

Team Assignment 2

CS2212B

TEAM 5

Bradley HAMELIN David LANGFORD Meg STARLING Jiaxi WANG Yuwei WANG

February 28, 2014

1 REVISED UML CLASS DIAGRAM

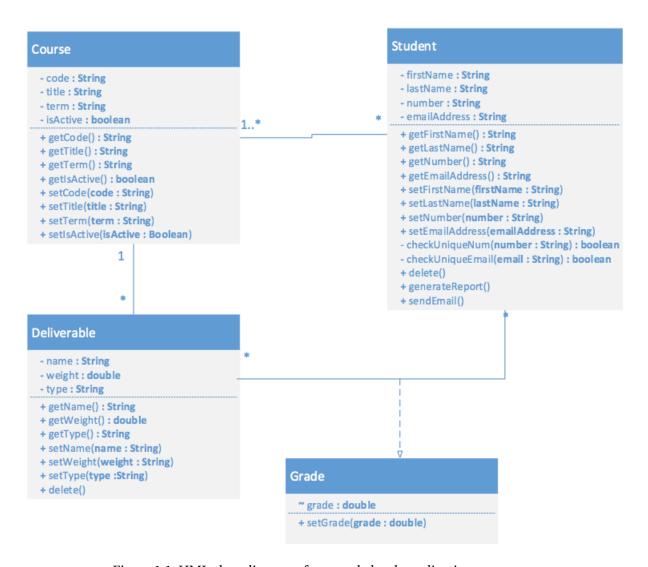
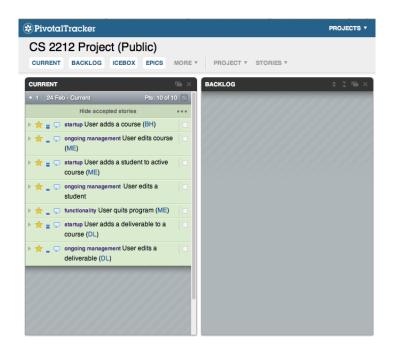
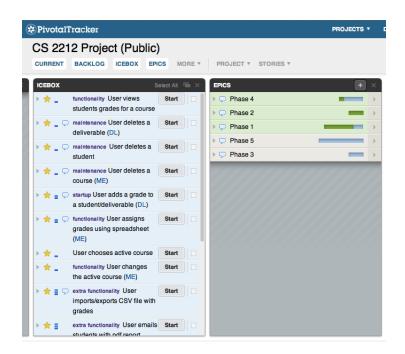


Figure 1.1: UML class diagrams for a grade book application

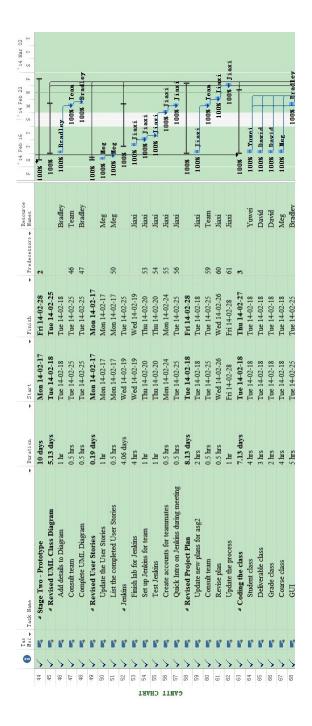
2 REVISED USER STORIES

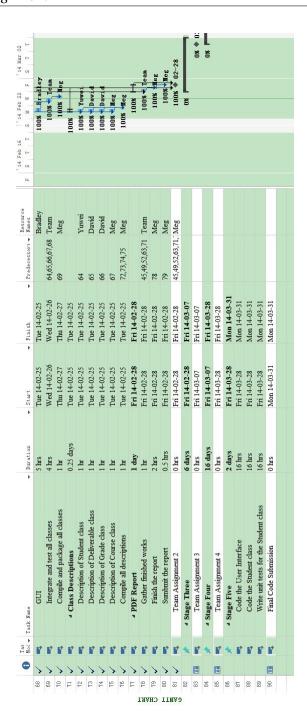




A textual link to our Pivotal Tracker Project: https://www.pivotaltracker.com/s/projects/1003240

3 PROJECT PLAN





4 CLASS DESCRIPTIONS

Please see the last 12 pages for the JavaDocs containing the class descriptions for the Course, Deliverable, Grade and Student classes.

Package Class Use Tree Deprecated Index Help

PREV CLASS NEXT CLASS
SUMMARY: NESTED | FIELD | CONSTR | METHOD

FRAMES NO FRAMES All Classes
DETAIL: FIELD | CONSTR | METHOD

ca.uwo.csd.cs2212.team5

Class Course

java.lang.Object

 \cup ca.uwo.csd.cs2212.team5.Course

public class Course
extends java.lang.Object

Course is a class that will be used to add a course in a gradebook application

Constructor Summary

Course(java.lang.String title, java.lang.String c, java.lang.String t, boolean act)
Constructs a new Course object.

Method Summary	
void	addDeliverable (ca.uwo.csd.cs2212.team5.Deliverable d) Adds a deliverable to a course
void	addStudent (ca.uwo.csd.cs2212.team5.Student newStudent Adds a new student to the list of students in a course
java.lang.String	getCode() Returns the course code
java.util.ArrayList <ca.uwo.csd.cs2212.team5.deliverable></ca.uwo.csd.cs2212.team5.deliverable>	Returns an ArrayList containing the deliverables for a course
ca.uwo.csd.cs2212.team5.Student	<pre>getStudent(java.lang.String studentNumber) Finds a student with a given student number</pre>
<pre>java.util.ArrayList<ca.uwo.csd.cs2212.team5.student></ca.uwo.csd.cs2212.team5.student></pre>	getStudents() Returns an iterator containing all students
java.lang.String	getTerm() Returns the course term
java.lang.String boolean	getTitle() Returns the course title
	isActive() Returns true if the course is the active course
void	<pre>setCode(java.lang.String c) Sets the course code</pre>
void	SetIsActive(boolean act) Sets the active course label
void	<pre>setTerm(java.lang.String t) Sets the course term</pre>

void setTitle(java.lang.String title)
Sets the course title

```
Methods inherited from class java.lang.Object
```

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

Constructor Detail

Course

Constructs a new Course object.

Parameters:

title - Title c - Code t - Term act - isActive

Method Detail

addStudent

public void addStudent(ca.uwo.csd.cs2212.team5.Student newStudent)

Adds a new student to the list of students in a course

Parameters:

newStudent - the new student to add

getStudent

public ca.uwo.csd.cs2212.team5.Student getStudent(java.lang.String studentNumber)

Finds a student with a given student number

Parameters:

studentNumber - the student to find

Returns:

the student if it exists in the course

getStudents

```
public java.util.ArrayList<ca.uwo.csd.cs2212.team5.Student> getStudents()
```

Returns an iterator containing all students

Returns:

an iterator for the list of students

addDeliverable

public void addDeliverable(ca.uwo.csd.cs2212.team5.Deliverable d)

Adds a deliverable to a course

Parameters:

d - the deliverable to add

getDeliverables

public java.util.ArrayList<ca.uwo.csd.cs2212.team5.Deliverable> getDeliverables()

Returns an ArrayList containing the deliverables for a course

Returns:

getTitle

public java.lang.String getTitle()

Returns the course title

Returns:

the title of the course

getCode

public java.lang.String getCode()

Returns the course code

Returns:

the code of the course

getTerm

public java.lang.String getTerm()

Returns the course term

Returns:

the term of the course

isActive

```
public boolean isActive()
```

Returns true if the course is the active course

Returns:

true if the course is active

setTitle

public void setTitle(java.lang.String title)

Sets the course title

Parameters:

tle - the new title of the course

setCode

public void setCode(java.lang.String c)

Sets the course code

Parameters:

c - the code of the course

setTerm

public void setTerm(java.lang.String t)

Sets the course term

Parameters:

t - the term of the course

setIsActive

public void setIsActive(boolean act)

Sets the active course label

Parameters:

act - the active label for the course

Package Class Use Tree Deprecated Index Help

PREV CLASS NEXT CLASS
SUMMARY: NESTED | FIELD | CONSTR | METHOD

FRAMES NO FRAMES All Classes
DETAIL: FIELD | CONSTR | METHOD

Deliverable 2014-02-28 8:58 PM

Package Class Use Tree Deprecated Index Help

PREV CLASS NEXT CLASS

SUMMARY: NESTED | FIELD | CONSTR | METHOD

FRAMES NO FRAMES All Classes
DETAIL: FIELD | CONSTR | METHOD

ca.uwo.csd.cs2212.team5

Class Deliverable

java.lang.Object

└ca.uwo.csd.cs2212.team5.Deliverable

public class Deliverable
extends java.lang.Object

Deliverable class represents a deliverable in a gradebook application

Constructor Summary

<u>Deliverable</u>(java.lang.String name, java.lang.String type, java.lang.Double weight)

Constructs a new Deliverable object

Method Summary	
void	delete() "Deletes" a deliverable object by setting its contents to null;
java.lang.String	Returns the name of a deliverable
java.lang.String	Returns the type of deliverable
double	Returns the weight of a deliverable
void	Sets the type of a deliverable
void	SetWeight (double x) Sets the weight of a deliverable

Methods inherited from class java.lang.Object

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

Deliverable 2014-02-28 8:58 PM

Constructor Detail

Deliverable

Constructs a new Deliverable object

Parameters:

```
name - the name of the deliverable
type - the type of deliverable
weight - the weight of the deliverable
```

Method Detail

getName

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

Returns the name of a deliverable

Returns:

the name of the deliverable

getWeight

```
public double getWeight()
```

Returns the weight of a deliverable

Returns:

the weight of the deliverable

getType

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

Returns the type of deliverable

Returns:

the type of the deliverable

Deliverable 2014-02-28 8:58 PM

setWeight

public void setWeight(double x)

Sets the weight of a deliverable

Parameters:

x - the weight of the deliverable

setType

public void setType(java.lang.String x)

Sets the type of a deliverable

Parameters:

x - the type of the deliverable

delete

public void delete()

"Deletes" a deliverable object by setting its contents to null;

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

Grade 2014-02-28 8:33 PM

Package Class Use Tree Deprecated Index Help

PREV CLASS NEXT CLASS

SUMMARY: NESTED | FIELD | CONSTR | METHOD

FRAMES NO FRAMES All Classes
DETAIL: FIELD | CONSTR | METHOD

ca.uwo.csd.cs2212.team5

Class Grade

java.lang.Object

ca.uwo.csd.cs2212.team5.Grade

public class Grade
extends java.lang.Object

A class that represents a Grade in a gradebook application

Constructor Summary

Grade(double x)

Constructs a new Grade object

Method Summary

Methods inherited from class java.lang.Object

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

Constructor Detail

Grade

public Grade(double x)

Constructs a new Grade object

Parameters:

x - the grade value

Package Class Use Tree Deprecated Index Help

PREV CLASS NEXT CLASS

SUMMARY: NESTED | FIELD | CONSTR | METHOD

FRAMES NO FRAMES All Classes
DETAIL: FIELD | CONSTR | METHOD

Package Class Use Tree Deprecated Index Help

PREV CLASS NEXT CLASS

SUMMARY: NESTED | FIELD | CONSTR | METHOD

FRAMESNO FRAMESAll ClassesDETAIL: FIELD | CONSTR | METHOD

ca.uwo.csd.cs2212.team5

Class Student

java.lang.Object

ca.uwo.csd.cs2212.team5.Student

public class Student
extends java.lang.Object

A class that represents a student in a gradebook application

Constructor Summary

Student(java.lang.String firstName, java.lang.String lastName, java.lang.String number,
java.lang.String emailAddress)

Constructs a new Student object

Method Summary	
java.lang.String	getEmailAddress() Returns the email address of a student
java.lang.String	Returns the first name of a student
java.lang.String	getLastName() Returns the last name of a student
java.lang.String	Returns the student number of a student
static void	<pre>main(java.lang.String[] args)</pre>
void	<pre>setEmailAddress(java.lang.String emailAddress) Sets the email address of a student</pre>
void	<pre>setFirstName(java.lang.String firstName) Sets the first name of a student</pre>
void	<pre>setLastName(java.lang.String lastName) Sets the last name of a student</pre>
void	

setNumber(java.lang.String number)
Sets the student number of a student

Methods inherited from class java.lang.Object

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

Constructor Detail

Student

Constructs a new Student object

Parameters:

firstName - the first name of the student
lastName - the last name of the student
number - the student number of the student
emailAddress - the email address of the student

Method Detail

main

public static void main(java.lang.String[] args)

getFirstName

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

Returns the first name of a student

Returns:

the first name of the student

getLastName

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

Returns the last name of a student

Returns:

the last name of the student

getNumber

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

Returns the student number of a student

Returns:

the student number of a student

getEmailAddress

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

Returns the email address of a student

Returns:

the email address of the student

setFirstName

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

Sets the first name of a student

Parameters:

firstName - the first name of the student

setLastName

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

Sets the last name of a student

Parameters:

lastName - the last name of the student

setNumber

public void setNumber(java.lang.String number)

Sets the student number of a student

Parameters:

number - the student number of the student

setEmailAddress

public void setEmailAddress(java.lang.String emailAddress)

Sets the email address of a student

Parameters:

emailAddress - the email address of the student

Package Class Use Tree Deprecated Index Help

PREV CLASS NEXT CLASS

SUMMARY: NESTED | FIELD | CONSTR | METHOD

FRAMESNO FRAMESAll ClassesDETAIL: FIELD | CONSTR | METHOD