
Vision and Scope Document

for

GooGrade

Version 1.5

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BluGoo

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Revision History

Name	Date	Reason For Changes	Version
Michael Quan	2009-01-15	First Draft	1.0
Michael Quan	2009-01-19	Revised First Draft	1.1
Nat Welch	2009-01-20	Cleaned First Draft	1.2
Michael Quan	2009-01-26	Edited Revised Version 1.2 Section 1	1.2.1
Katherin Blizard	2009-01-26	Edited Revised Version 1.2 Section 2	1.2.2
Paul Phu	2009-01-26	Edited Revised Version 1.2 Section 3	1.2.3
Hermyn Mendez	2009-01-26	Edited Revised Version 1.2 Section 4	1.2.4
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Michael Quan	2009-02-03	Major revision from instructor feedback	1.4
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1. Business Requirements

1.1. Background

Managing, calculating and monitoring grades is a time consuming and tedious task for any **Teacher**, especially if the **Class** is large. Numerous calculations must be carried out to set a grade. If variables such as different assignment weights and dynamic grading scales are to be taken into account these calculations become even worse. **Teachers** have a stressful schedule as it is and should spend as much time as possible to prepare lectures and to do what they do best, teach!

Students want to be able to monitor their progress through a **Class**. Also they wish to be able to figure out what score they need on their final for a certain grade. Depending on their own attitude towards the **Class** some **Students** wish to have opportunity to compare themselves to the rest of their **Class** to know how well they are doing. Being able to do all of this from home is a requirement for regular use. *

*based on survey from roommates and friends (see Appendix B)

1.2. Business Opportunity

There is a high market demand for a quality grading tool that will save time and effort for the **Teacher** by keeping track of and calculating grades for a large number of assignments and **Students**. The concept behind GooGrade is to simplify grade management at zero cost to the user.

GooGrade will be competing with other tools of similar nature, which can cost money or contain little features such as only a grade storage. * GooGrade contains more features than other grading tool in the market at zero cost to the **Teacher**. GooGrade will have a Desired Grade Calculator, which none of the competition offers. Moodle is the only other tool that can compete with GooGrade but lacks attendance keeping, desired grade calculator, and **Email** notifications. Classmate is a higher priced tool with very little features and Blackboard offers a good set of features with a cost that no individual **Teacher** can afford.

Since GooGrade is free of charge, it leaves **Teachers** with extra money to spend on desired educational material instead of course administration tools.

* based on comparative feature matrix (see Appendix A)

1.3. Business Objectives and Success Criteria

Objectives

- A. Simplify grade management for users.*
- B. Hasten grade viewing for users.*
- C. Provide free web based grade management application. **
- D. Increase productivity in time management for grading. **

- E. Increase clarity in grading breakdowns. *
- F. A graphical user interface (GUI) that minimizes the number of clicks to achieve a task. **
- G. A graphical user interface that contains an appropriate balance of negative space and information to avoid confusion in reading data. **
- H. Supported by the following web browsers: Firefox 3, Safari 3, or Internet Explorer 7. **

Success

- I. Measured by user positive and negative feedback. *
The user experience is measured using survey analysis. Usability studies will determine if the application is “easy to use”.
- J. Increase in application use over a period of time. *
If two ore more **Teachers** choose GooGrade over competing software we will consider the project a success.

*based on survey taken roommates and friends (see Appendix B)

** based on information from customer Lauren Tsung

1.4. Customer or Market Needs

Teachers need a way to **ManageGrades**. **Teachers** also need to look at various metrics of the **Class** such as medians and modes. The application will be web based, and thus accessible through a supported web browser. Because of this, the application will be operating system independent. The host machine will need to be reliable and running at any given time requested by the customer.

1.5. Business Risks

- a. If GooGrade cannot comply with all security requirements designated by FERPA, a **Teacher** and a **Student** who fear leakage of personal information may not use the application.
- b. A **Teacher** may not use the application since many other grading tools exist. Time and money may be spent developing an unused piece of software.

2. Vision of the Solution

2.1 Vision Statement

This grading application will provide a **Student** the ability to view their grades from the Internet without the need to visit the office hours of a **Teacher** on campus, and it provides a **Teacher** with an application that helps calculate grades and enables freedom of time for **Teacher** and **Student**.

2.2 Major Features

2.2.1 System and Rules

- a. The system must support a maximum of 200 **Student** per **Class**. The typical class size is 40 but larger **Class(es)** exist.
- b. A **Teacher** instructs a maximum of five **Class(es)**. Each class may have one **TeacherAssistant**.
- c. A **Teacher** has the option to add and drop any **Student** from a class.

2.2.2 Major Features

There will be a hierarchy of **Permissions**. **Permissions** exclude certain system features from users who do not have **Permissions**. A **Teacher** will have the most **Permissions** and the **Student** will have the fewest.

A **Teacher** will always be able to:

1. View Metrics
2. Add **Class**
3. Remove **Class**
4. Edit **Class**
5. Add Users
6. Remove Users
7. Edit Users
8. Add **Assignment**
9. Remove **Assignment**
10. Edit **Assignment**
11. Add **Announcement**
12. Remove **Announcement**
13. Edit **Announcement**
14. Send **Email**
15. Grade **Students**
16. View roster
17. Take attendance
18. Adjust grading curve
19. Import data
20. Export data

- 21. Print page
- 22. Download **File**
- 23. Upload **File**
- 24. Reset **Password**

A **TeacherAssistant Permission(s)** are up to the discretion of a **Teacher** and can include any of the **Teacher's Permission(s)**.

A **Student** will always be able to:

- 25. View **Announcements**
- 26. View current grade
- 27. Check current **Class** standing
- 28. Predict Grade in **Class**
- 29. Print page
- 30. Download **File**
- 31. Upload **File**
- 32. Add **Assignment**
- 33. Reset **Password**

2.3 Assumptions and Dependencies

Assumptions:

- a. The system assumes the **Teacher** will not give more **Permissions** than desired to a **Student** or **TeacherAssistant**. It assumes that users will not share **Passwords** with each other, and that each user has one and only one **Account**.
- b. **Class** prerequisites are met by enrolled **Students**.
- c. All **Students** are enrolled in the class.

Dependencies

- a. The system will need to be hosted at an address on the World Wide Web. The host site will need to contain secure data encryption to protect users information from FERPA laws.
- b. The system depends on the **Teacher** and **TeacherAssistant** keeping **Student** rosters and any **Assignment** accurate and up to date.

3. Scope and Limitations

3.1 Scope of Initial Release

User	Feature	Release 1	Release 2
Teacher	View Metrics	Fully Implemented	
Teacher	Add Class	Fully Implemented	
Teacher	Remove Class	Fully Implemented	
Teacher	Edit Class	Fully Implemented	
Teacher	Add Users	Fully Implemented	
Teacher	Remove Users	Fully Implemented	
Teacher	Edit Users	Fully Implemented	
Teacher	Add Assignment	Fully Implemented	
Teacher	Remove Assignment	Fully Implemented	
Teacher	Edit Assignments	Not Implemented	
Teacher	Add Announcement	Fully implemented	
Teacher	Remove Announcement	Fully Implemented	Fully Implemented
Teacher	Edit Announcement	Fully Implemented	
Teacher	Send Email	Not Implemented	Fully Implemented
Teacher	Grade Students	Fully Implemented	
Teacher	View roster	Fully Implemented	
Teacher	Adjust grading curve	Fully Implemented	
Teacher	Import data	Not Implemented	Fully Implemented
Teacher	Export data	Not Implemented	Fully Implemented
Teacher and Student	Print page	Fully Implemented	
Teacher and Student	Download File	Not Implemented	Fully Implemented
Teacher and Student	Upload File	Not Implemented	Fully Implemented
Teacher and Student	Reset Password	Fully Implemented	
Teacher Assistant		Based on Implementation of Teacher features	Based on Implementation of Teacher features
Student	View Announcements	Fully Implemented	
Student	View current grade	Fully Implemented	
Student	Check current Class standing	Fully Implemented	
Student	Predict Grade in Class	Not Implemented	Fully Implemented

3.2 Limitations and Exclusions

<i>Limitations and Exclusions</i>	<i>Reasons</i>
Possible incompatibilities with a Teacher's computer	Teachers may have older computer equipment, which can lead to incompatibilities with supported web browsers. We can only guarantee functionality on supported browsers. See glossary.
Time limitations. 7 team members x 10 hrs a week of work = 70 hours of total work for the team.	Due to programmers being full time Students , time will be limited meaning possible exclusions of other features.

4. Business Context

4.1 Stakeholder Profiles

<i>Stakeholder</i>	<i>Stakeholder Profile</i>	<i>Major Benefits</i>	<i>Likely Attitudes Towards the Application</i>	<i>Key Application Features of Interest</i>
Teacher	A Teacher will create classes, ManageStudents and ManageGrades .	Reduction of time spent calculating grades and metrics.	The Teacher may be skeptical because blackboard is already a reliable and widely used tool. GooGrade will provide graphical and statistical features superior to those of blackboard.	The statistics features give the Teacher an incentive to upload grades. Accessible from any computer with access to the Internet and a supported web browser.
Student	A Student will be able to view their grades and see detailed Assignment breakdowns.	Access to their grades and Class metrics from supported web browser.	A Student will embrace whatever the Teacher uses.	A Student will be able to view their grades. They will also know how they match up against the Class average for each Assignment .
<i>Lauren Tsung</i>	Customer will market application to Teachers	Will build relations with Teachers	The customer will see a good opportunity to make educational metrics more efficient	The final working application.

4.2 Project Priorities

<i>Dimension</i>	<i>Driver (state objective)</i>	<i>Constraint (state limits)</i>	<i>Degree of Freedom (state allowable range)</i>
<i>Schedule</i>	To have a successful release before end of CPE309	No Constraint	Preferably a 2 nd release by the designated deadline but due to unforeseen consequences a patched 1 st release would be satisfactory.
<i>Features</i>	None	No Constraint	70-80% of high priority features must be included in 1 st release
<i>Quality</i>	None	No Constraint	>90% of user acceptance tests must pass for 1 st release, >95% for 1 st patch
<i>Staff</i>	None	maximum team size is 7	By 309 team size may have 1-7 different members
<i>Cost</i>	None	All software used will be freely available or open source	None

4.3 Operating Environment

The GooGrade software will have a web based graphical user interface. This will allow operation at both personal computers at a home environment as well as from a local terminal in a computer laboratory. As long as the computer can access the Internet with use of a supported web browser, it will be able to work with a GooGrade interface.

Providing a web based interface allows for a **Student** enrolled in a **Class** to gain information about their grade without direct contact with the **Teacher**. It also allows a **Teacher** to communicate important information to any **Student** without being in **Class**.

Appendix A - Comparative Feature Matrix

Grading Tool Reviewed	GooGrade	Blackboard	Class Mate	Moodle	eGrader	RealGrade
User Types						
Student	Yes	Yes	No	Yes	No	No
Teacher's Assistant	Yes	Yes	No	Yes	No	No
Teacher	Yes	Yes	Yes	Yes	Yes	Yes
Additional Admin	No	Yes	No	Yes	No	No
Features						
Class Statistics	Yes	Yes	Yes	Yes	Yes	Yes
Student Statistics	Yes	Yes	Yes	Yes	No	Yes
Desired Grade Calculator	Yes	No	No	No	No	No
Attendance Record Keeping	Yes	No	No	No	No	Yes
Uploadable Assignment Key	Yes	Yes	No	Yes	No	Yes
Automated E-mail Notifications	Yes	No	No	No	No	Yes
Class News Bulliten	Yes	Yes	No	Yes	No	No
Forums	No	Yes	No	Yes	No	No
Webbased?	Yes	Yes	No	Yes	No	No
Cost	Free	\$259,000	\$300	Free	\$8	Free

Appendix B – Market Needs Survey

- 1.What do you think of current grade checking tools available now such as Blackboard?
- 2.How would you improve upon these tools? Any additional features?
- 3.If we created a grading application, how important is ease of use?
- 4.If you tried out our grading application and liked it, would you recommend it to other peers?