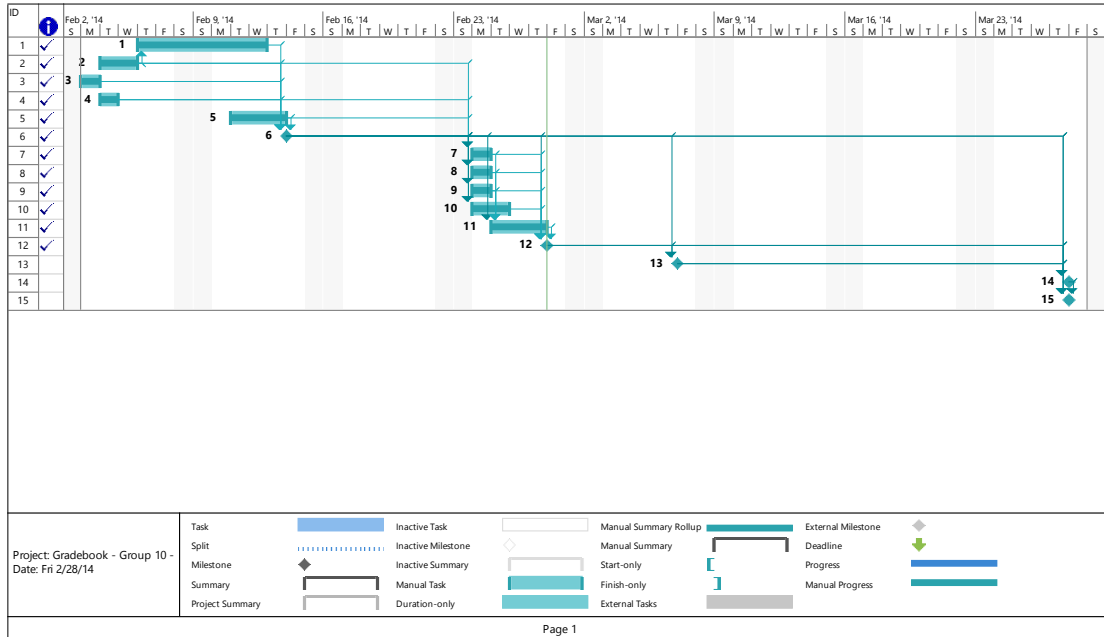
Student's email address

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

SECTION 4: PROJECT PLAN DOCUMENTATION



ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names	% Complete
1	✓	Complete the Project Plan	5 days	Thu 2/6/14	Wed 2/12/14	2	Alex MacLean, Marcus Tonogai, Henrique Brighenti, Stephen Solis, William Callaghan	100%
2	✓	Learn Microsoft Project	2 days	Tue 2/4/14	Wed 2/5/14		William Callaghan	100%
3	✓	Personal Profiles	1 day	Mon 2/3/14	Mon 2/3/14		Alex MacLean, Henrique Brighenti, Marcus Tonogai, Stephen Solis, William Callaghan	100%
4	✓	User Stories	1 day	Tue 2/4/14	Tue 2/4/14		Alex MacLean, Henrique Brighenti, Marcus Tonogai, Stephen Solis, William Callaghan	100%
5	✓	UML Class Diagram	3 days	Tue 2/11/14	Thu 2/13/14		Henrique Brighenti	100%
6	✓	Team Assignment 1	0 days	Fri 2/14/14	Fri 2/14/14	1, 2, 3, 4, 5	Alex MacLean, Henrique Brighenti, Marcus Tonogai, Stephen Solis, William Callaghan	100%
7	✓	Revised UML Diagram	1 day	Mon 2/24/14	Mon 2/24/14	5, 6	Henrique Brighenti	100%
8	✓	Revised User Stories	1 day	Mon 2/24/14	Mon 2/24/14	4, 6	Alex MacLean	100%
9	✓	Class Descriptions	1 day	Mon 2/24/14	Mon 2/24/14	6	Marcus Tonogai	100%
10	✓	Update Project Plan	2 days	Mon 2/24/14	Tue 2/25/14	2, 6	William Callaghan	100%
11	✓	Prototype 6 User Stories	3 days	Tue 2/25/14	Thu 2/27/14	6, 7, 8, 9	Alex MacLean, Henrique Brighenti, Stephen Solis	100%
12	✓	Team Assignment 2	0 days	Fri 2/28/14	Fri 2/28/14	6, 7, 8, 9, 10, 11	Alex MacLean, Henrique Brighenti, Marcus Tonogai, Stephen Solis, William Callaghan	100%
13	✓	Team Assignment 3	0 days	Fri 3/7/14	Fri 3/7/14	6, 12		0%
14	✓	Team Assignment 4	0 days	Fri 3/28/14	Fri 3/28/14	6, 12, 13		0%
15	✓	Final Code Submission	0 days	Fri 3/28/14	Fri 3/28/14	6, 12, 13, 14		0%