BAD ROBOT ENTERPRISES

INTERNATIONAL ONLINE SURVEY
(IOS)
DETAILED DESIGN

Roger Bacon Science Center, Room 328
March 4th, 2008
7:00 pm

WELCOME

Dr. Darren Lim
Computer Science
Siena College

Dr. Manimoy Paul
Quantitative Business Analysis
Siena College

TEAM MEMBERS

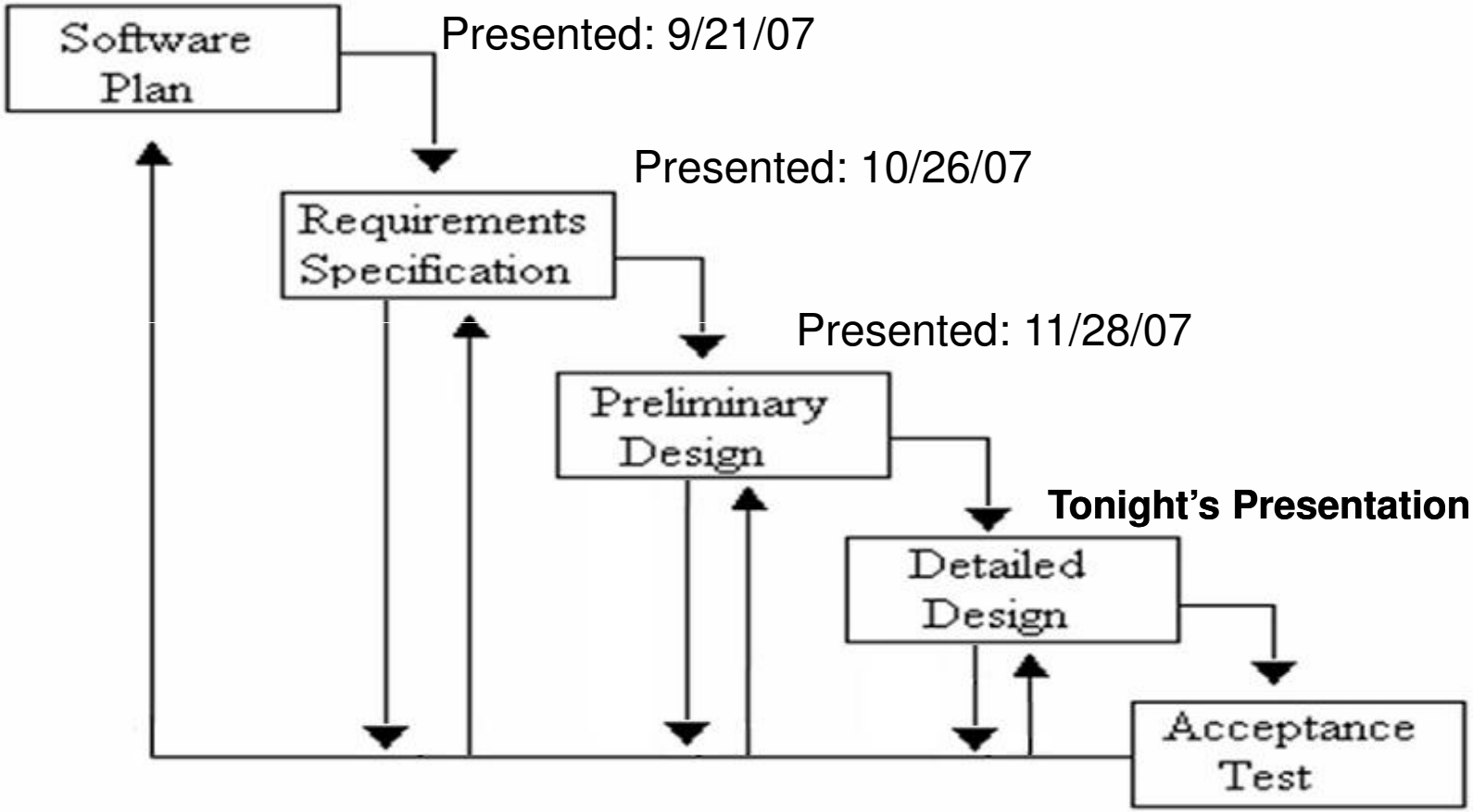
Ryan Rose……..Team Leader
rc26rose@siena.edu

Vito Urbano……..Librarian
va23urba@siena.edu

Ryan May……Webmaster
r15may@siena.edu

Paul Borchers……Systems Administrator
pm15borc@siena.edu

CURRENT PROGRESS



AGENDA

- Problem Definition – Ryan Rose
- Prototypes – Ryan May
- Database Design – Paul Borchers
- Test Plan – Vito Urbano
- Timeline – Vito Urbano
- What's Next, Important Dates, and Questions – Paul Borchers

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PROBLEM DEFINITION

- Web based survey creation application.
- To be able to create and distribute surveys.
- Administrators oversee, teachers create, students complete.
- Download of results to local computer.

PROGRAM'S FUNCTION

- Web Program that will use a database to store information.
  - Student and Teacher Accounts
  - Surveys
- Program will allow Teacher to download results
  - Excel file

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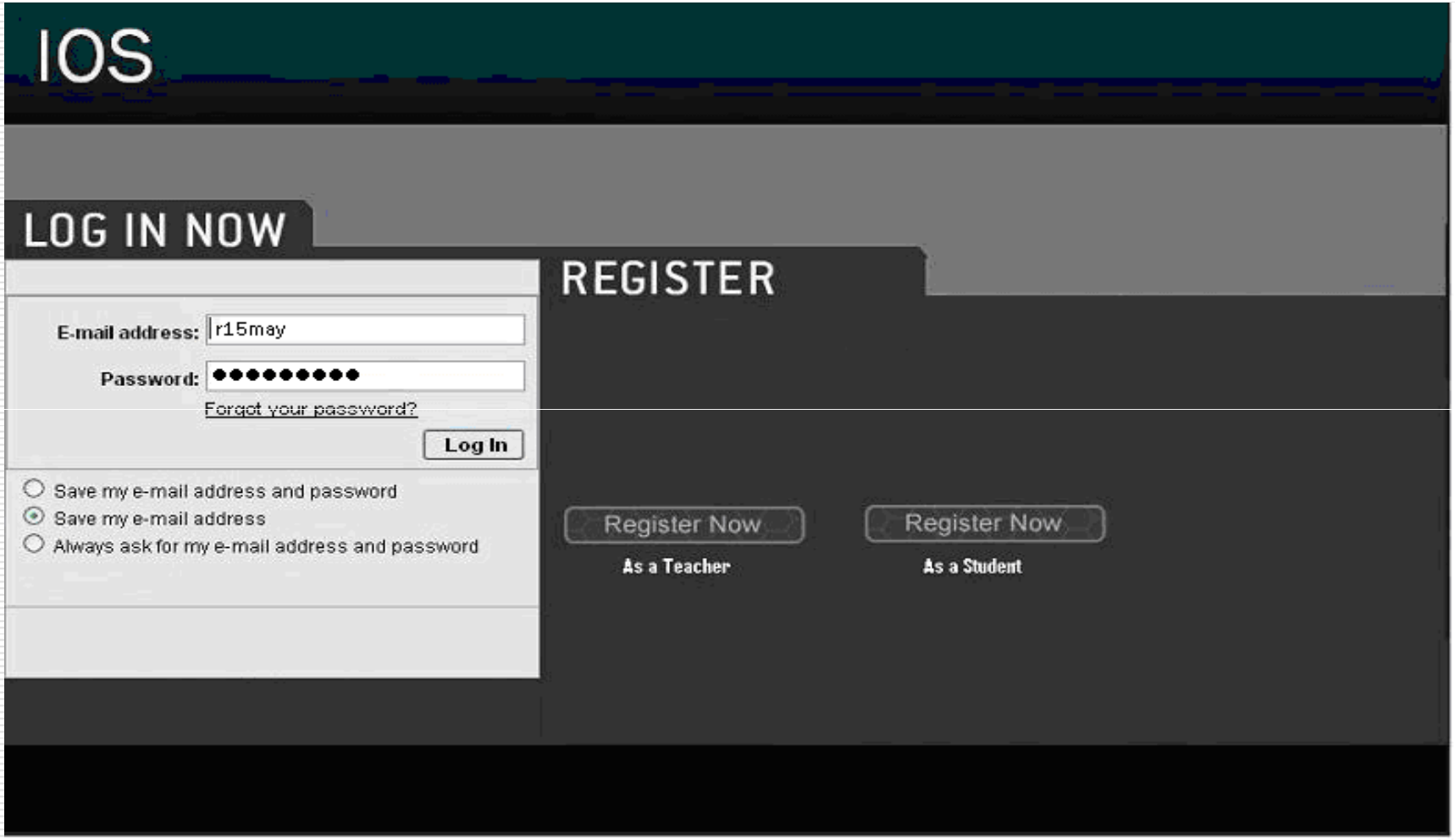
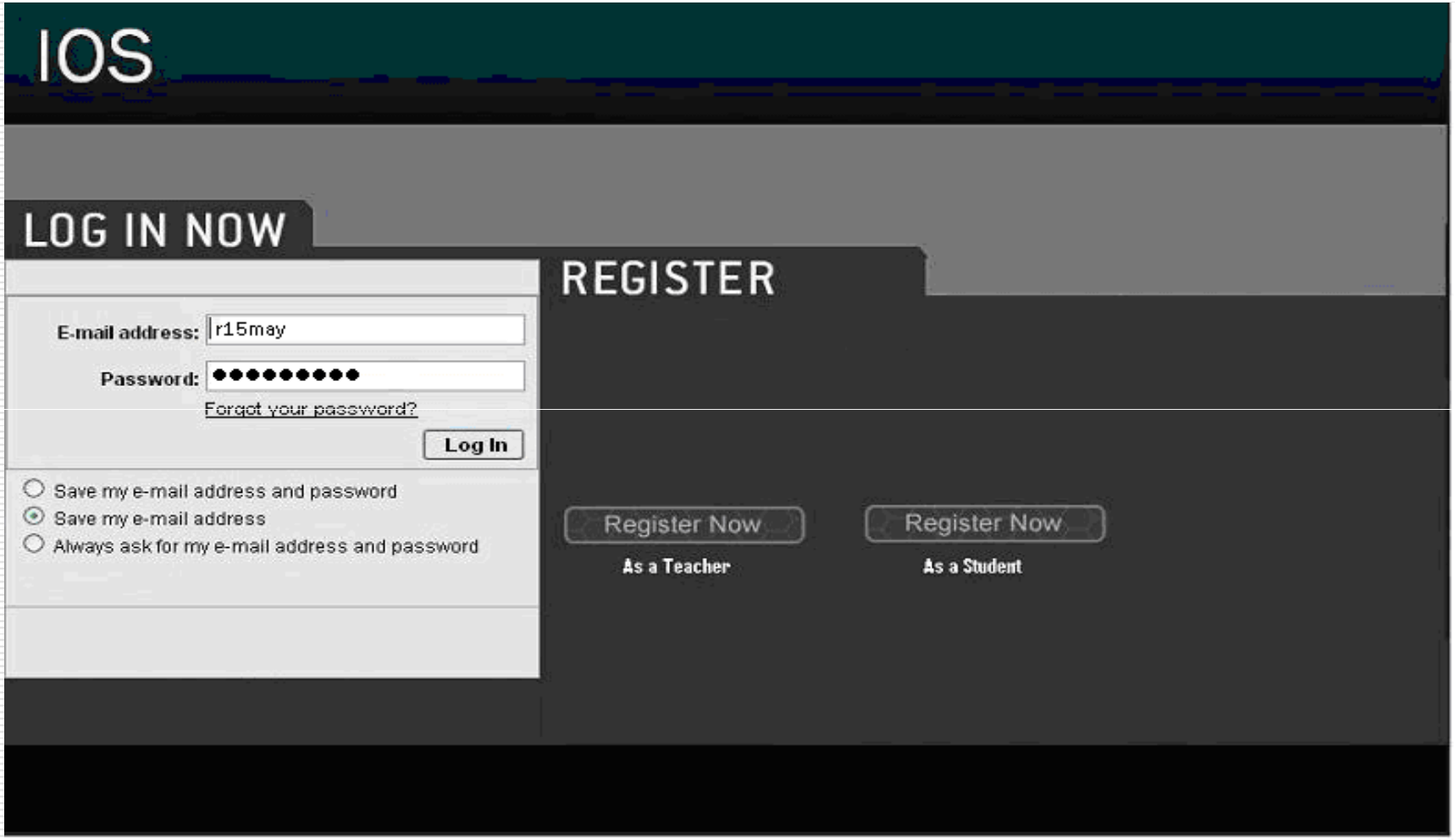
LOGIN PAGE

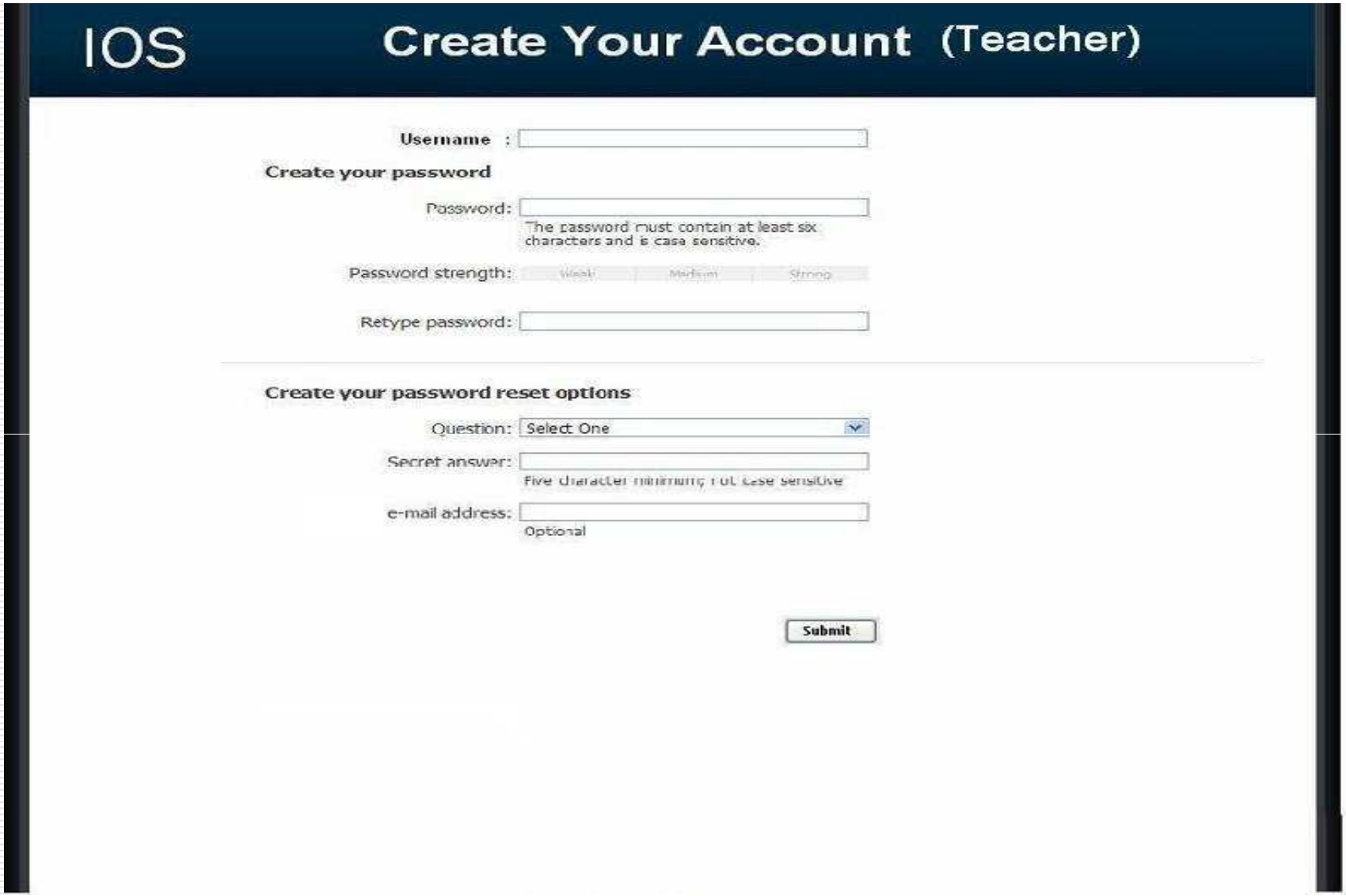

IOS
LOG IN NOW
REGISTER
E-mail address:
r15may
Password:
Forgot your password?
Log In
Save my e-mail address and password
Save my e-mail address
Always ask for my e-mail address and password
Register Now
As a Teacher
Register Now
As a Student

PASSWORD RECOVERY

LOGIN PAGE


IOS
LOG IN NOW
REGISTER
E-mail address:
r15may
Password:
Forgot your password?
Log In
Save my e-mail address and password
Save my e-mail address
Always ask for my e-mail address and password
Register Now
As a Teacher
Register Now
As a Student

TEACHER ACCOUNT CREATION



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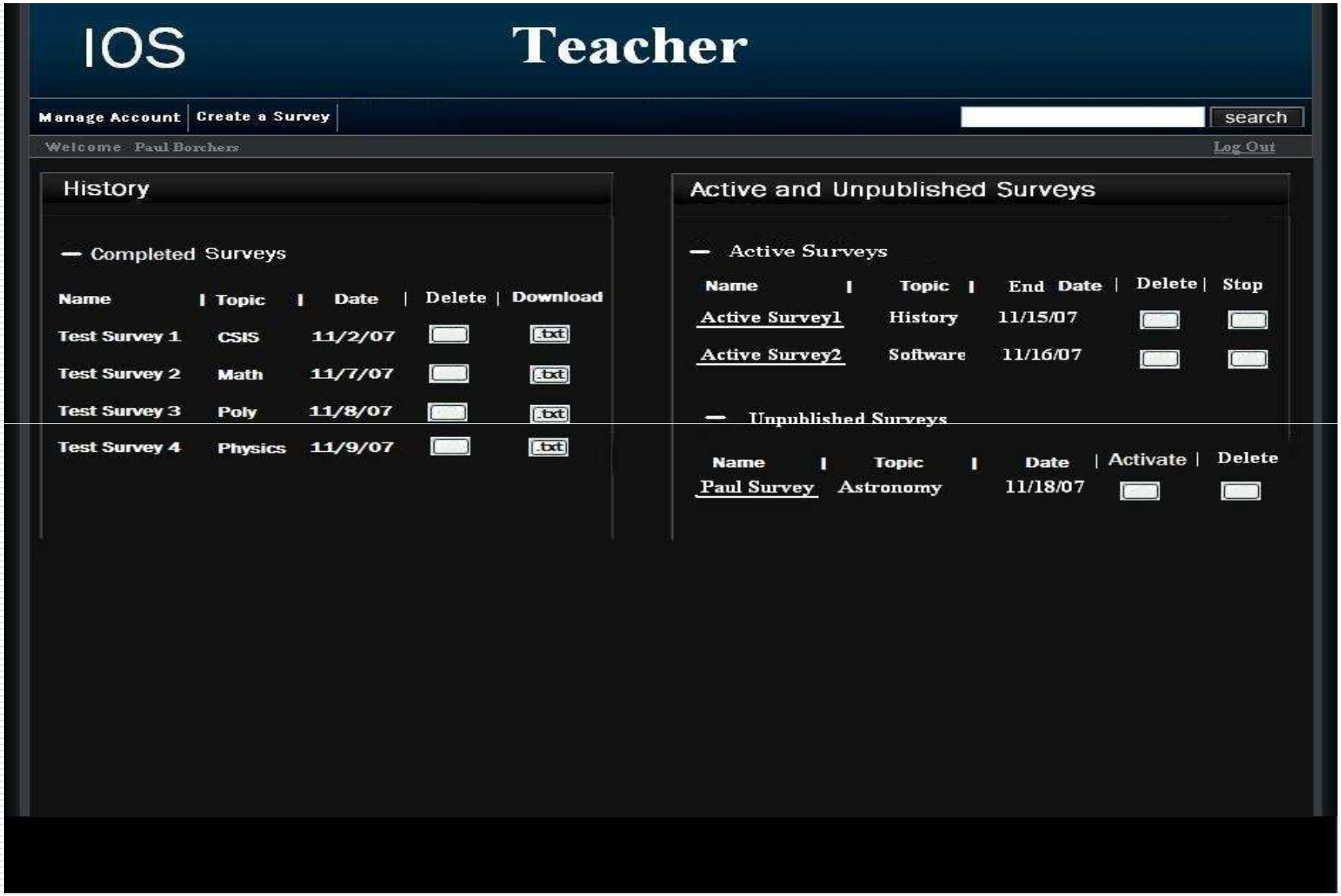
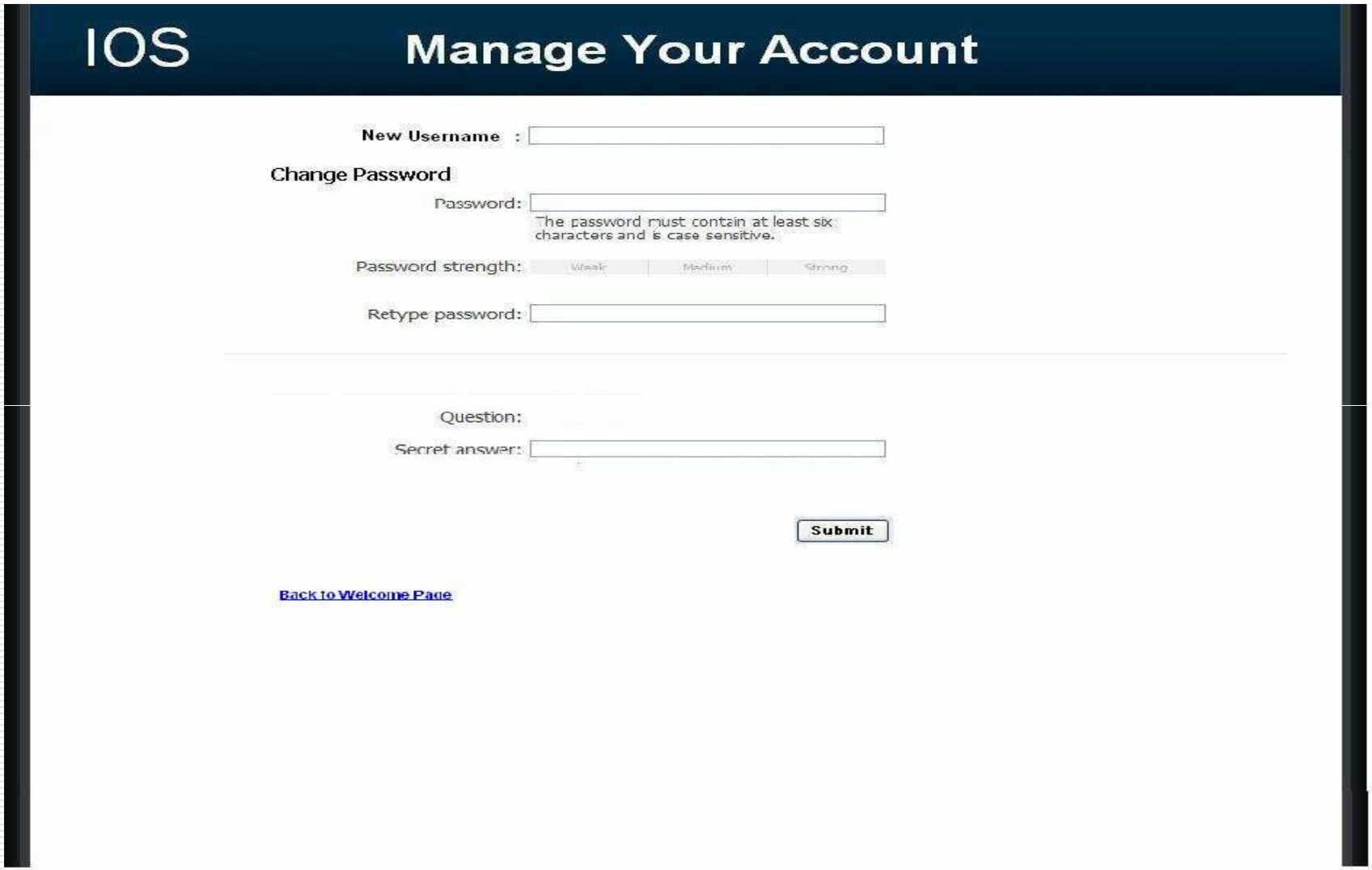


TEACHER ACCOUNT MANAGEMENT PAGE



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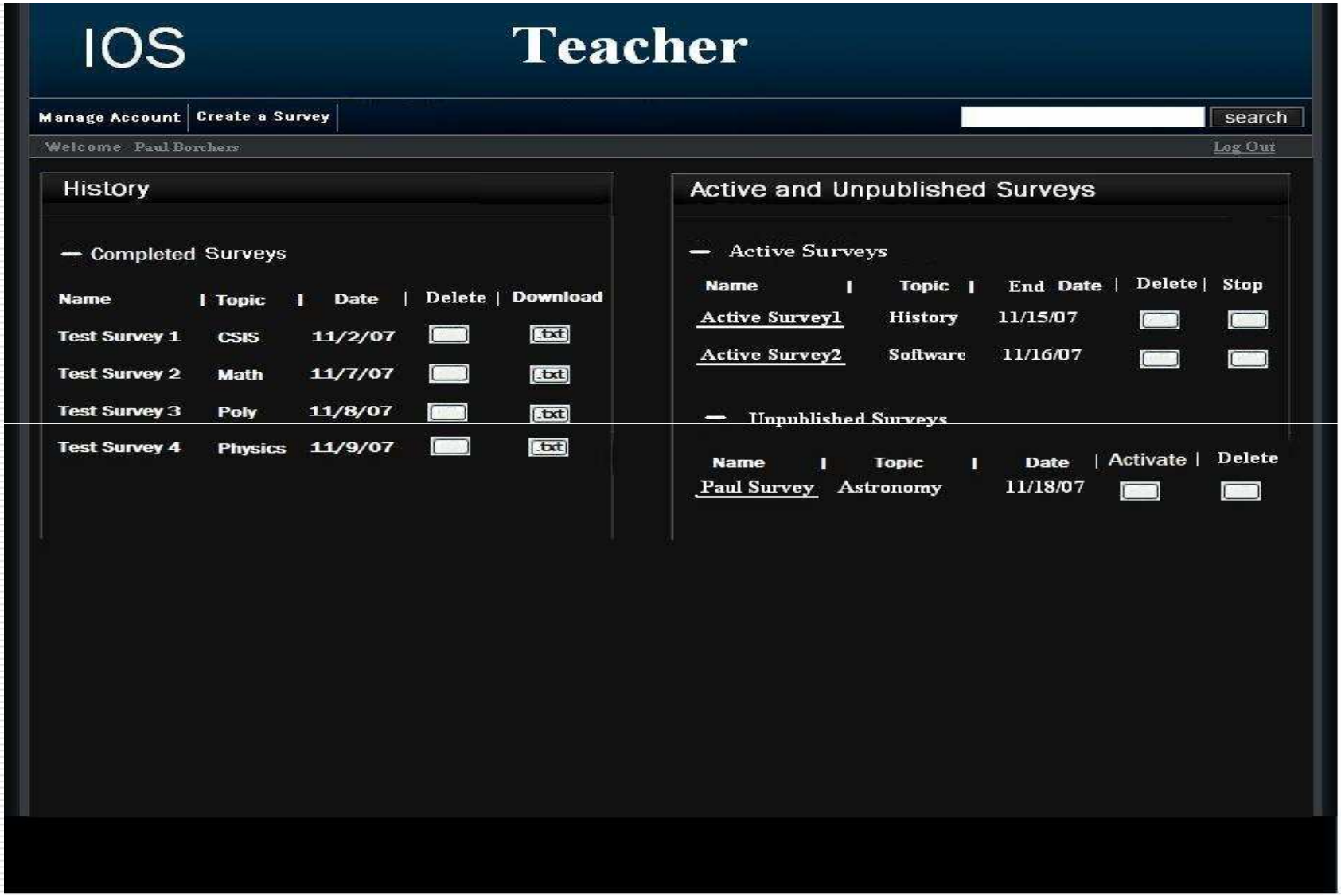

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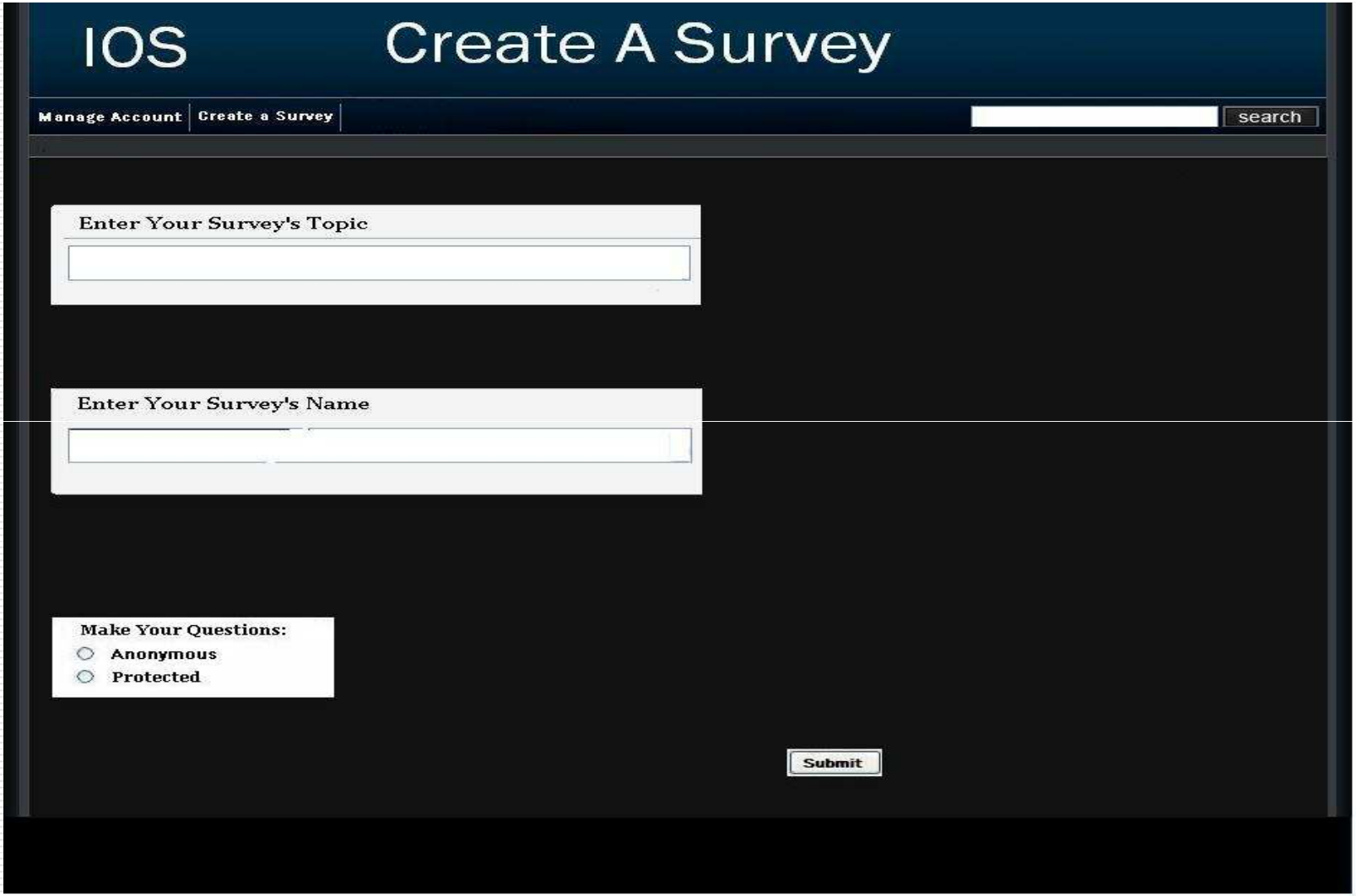
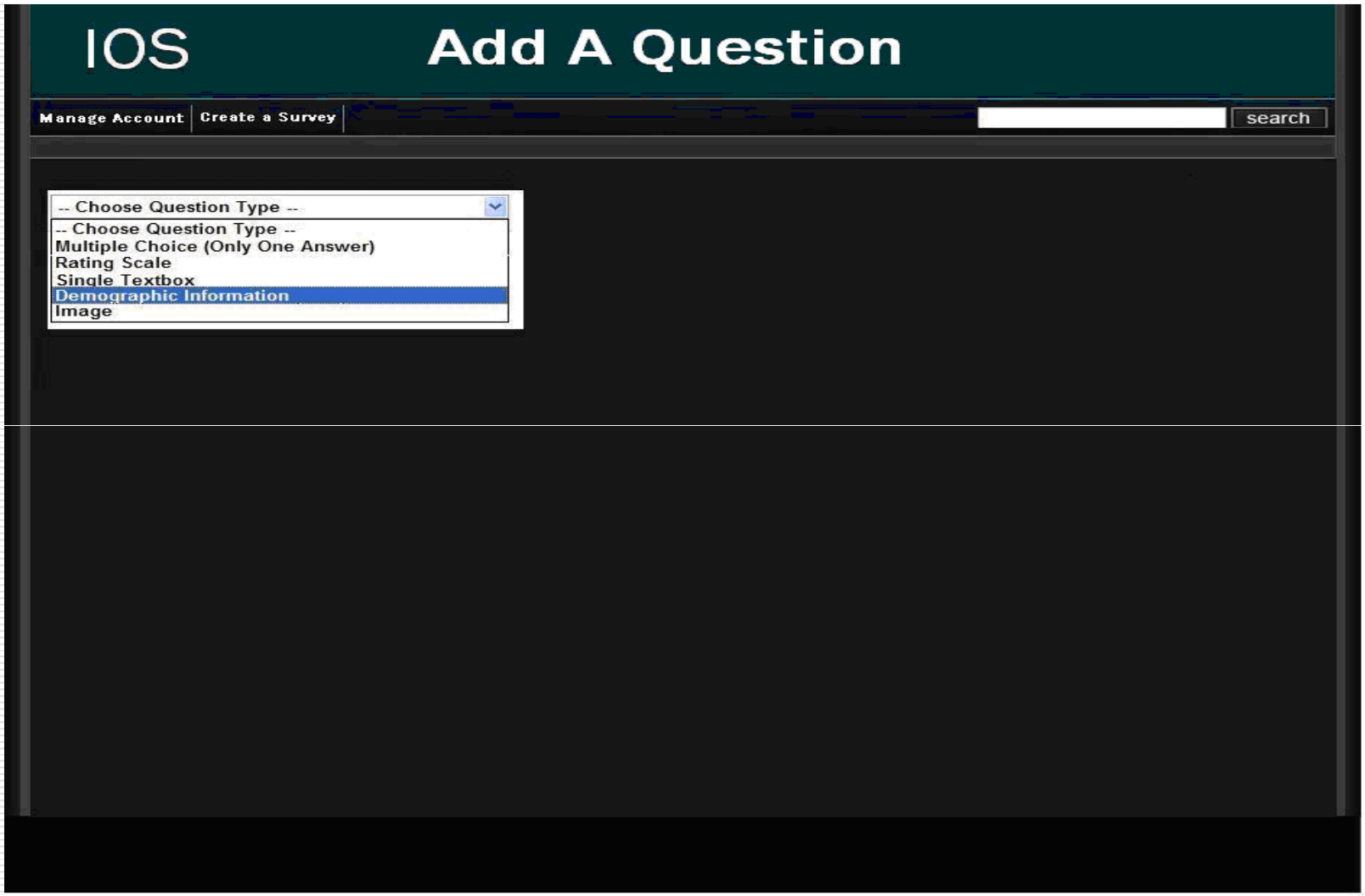


TEACHER EDIT SURVEY PAGE (BLANK)

TEACHER ADD A QUESTION PAGE (BLANK)



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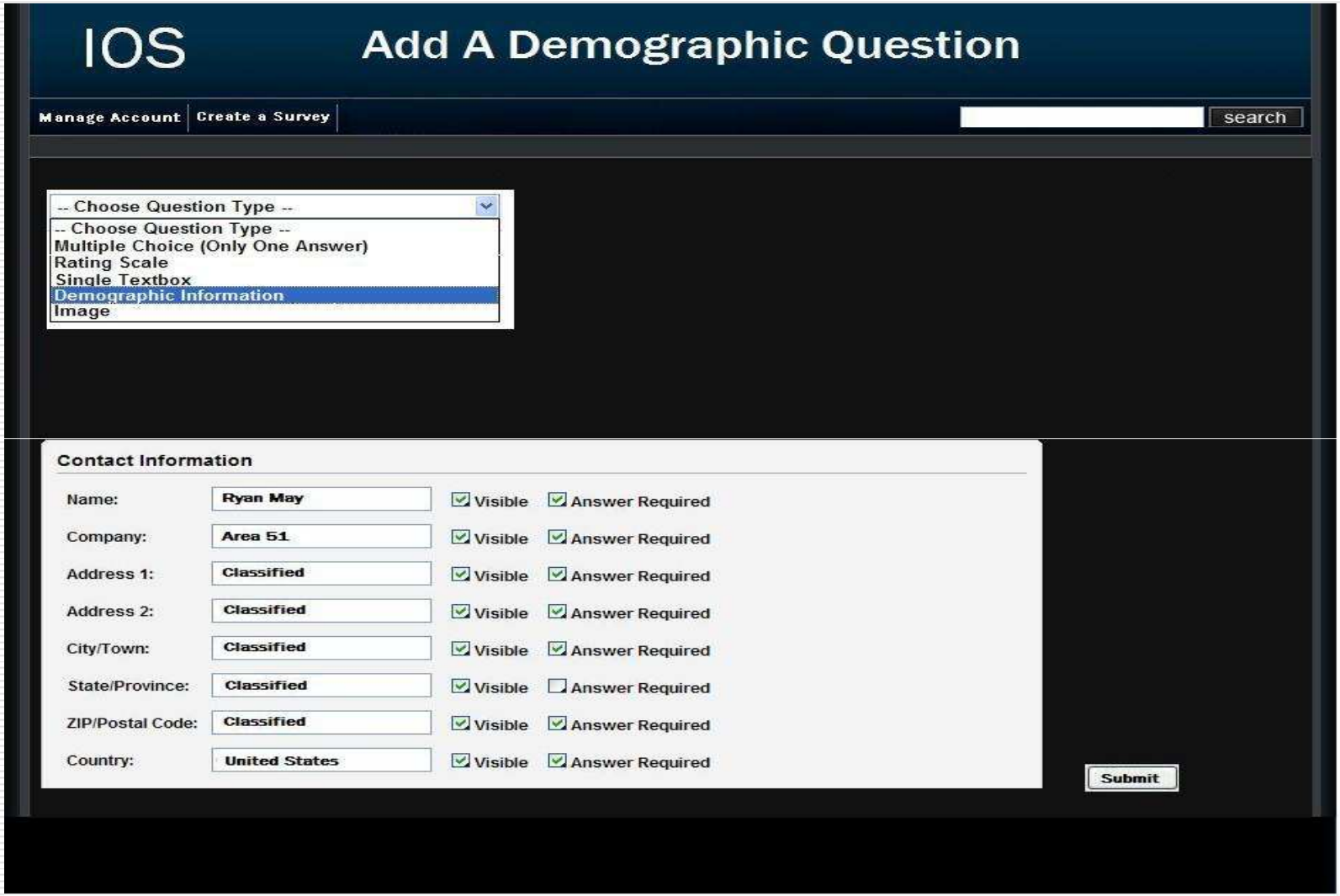
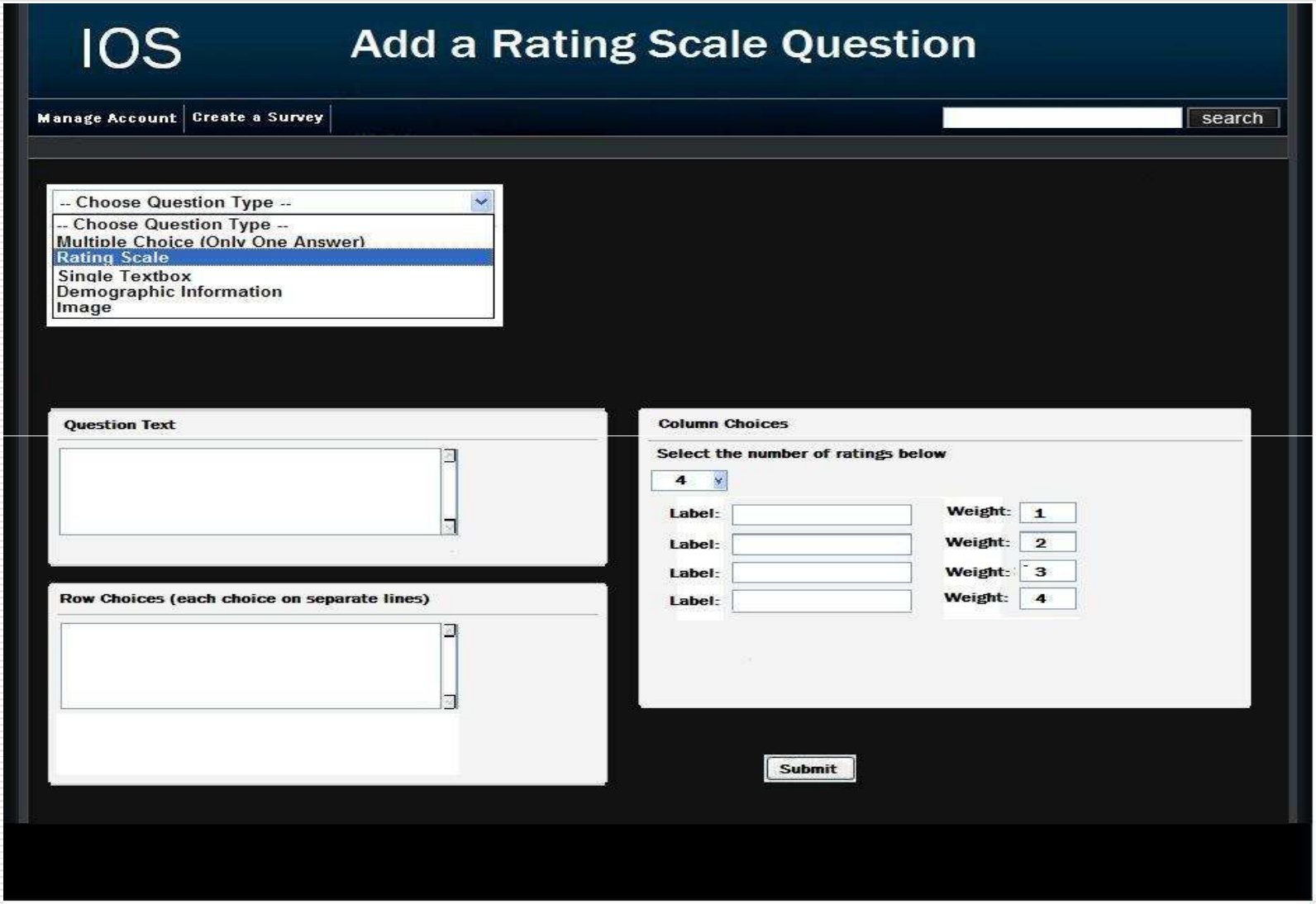


RATING SCALE



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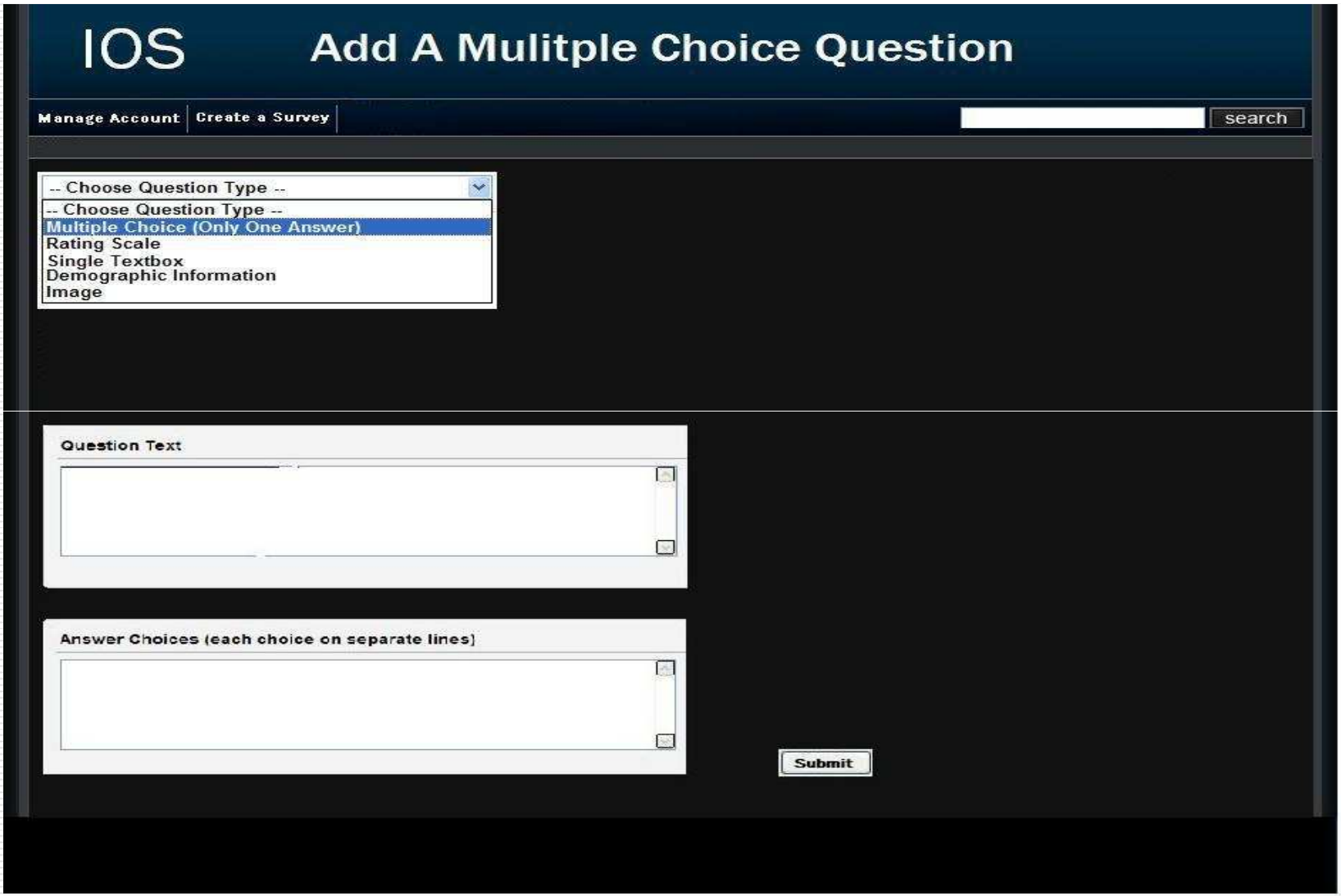

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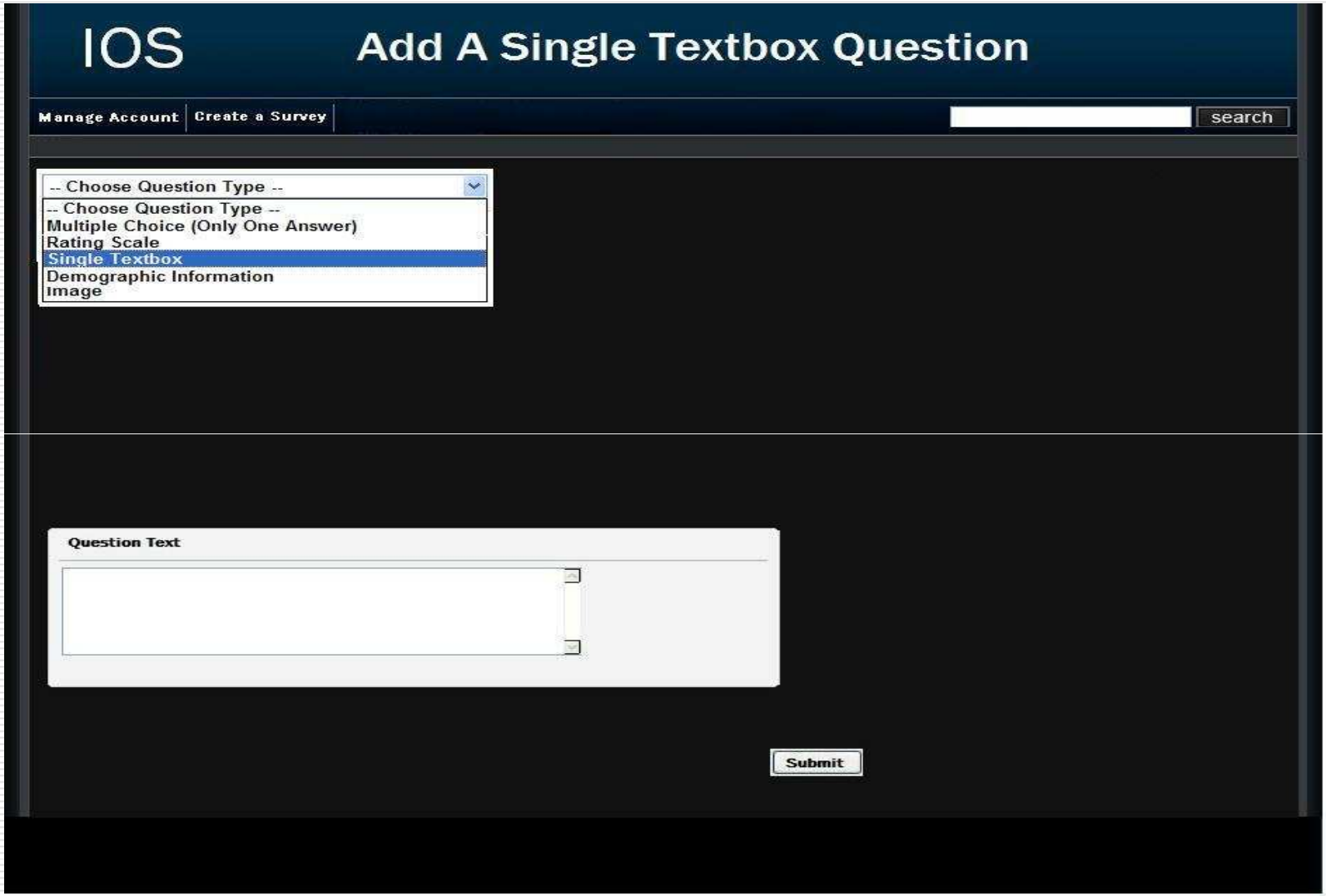
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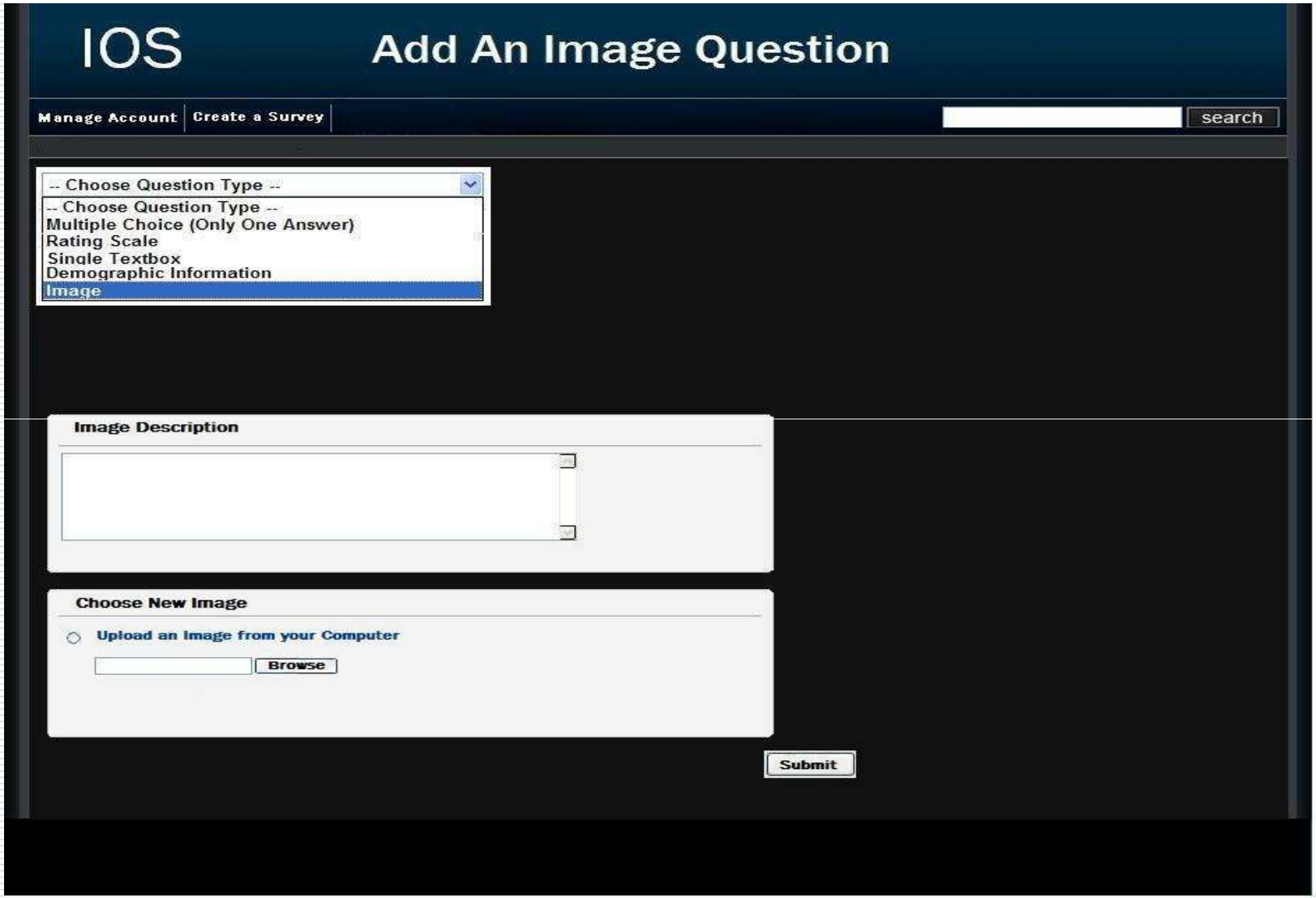
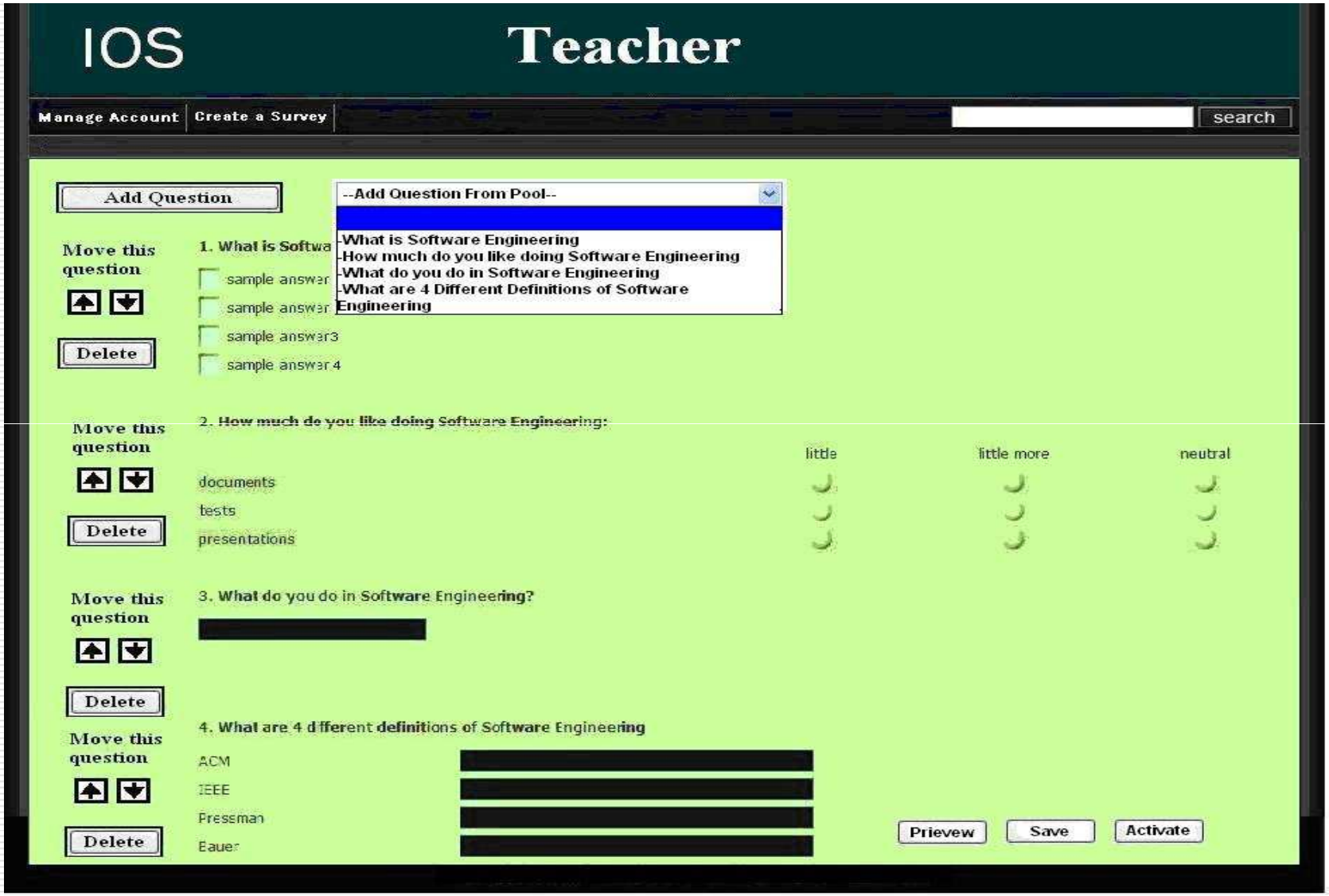
Add A Single Textbox Question
Manage Account
Create a Survey
search
-- Choose Question Type --
-- Choose Question Type --
Multiple Choice (Only One Answer)
Rating Scale
Single Textbox
Demographic Information
Image
Question Text
Submit

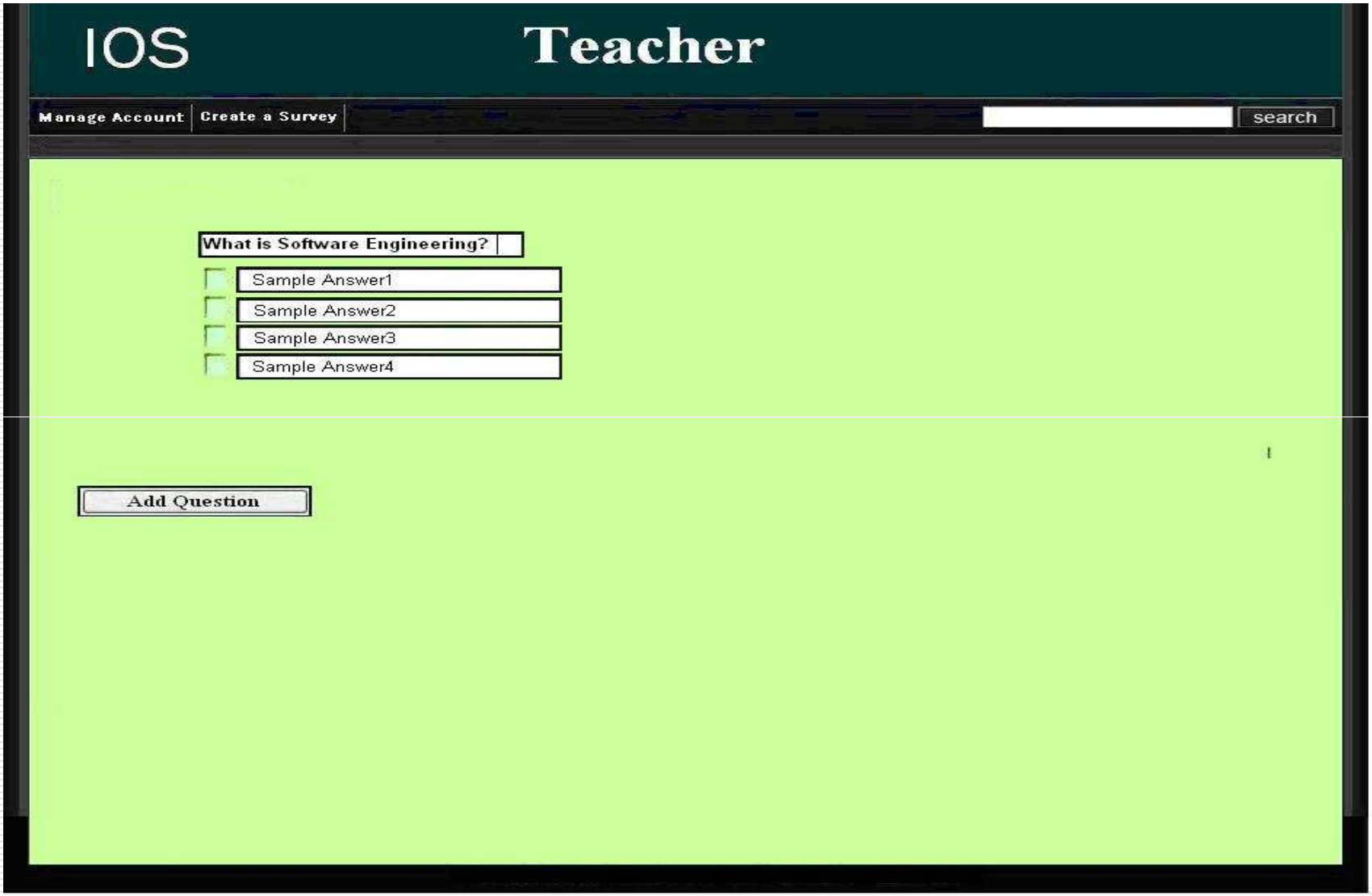
IMAGE


IOS
Add An Image Question
Manage Account
Create a Survey
search
-- Choose Question Type --
-- Choose Question Type --
Multiple Choice (Only One Answer)
Rating Scale
Single Textbox
Demographic Information
Image
Image Description
Choose New Image
Upload an Image from your Computer
Browse
Submit

EDIT SURVEY PAGE



ADD QUESTIONS FROM POOL PAGE



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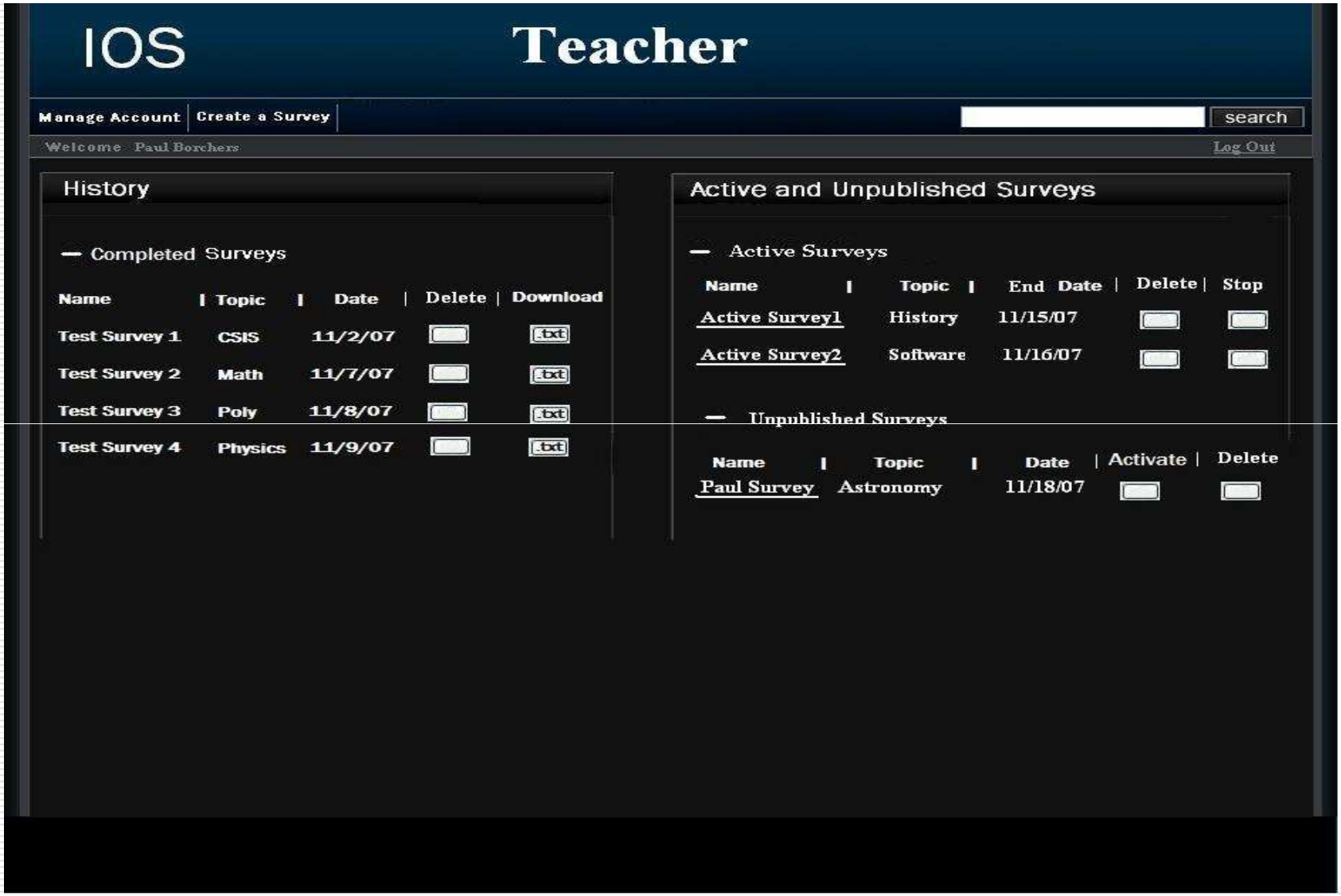
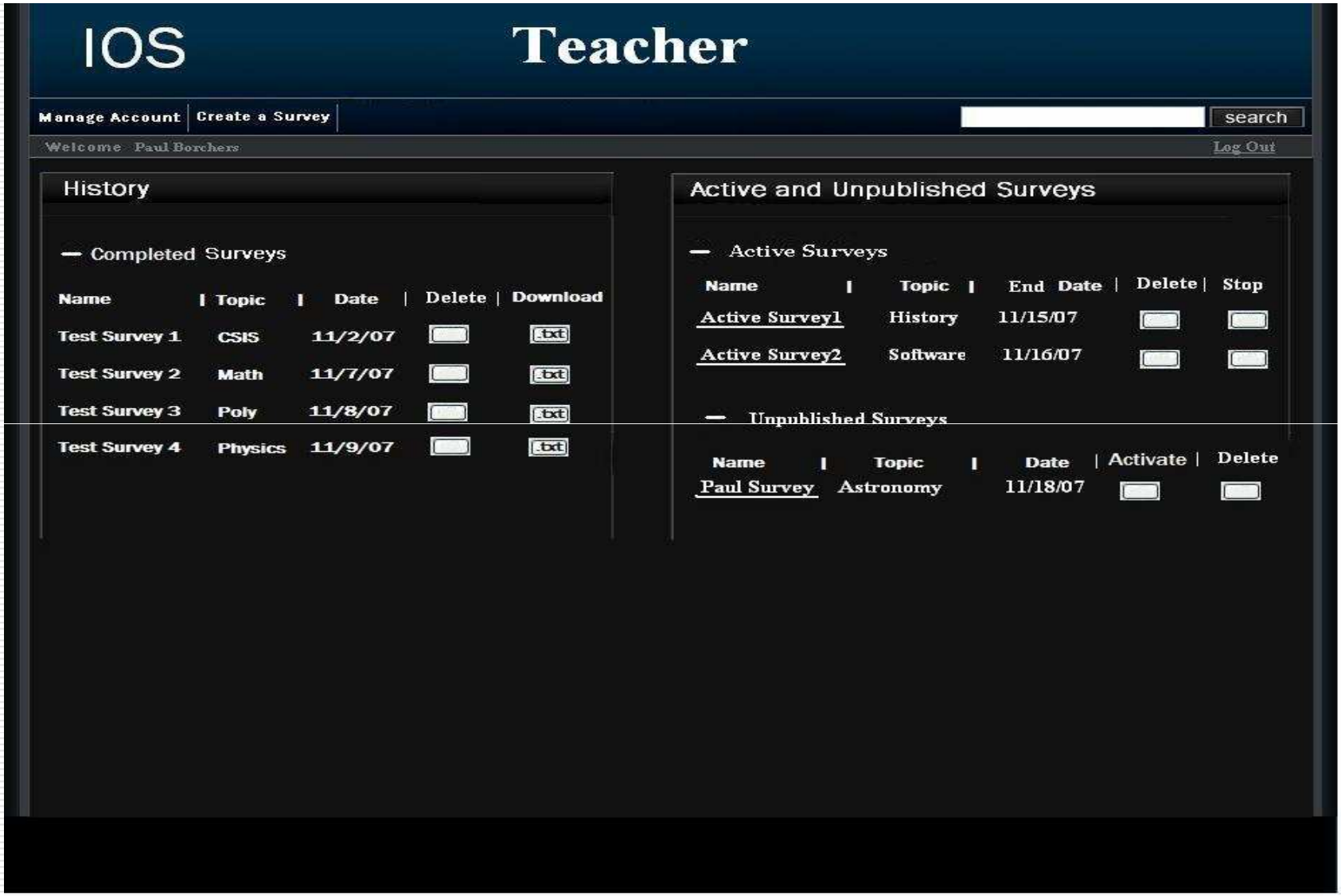


FORMAT OF RESULTS

	Gender	Age	Marital Status	Children	College Name	Private/Public College	Grad_Yr	Yr_since_Grad	Cumulative GPA
1	1	29	0	0	Siena College	1	2000.00	7.00	3.4
2	1	42	1	1	SUNY Albany	0	1990	17.00	2.8
3	0	26	0	0	Siena College	1	2002	5.00	2.90
4	1	32	1	0	Siena College	1	1997	10.00	3.4
5	1	56	0	0	SUNY Cortland	0	1973	34.00	3.2
6	0	55	1	1	Lee College	1	1982	25.00	2.8
7	1	24	0	0	Cortland State	0	2005	2.00	3.5
8	1	25	0	0	Ithaca College	1	2003	4.00	3.6
9	1	50	1	1	Worcester State	0	1983	24.00	3.6
10	0	50	1	1	Worcester State	0	1978	29.00	3.5
11	0	24	0	0	Siena College	1	2005	2.00	2.99
12	0	25	0	0	Siena College	1	2004	3.00	3.2
13	0	23	0.00	0	Siena College	1	2006	1.00	3.3
14	0	30	1.00	1	Siena College	1	2002	5.00	3.2
15	0	47	1.00	1	SUNY Plattsburg	0	1981	26.00	3.3
16	0	48	1.00	1	LeMoyne	1	1981	26.00	3.45
17	0	47	1	1	SUNY Albany	0	1996	11.00	3.2
18	0	46	1	1	SUNY New Paltz	0	1985	22.00	3.5
19	0	38	1	1	SUNY Albany	0	1994	13.00	3.74
20	1	23	0	0	Hudson Valley Community College	0	2004	3.00	4
21	0	34	1	1	UNC Charlotte	0	1999	8.00	3.85
22	0	33	1	1	SUNY Plattsburg	0	1997	10.00	2.90
23	0	35	0	0	Syracuse	1	1994	13.00	3.1
24	0	48	1	0	Niagra	1	1980	27.00	3.7
25	0	55	0	1	Ohio State	0	1975	32.00	2.75
26	0	56	1	1	SUNY Cortland	0	1973	34.00	2.83
27	1.00	54	0	0	Pratt Institute	0	1983	24.00	4

TEACHER WELCOME



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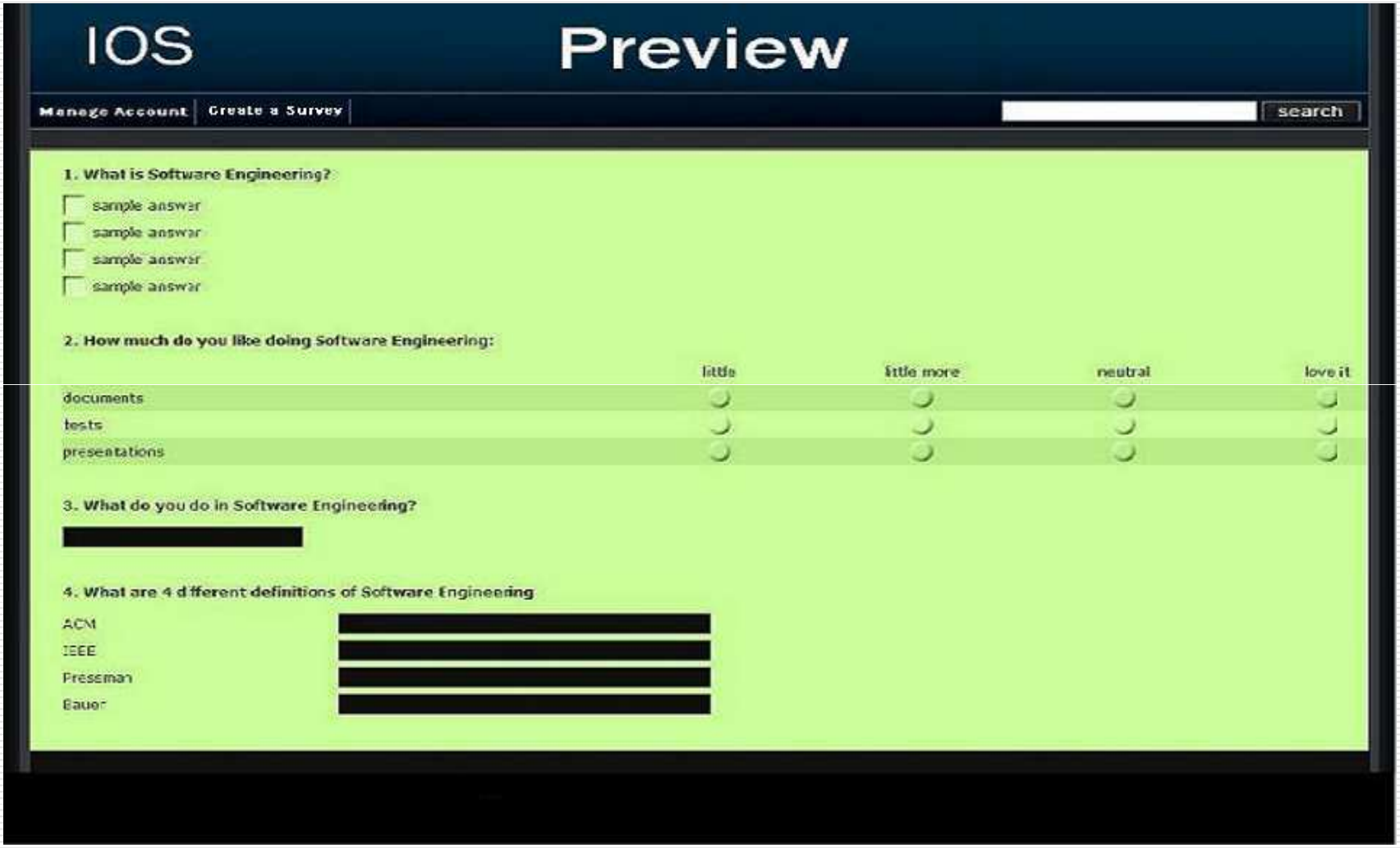

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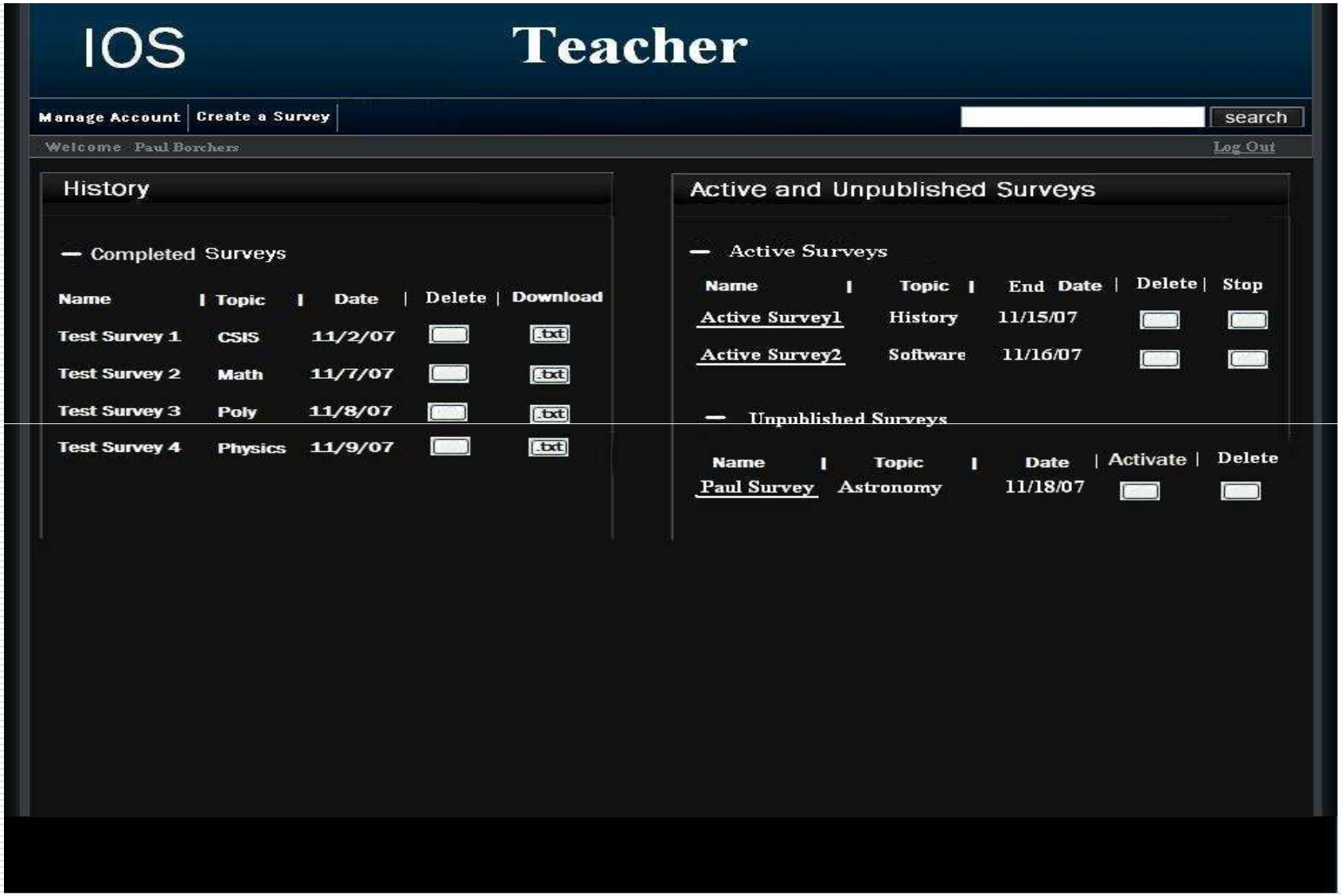
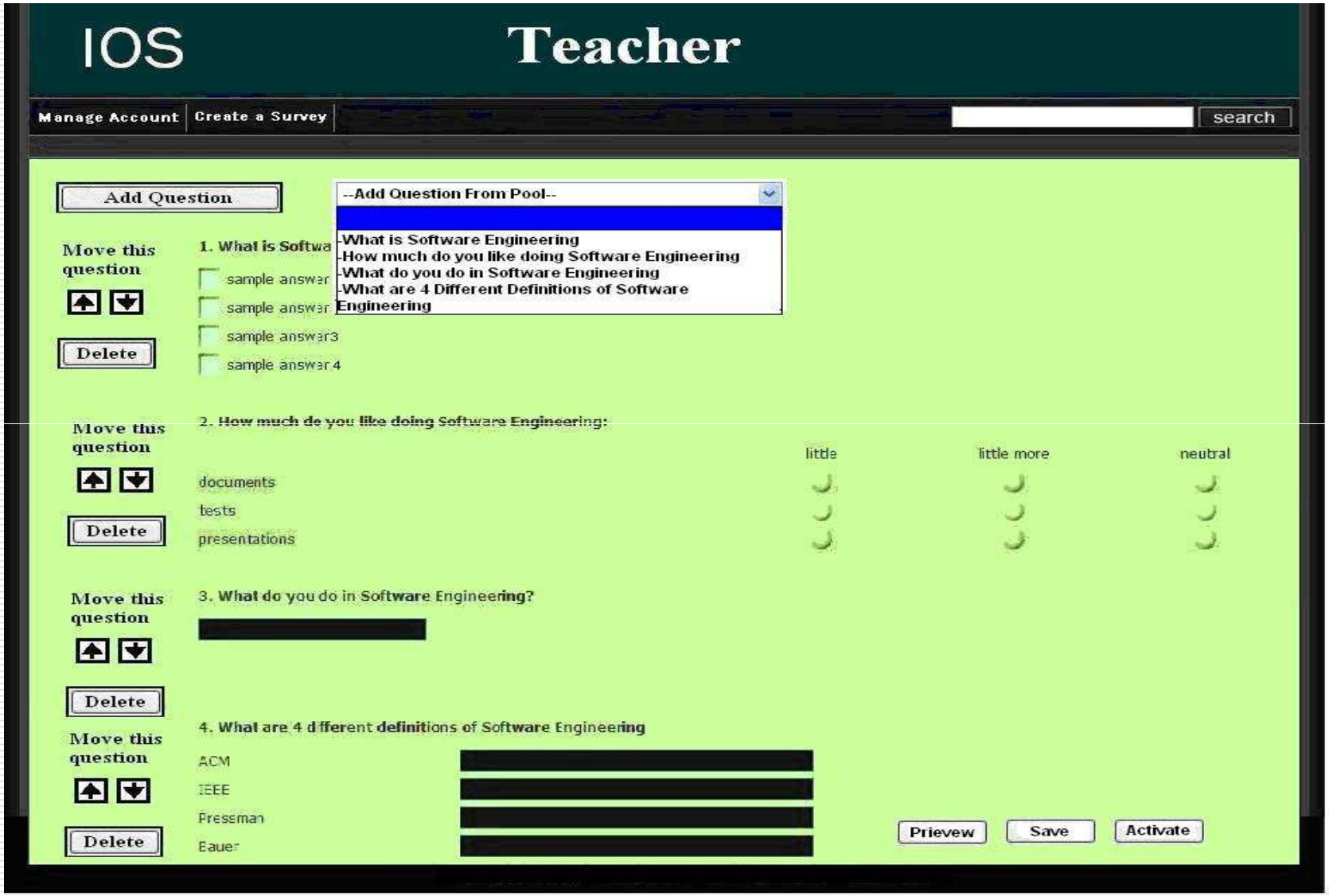


EDIT SURVEY PAGE



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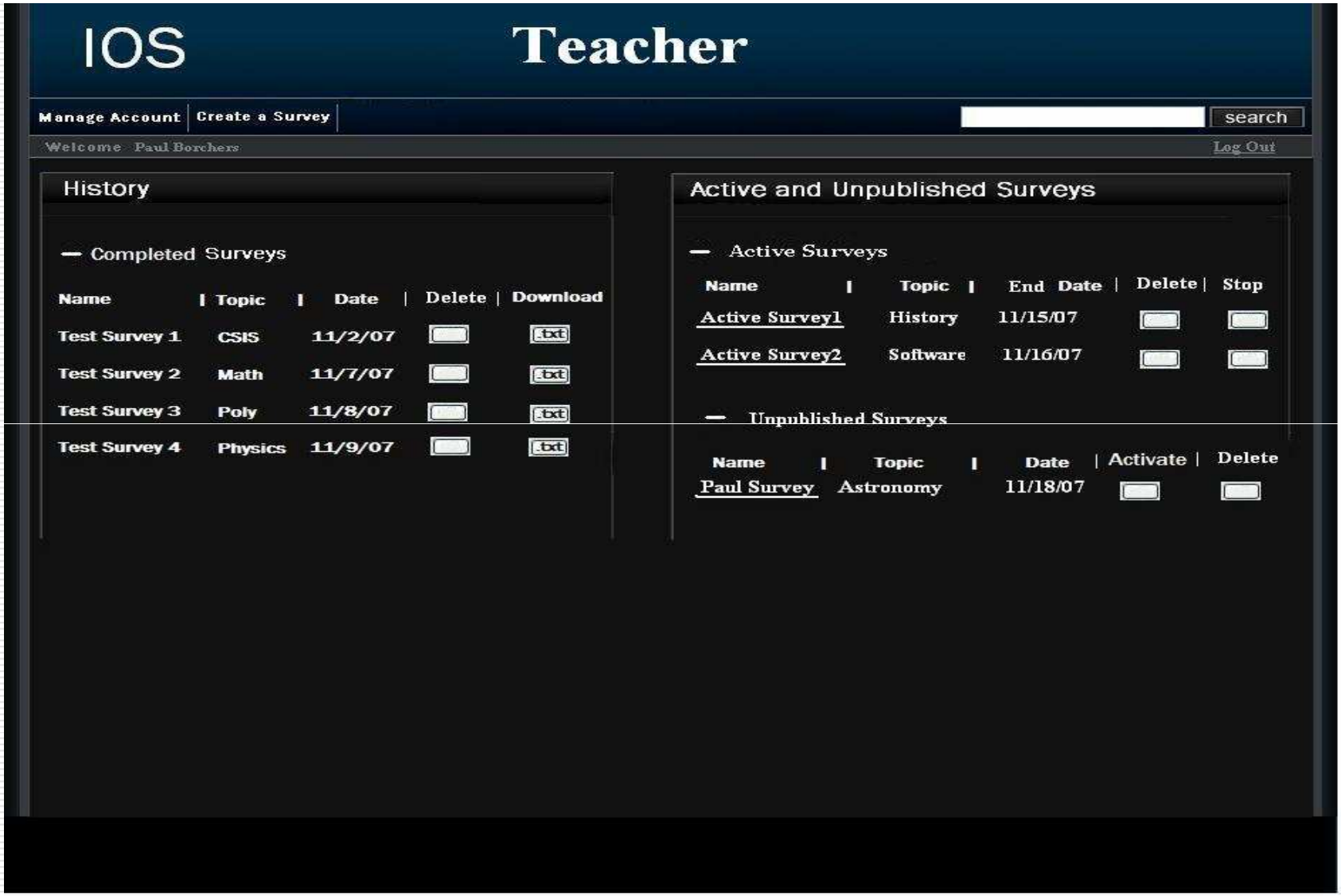

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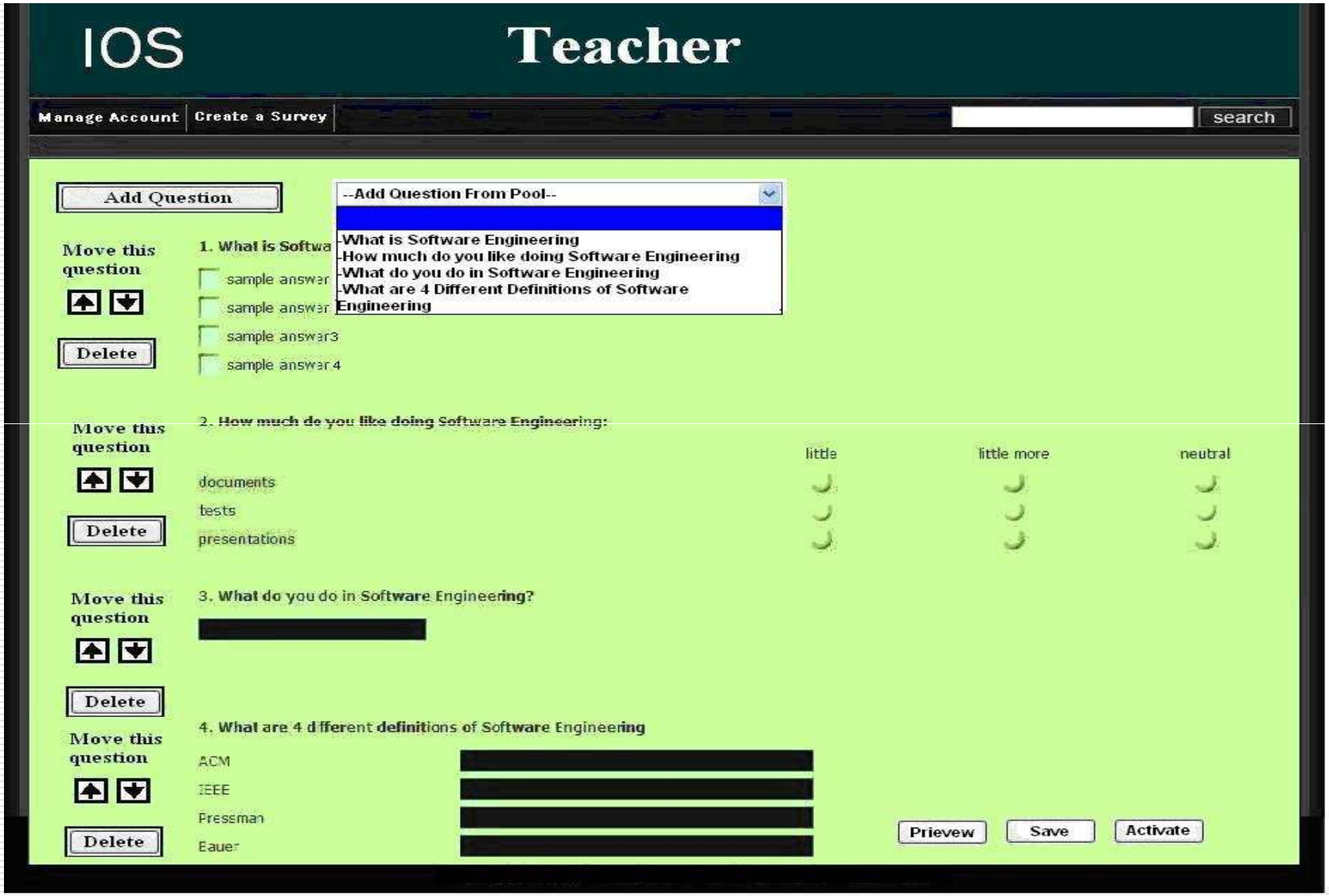
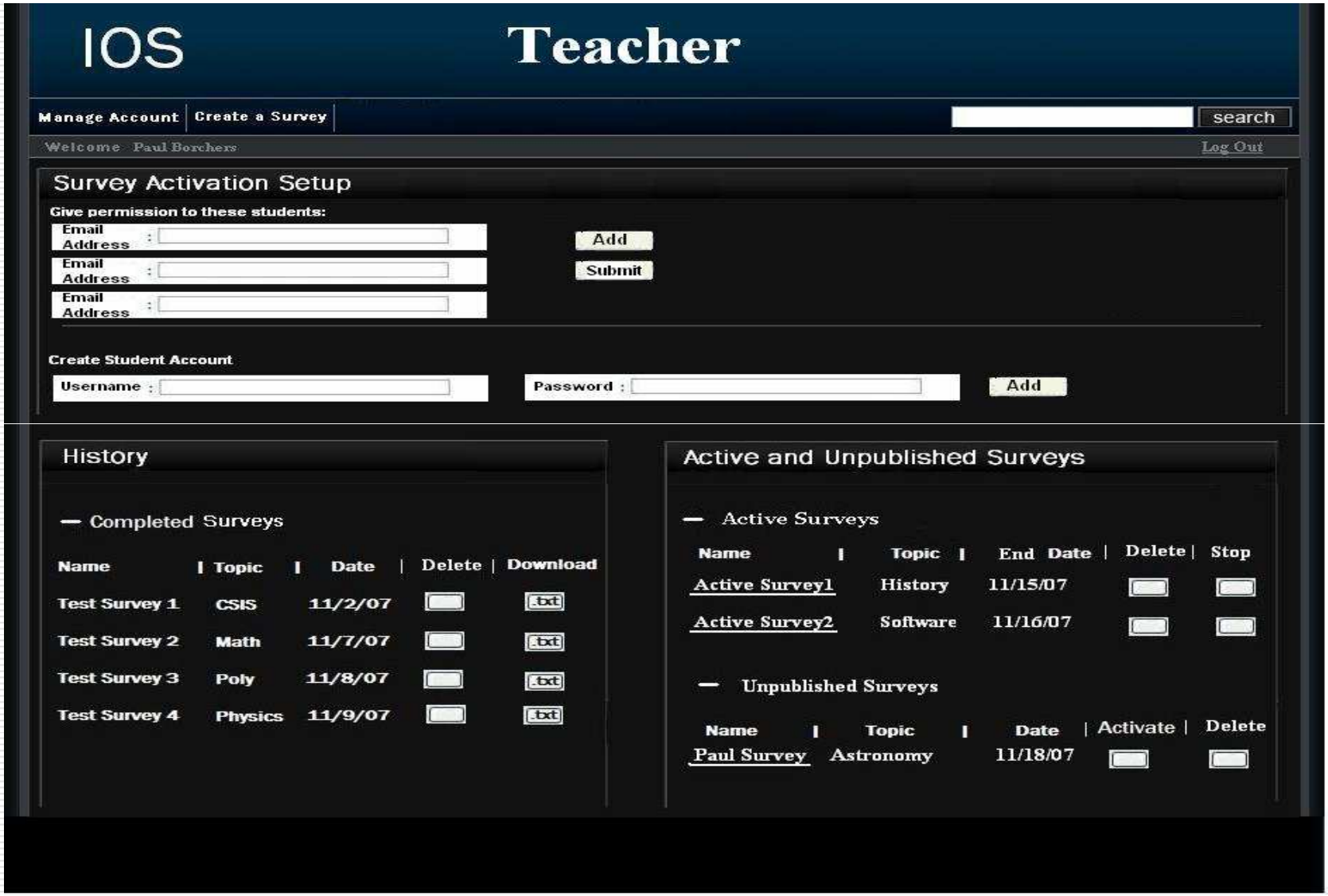


ACTIVATE SURVEY PAGE



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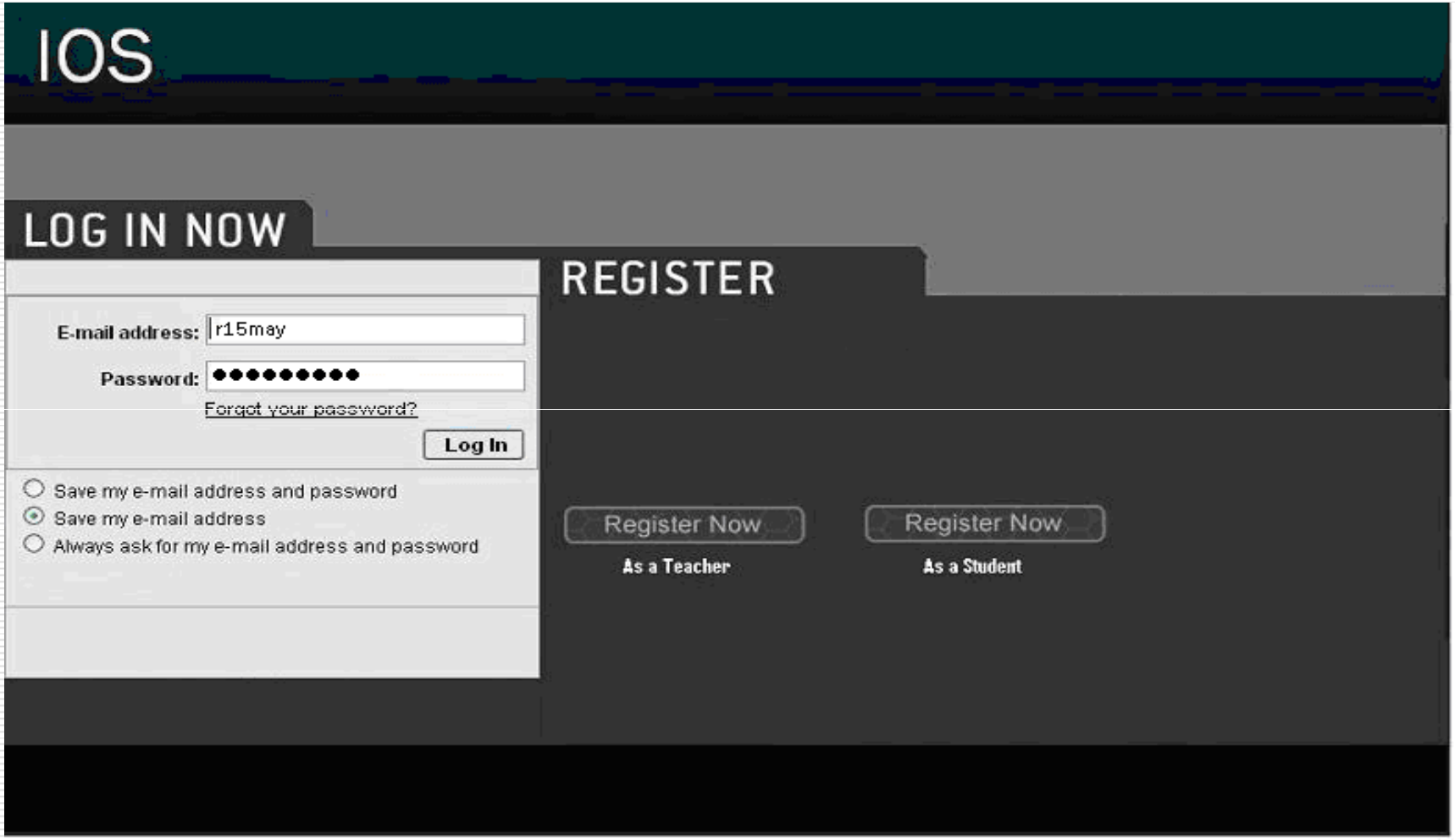
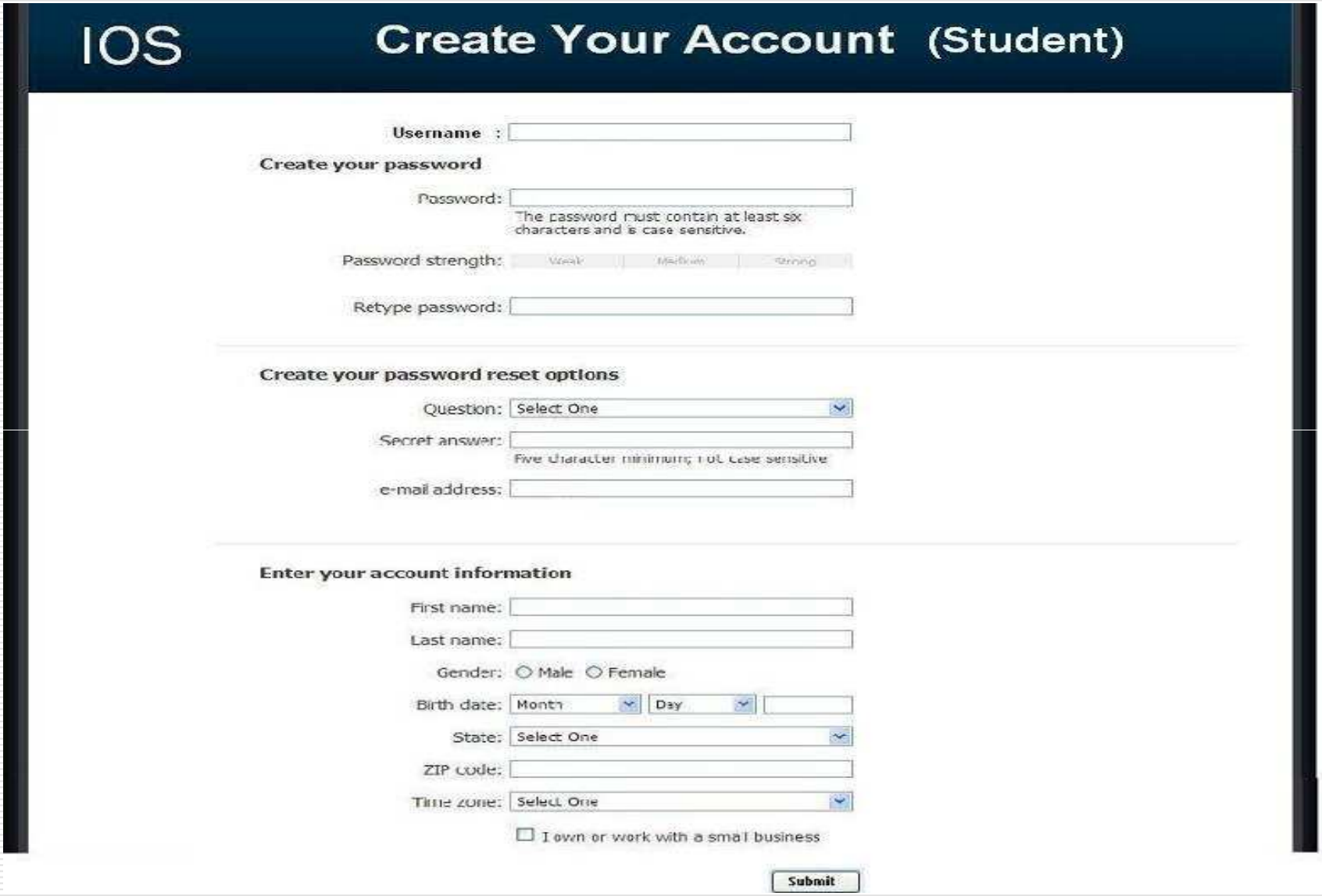

IOS
LOG IN NOW
REGISTER
E-mail address:
r15may
Password:
Forgot your password?
Log In
Save my e-mail address and password
Save my e-mail address
Always ask for my e-mail address and password
Register Now
As a Teacher
Register Now
As a Student

STUDENT ACCOUNT CREATION



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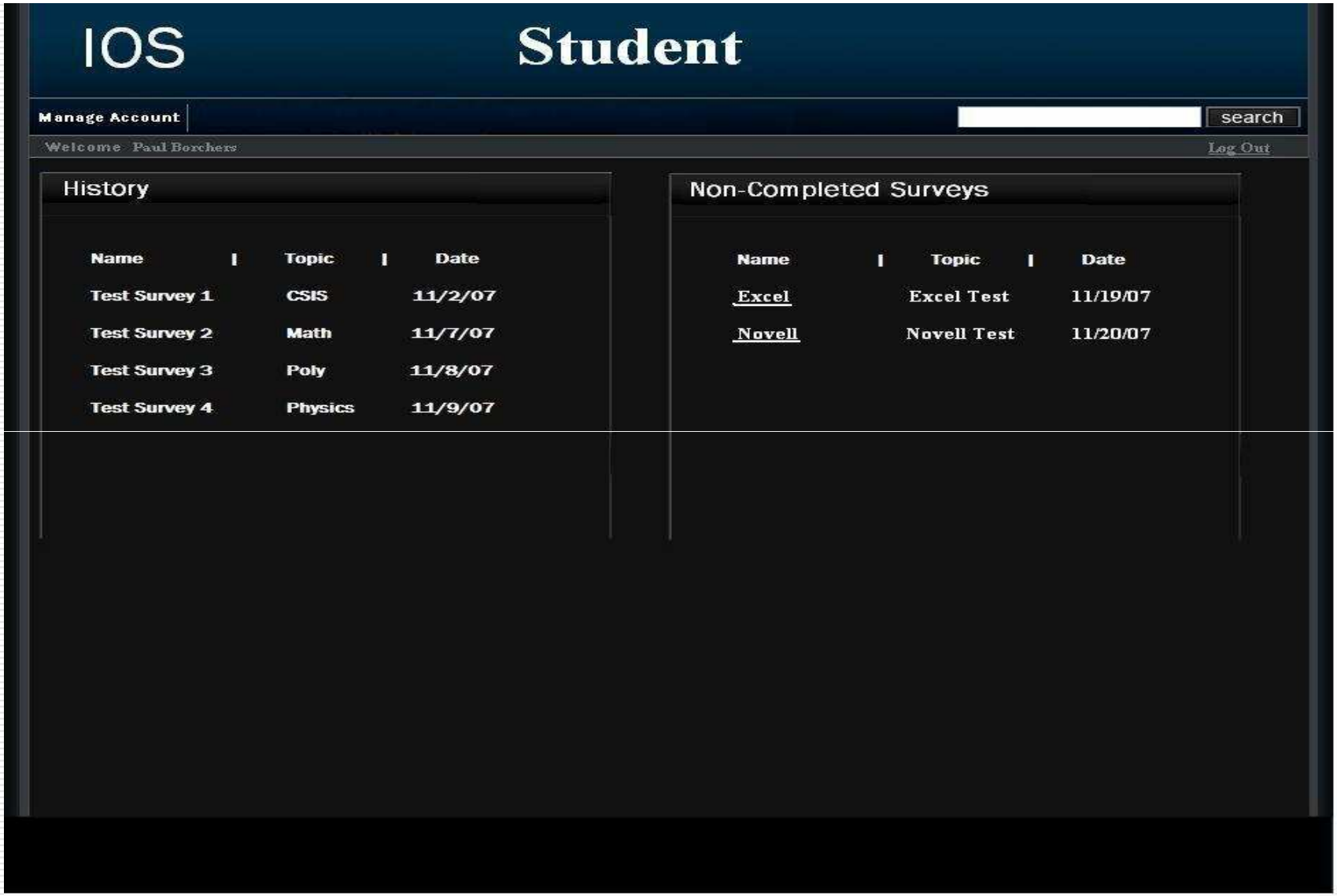

STUDENT ACCOUNT MANAGEMENT PAGE

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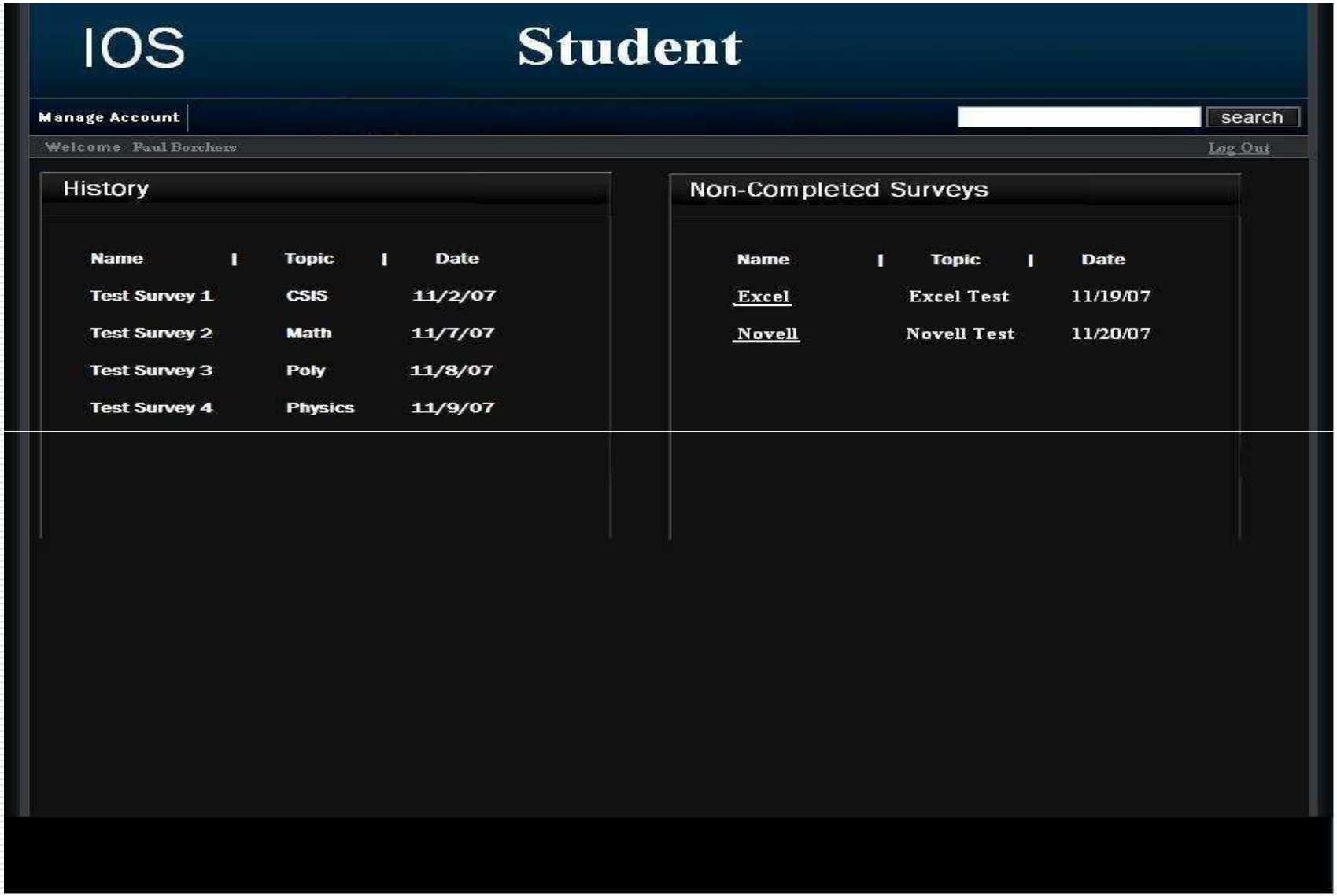

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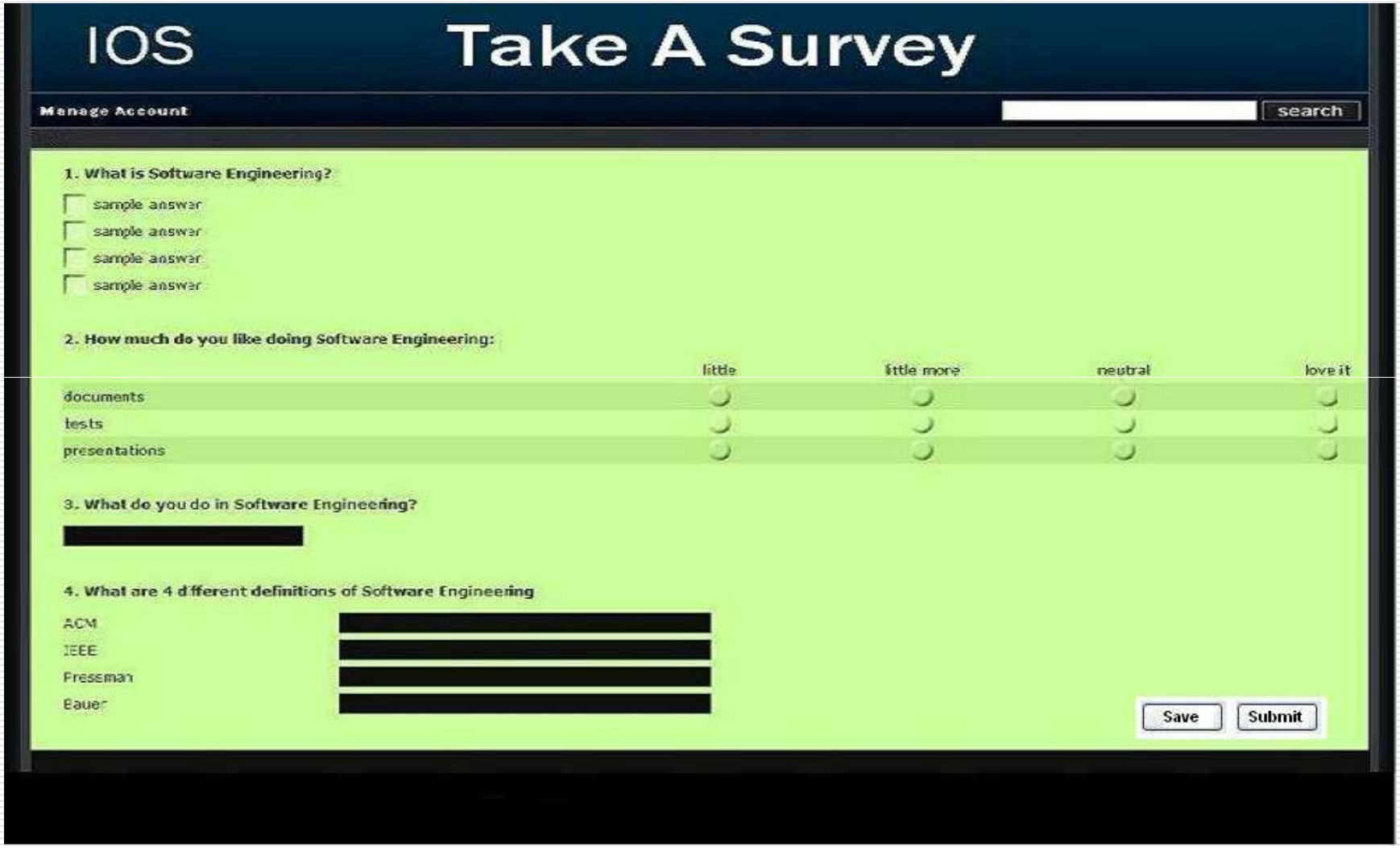
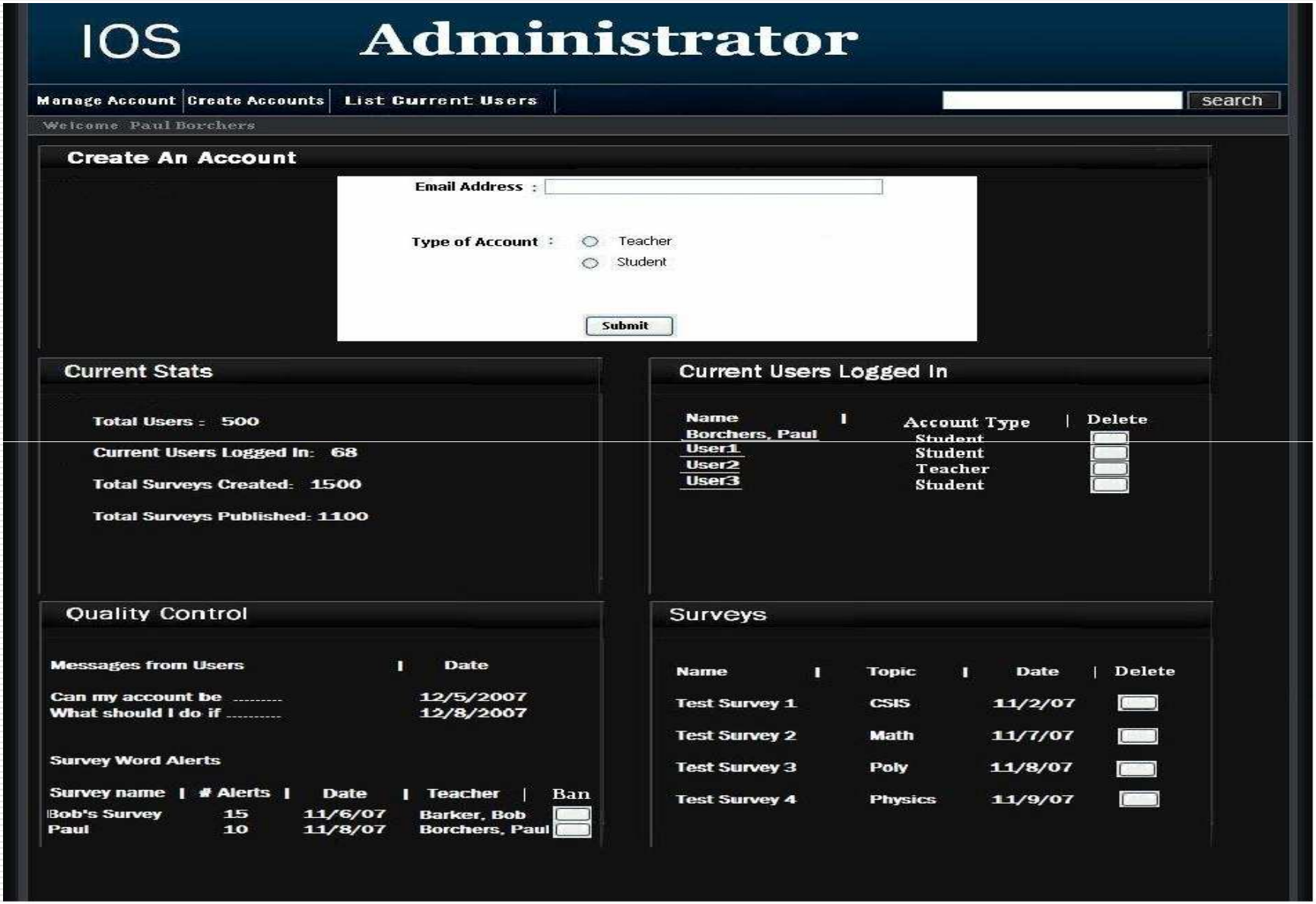


ADMINISTRATOR WELCOME

ADMINISTRATOR ACCOUNT MANAGEMENT PAGE

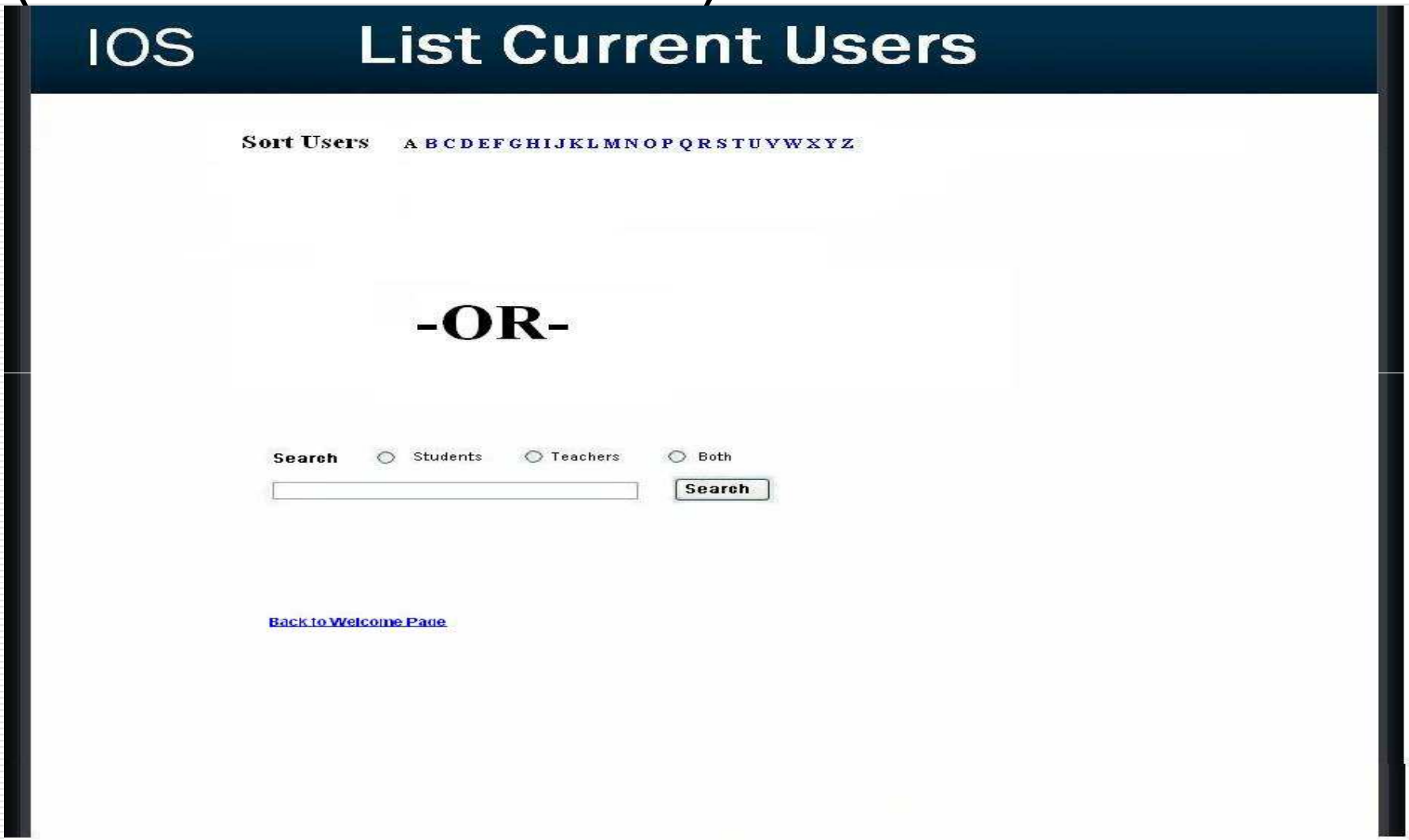
ADMINISTRATOR WELCOME

ACCOUNT CREATION PAGE

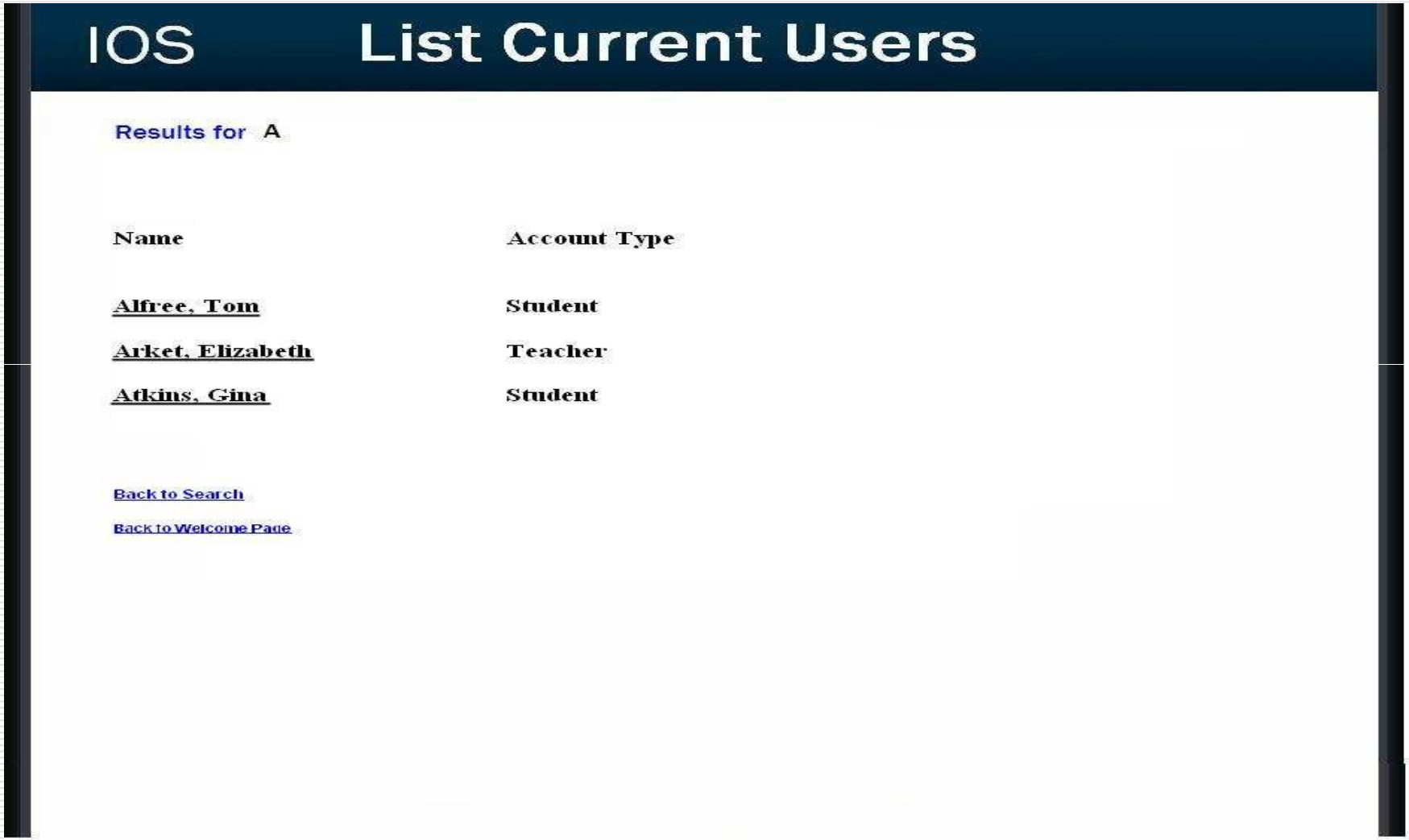


ADMINISTRATOR WELCOME

LIST CURRENT USERS (ADMINISTRATOR)

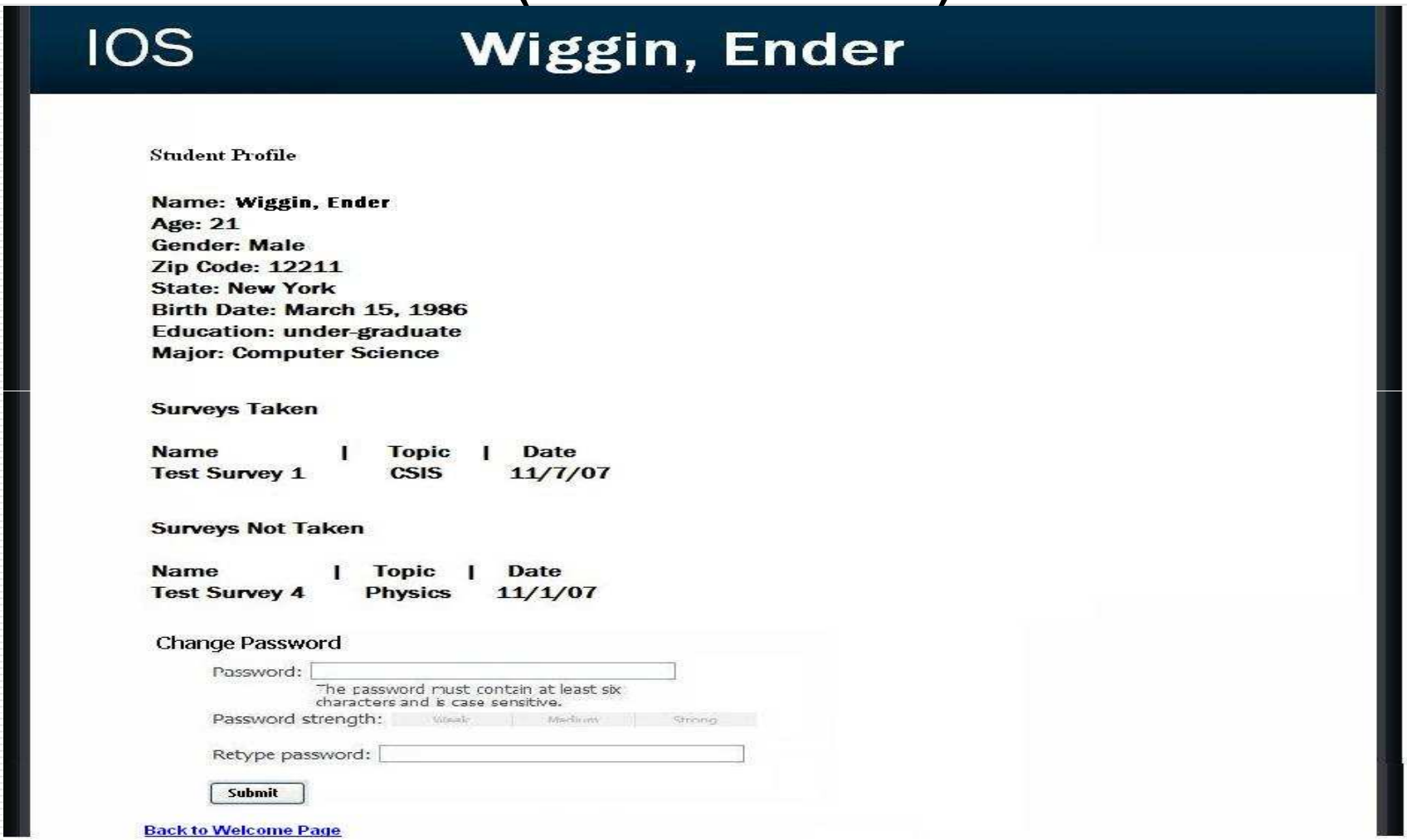


LIST CURRENT USERS RESULTS PAGE

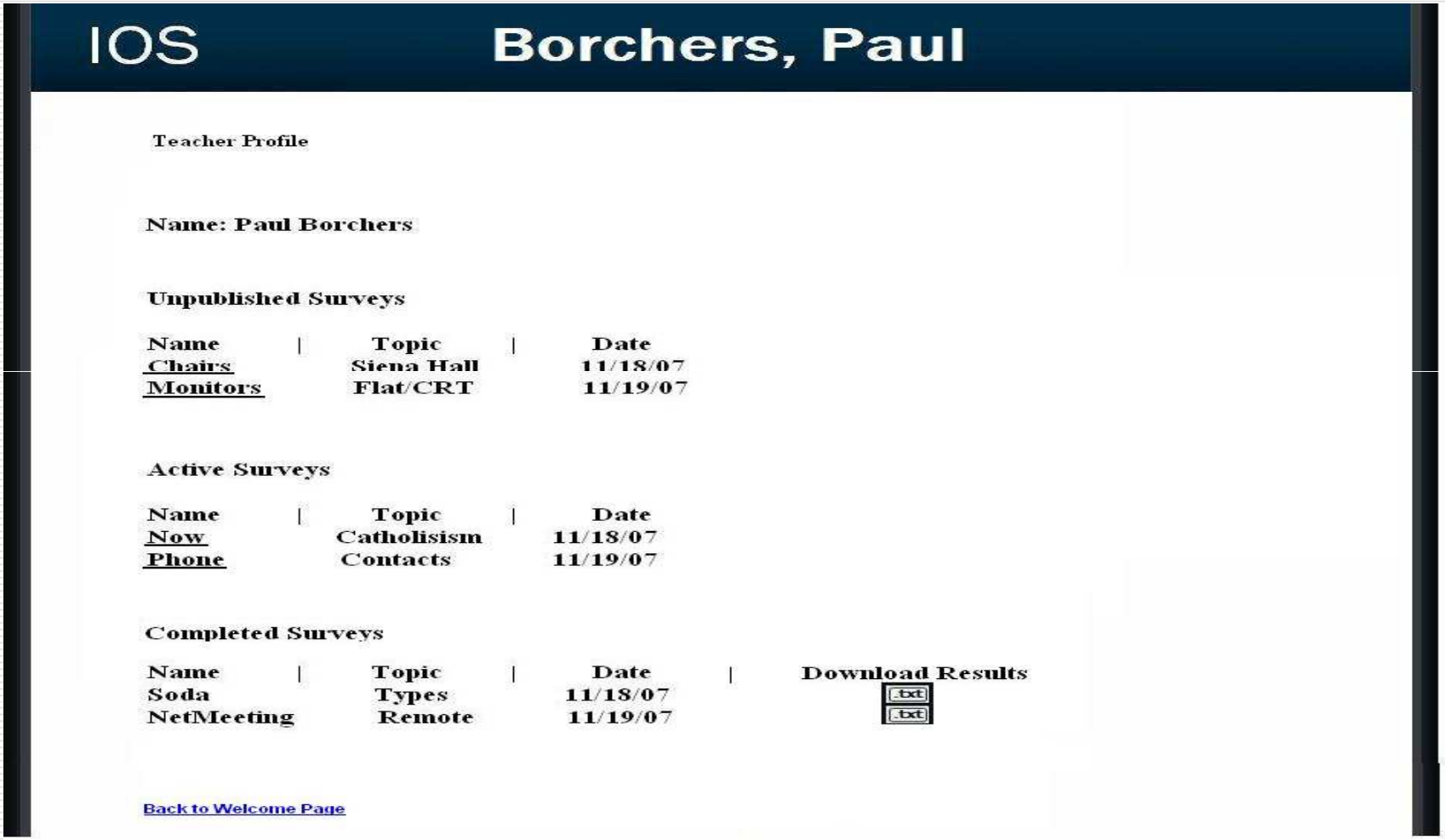


ADMINISTRATOR WELCOME

USER PAGE (STUDENT)



USER PAGE (TEACHER)



IOS **Borchers, Paul**

Teacher Profile

Name: Paul Borchers

Unpublished Surveys

Name	Topic	Date
Chairs	Siena Hall	11/18/07
Monitors	Flat/CRT	11/19/07

Active Surveys

Name	Topic	Date
Now	Catholisism	11/18/07
Phone	Contacts	11/19/07

Completed Surveys

Name	Topic	Date	Download Results
Soda	Types	11/18/07	.txt
NetMeeting	Remote	11/19/07	.txt

Back to Welcome Page

ADMINISTRATOR WELCOME

SEARCH RESULTS PAGE

AGENDA

- Problem Definition – Ryan Rose
- Prototypes – Ryan May
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- Test Plan – Vito Urbano
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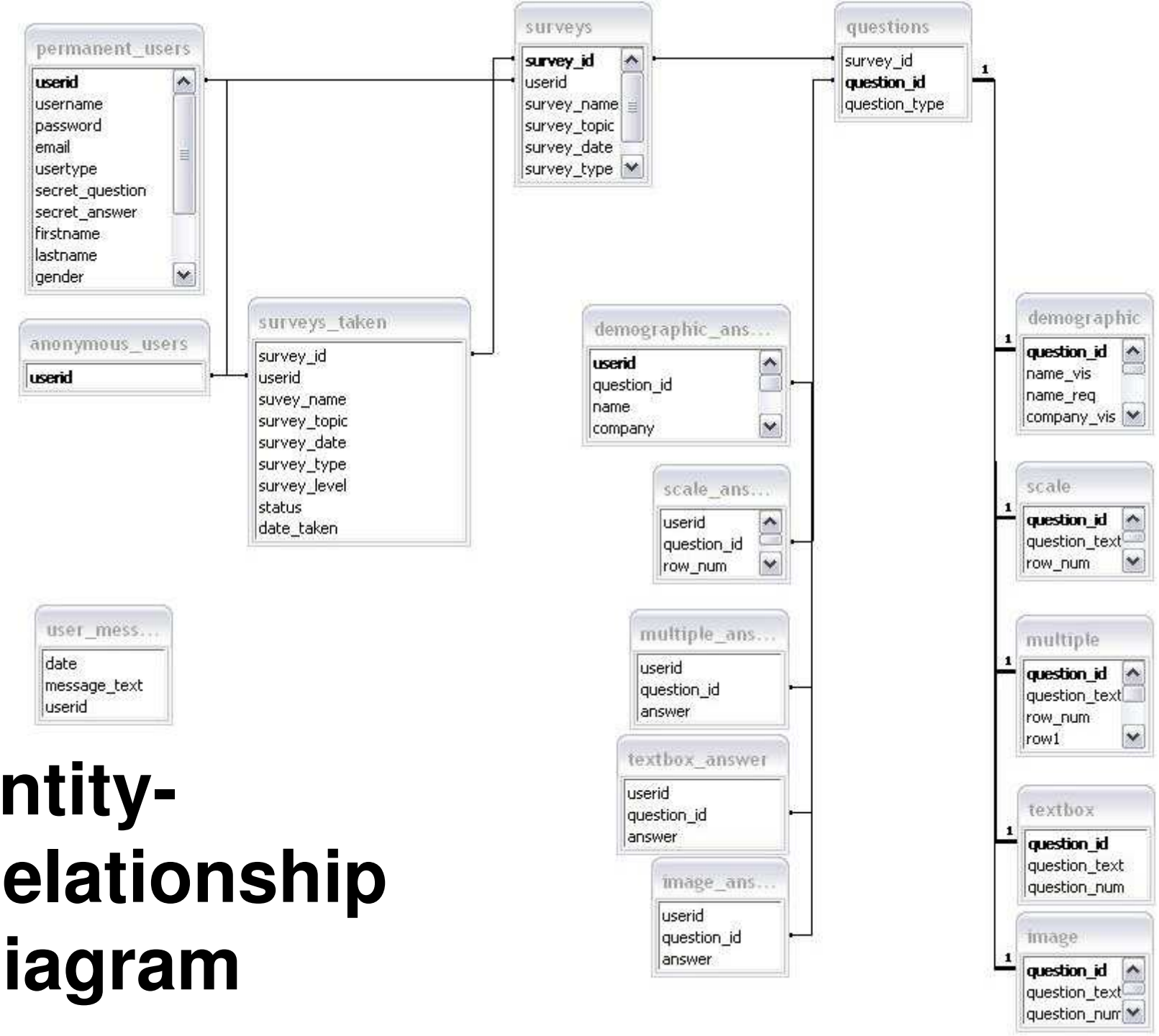
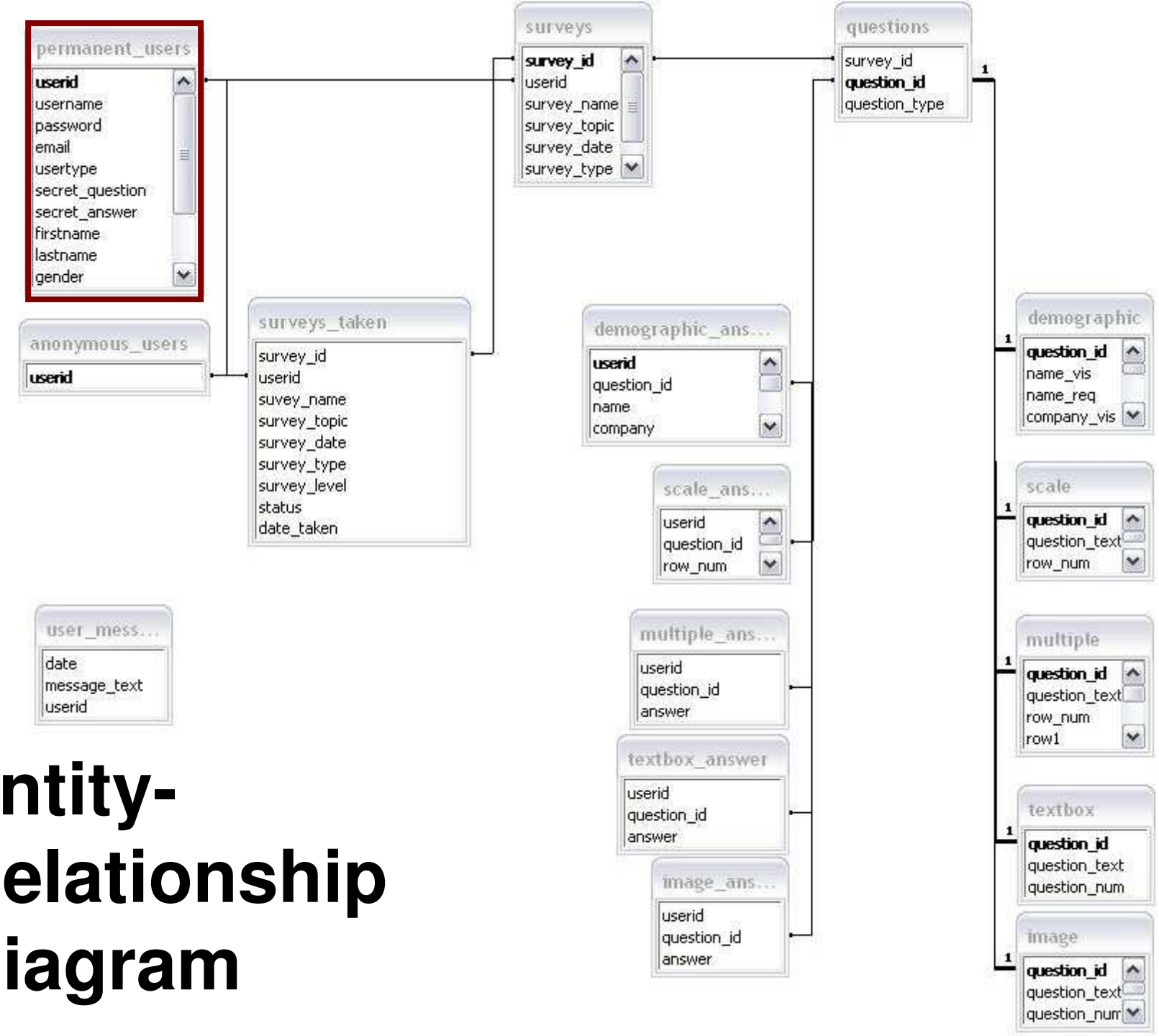
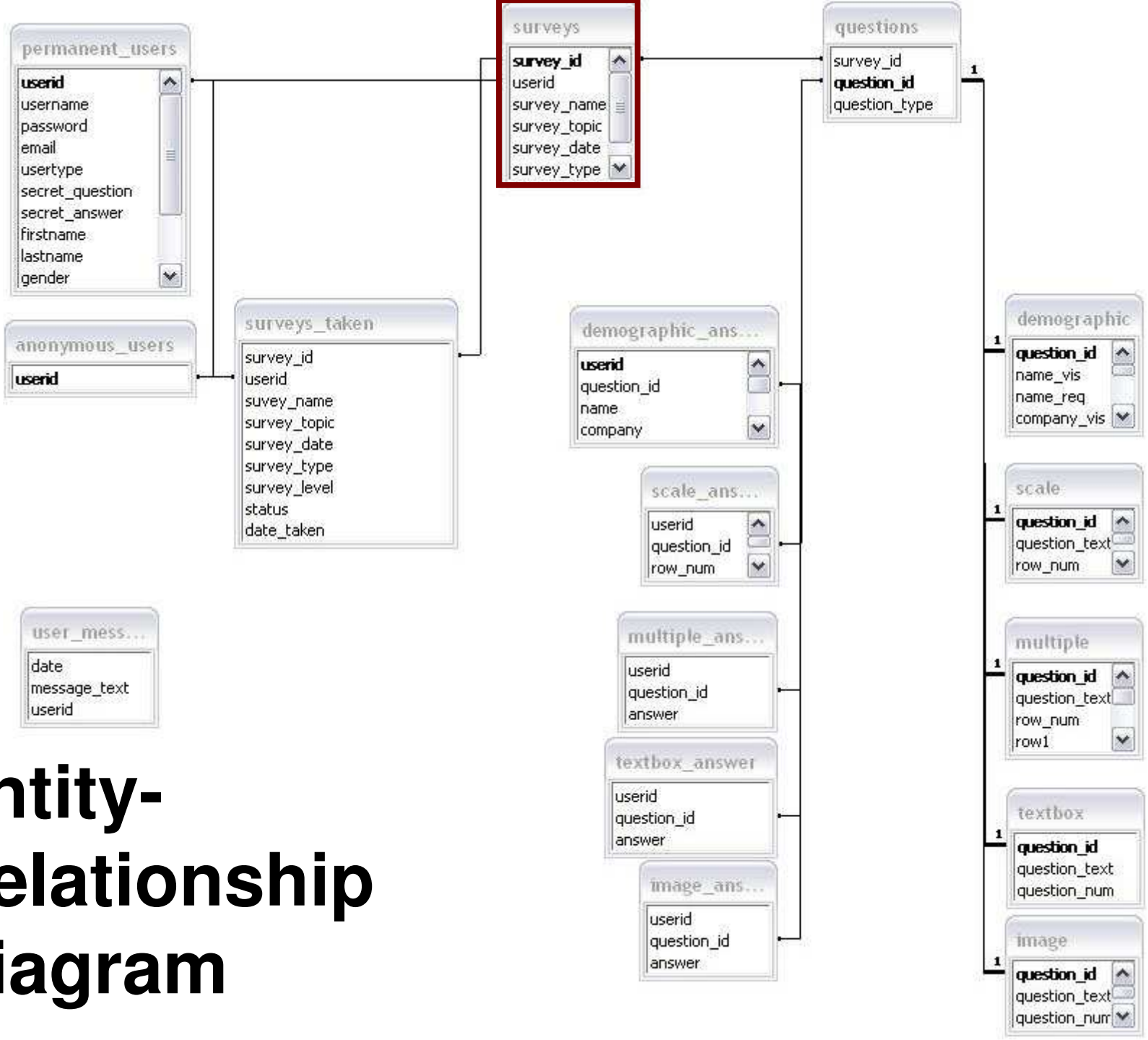


Entity-Relationship Diagram



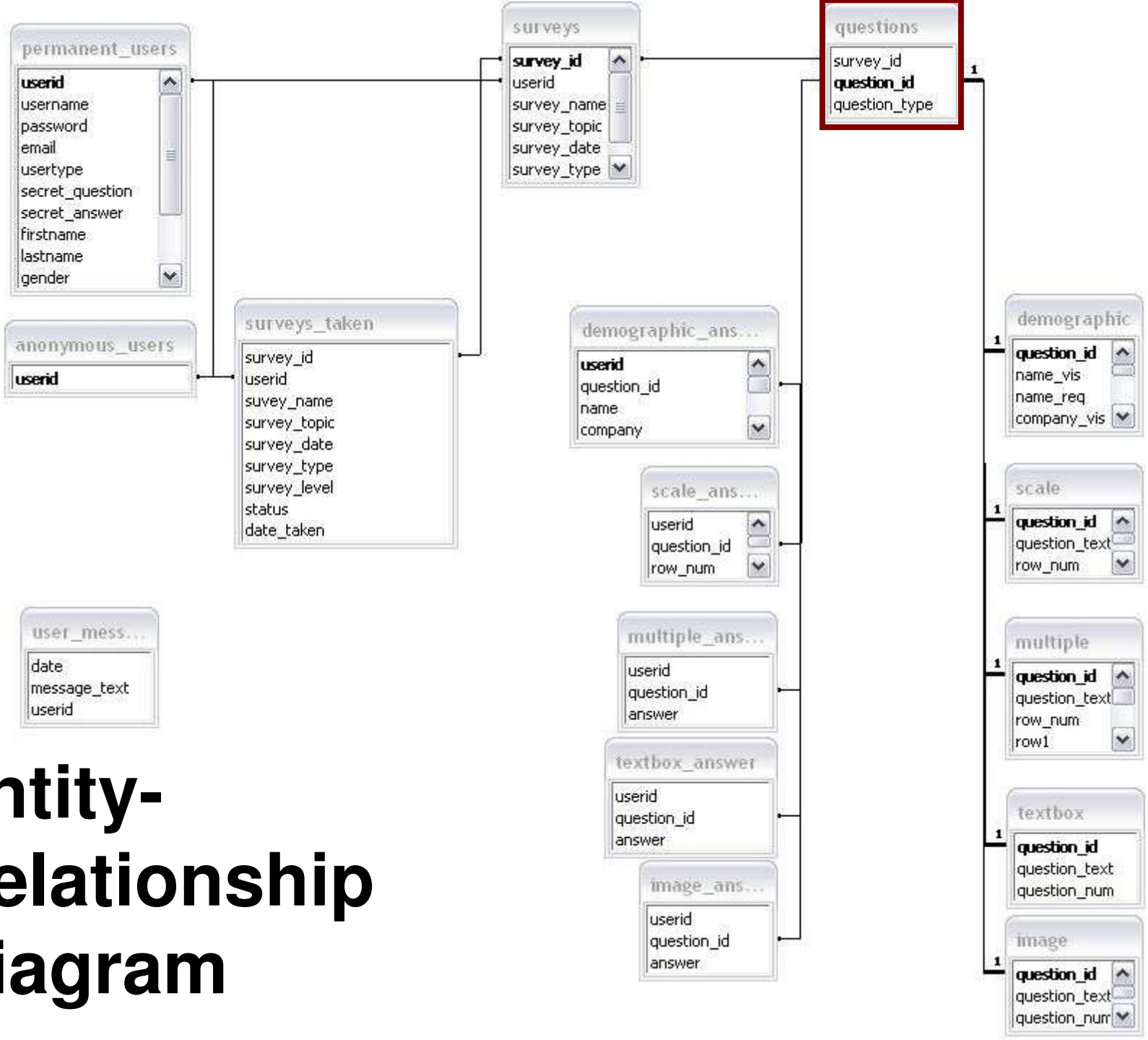
Entity-Relationship Diagram

permanent_users		
column name	**type**	**Comments**
usersid	int	Primary Key - Odd number.
username	nvarchar(16)	User specified username.
password	nvarchar(16)	user specified password
email	nvarchar(32)	pm15borc@siena.edu
user_type	int	User type: 10 = student, 20 = teacher, 30 = admin
secret_quetion	ntext	Question used to reset password if the user has lost their password.
secret_answer	ntext	Answer needed to reset password in Forgot Password page.
firstname	nvarchar(16)	User supplied first name.
lastname	nvarchar(16)	User supplied last name.
gender	nvarchar(16)	User supplied gender.
birthdate	smalldate	Birthdate in format MM/DD/YYYY
state	nvarchar(16)	User supplied state or province of residence.
zip	int	User supplied zip or postal code of residence.
time_zone	nvarchar(32)	User supplied time zone.
logged_in	boolean	Keeps track of if user is logged in. true = logged in, false = offline



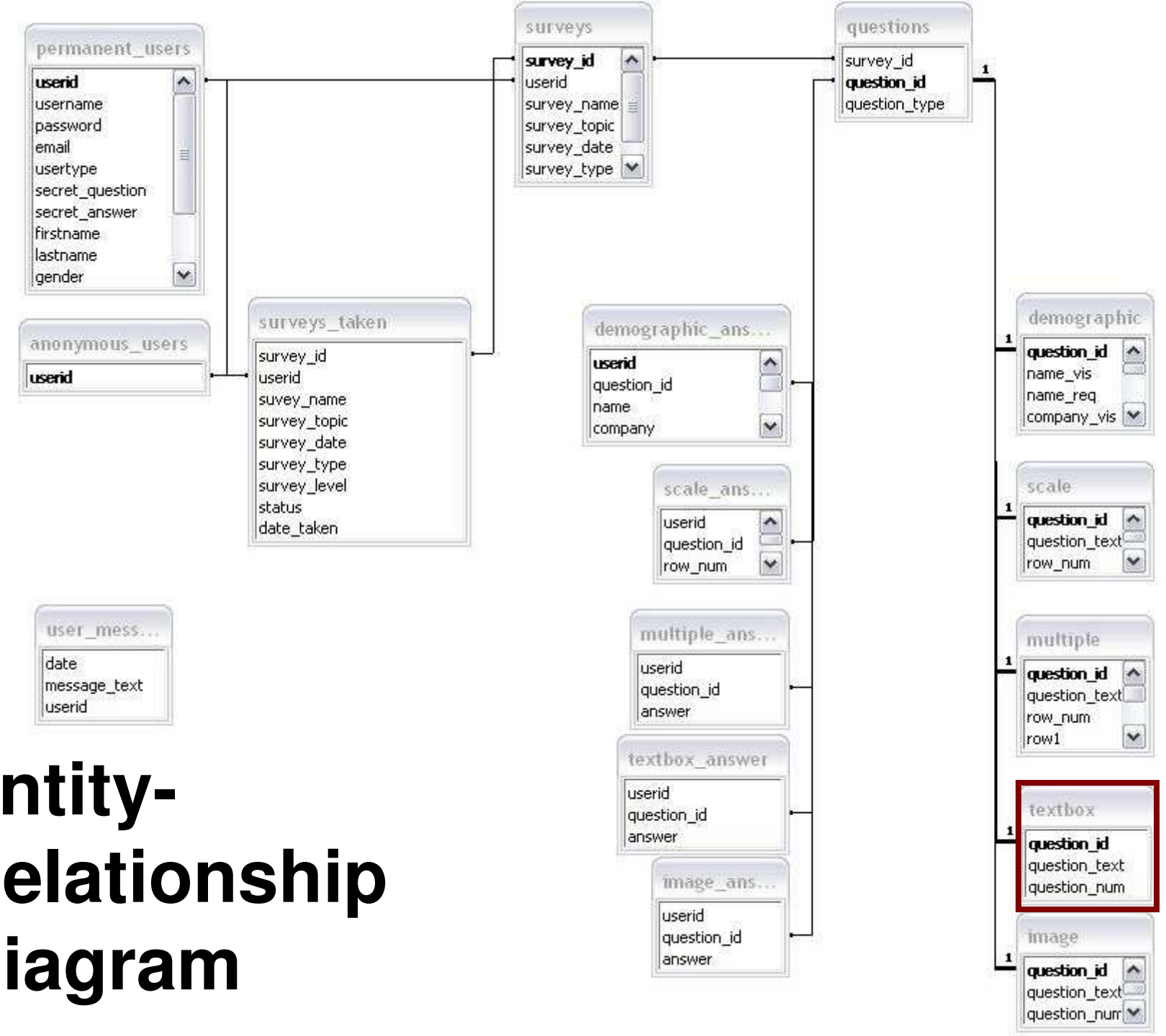
Entity-Relationship Diagram

surveys		
column name	**type**	**Comments**
survey_id	int	Primary Key
userid	int	Gotten from permanent_users table, teachers only.
survey_name	nvarchar(32)	Teacher inputted survey name.
survey_topic	nvarchar(32)	Teacher inputted survey topic.
survey_date	smalldate	Date of survey creation in format: MM/DD/YYYY
survey_type	int	Teacher selected survey type. 10 = protected, 20 = anonymous
survey_level	int	10 = unpublished, 20 = active, 30 = completed



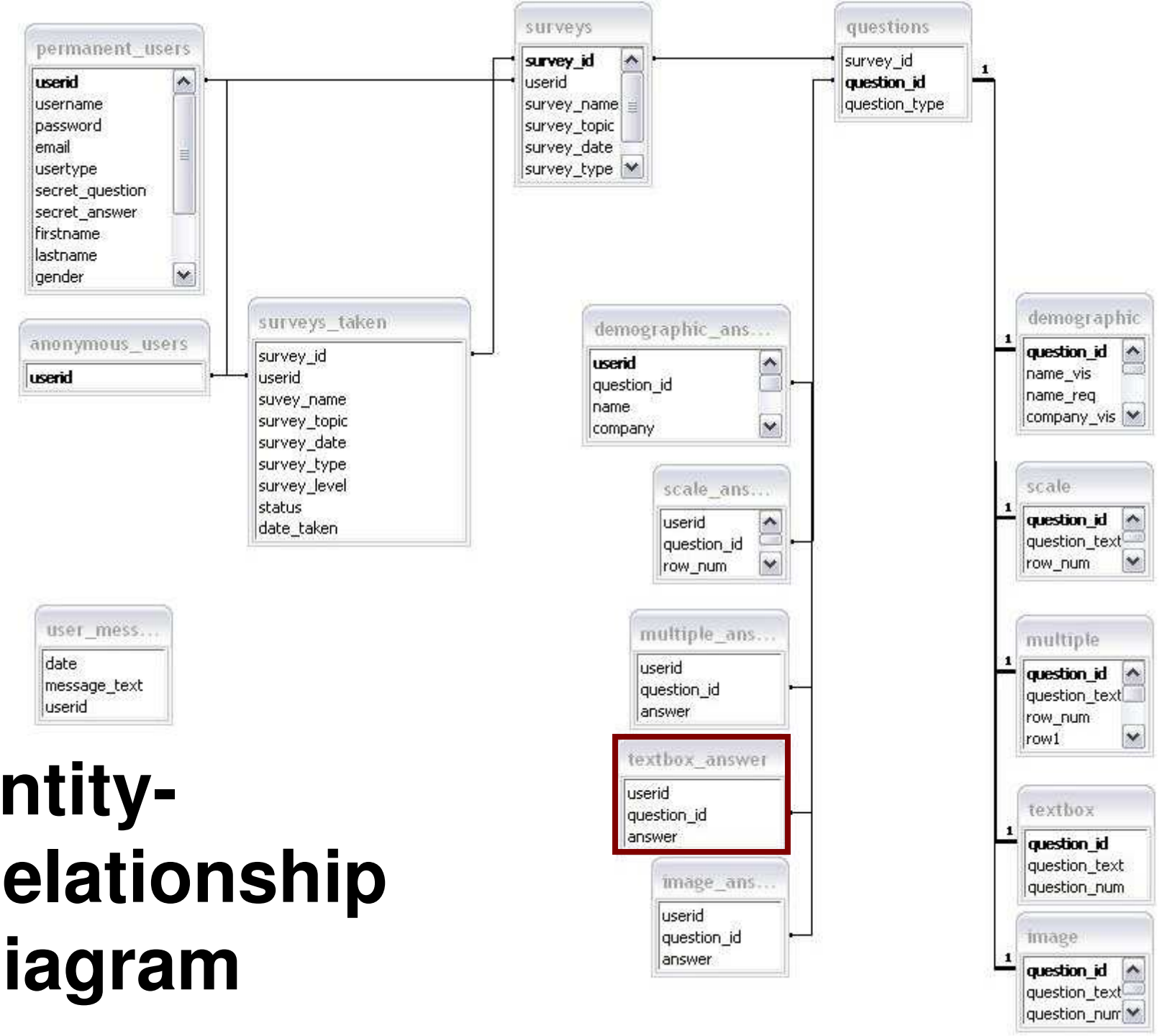
Entity-Relationship Diagram

questions		
column name	**type**	**Comments**
survey_id	int	Taken from surveys table.
question_id	int	Primary Key
question_type	int	There are five types of questions and they each have a numerical representation in the database. 10 = demographics, 20 = scale, 30 = multiple choice, 40 = textbox, 50 = image



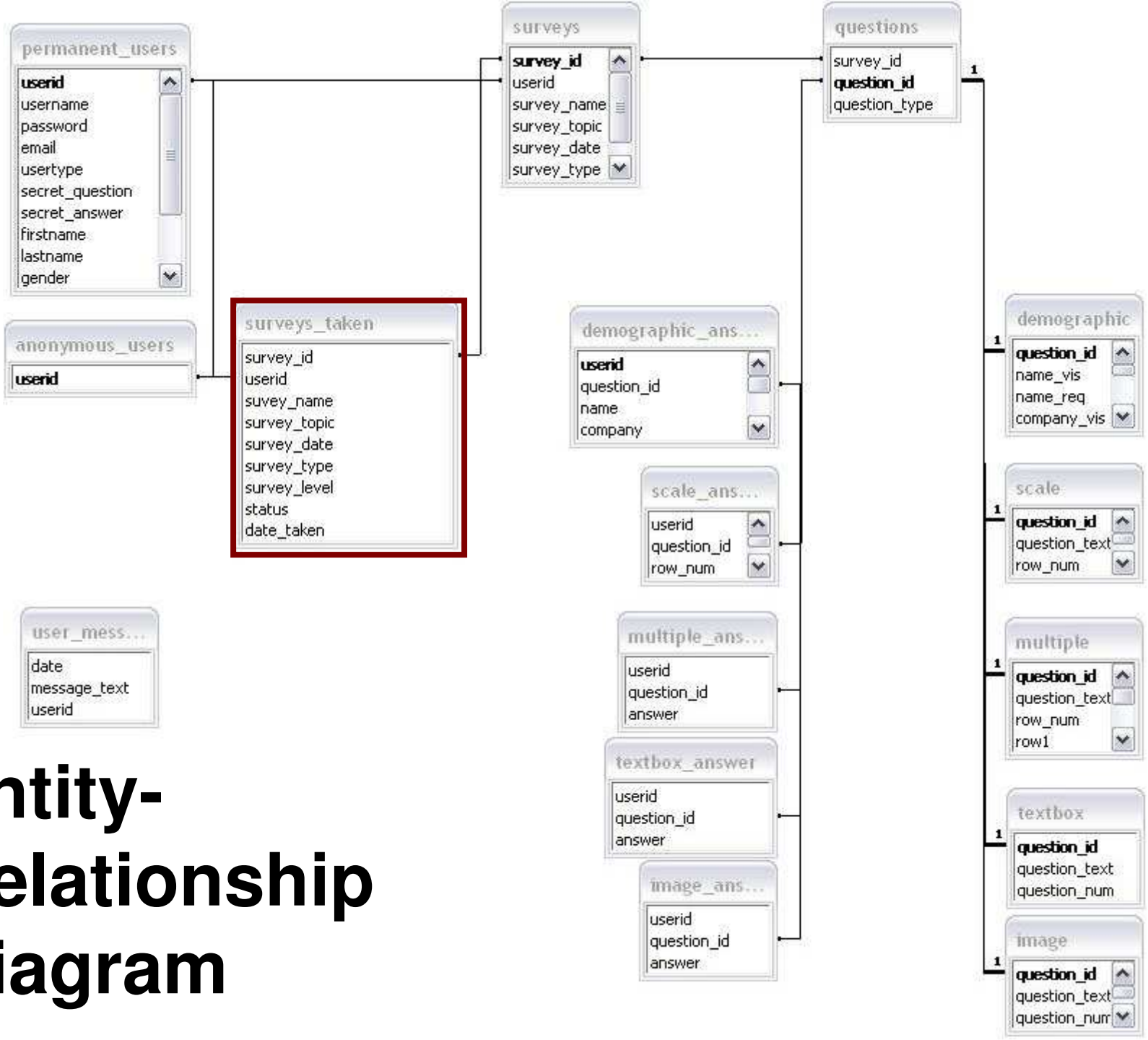
Entity-Relationship Diagram

textbox		
column name	**type**	**Comments**
question_id	int	Taken from question table.
question_text	ntext	Teacher inputted question text.
question_num	int	Position to display in survey.



Entity-Relationship Diagram

textbox_answer		
column name	**type**	**Comments**
userid	int	Taken from anonymous and permanent tables, only students.
question_id	int	Taken from questions table.
answer	ntext	User inputted answer.



Entity-Relationship Diagram

surveys_taken		
column name	**type**	**Comments**
survey_id	int	Taken from surveys table.
userid	int	Gotten from permanent_users table and anonymous, students only.
survey_name	nvarchar(32)	Teacher inputted survey name.
survey_topic	nvarchar(32)	Teacher inputted survey topic.
survey_date	smalldate	Date of survey creation in format: MM/DD/YYYY
survey_type	int	Teacher selected survey type. 10 = protected, 20 = anonymous
survey_level	int	10 = unpublished, 20 = active, 30 = completed
status	boolean	Keeps track of whether the survey has been taken. Set to true for anonymous users. false = not taken, true = taken
date_taken	smalldate	Date the survey was taken in format. MM/DD/YYYY

AGENDA

- Problem Definition – Ryan Rose
- Prototypes – Ryan May
- Database Design – Paul Borchers
- **Test Plan – Vito Urbano**
- Timeline – Vito Urbano
- What's Next, Important Dates, and Questions – Paul Borchers

TESTING OBJECTIVES

- The software must meet all functional requirements.
- Good testing will uncover errors.
- Many phases of testing.

SYSTEM TESTING

- Validating the specified functional requirements.
- Crucial part of the test plan.
- Helps us determine if all requirements were met.

UNIT TESTING

- Test each program unit individually.
- Each unit must be free of errors.
- Each webpage is a separate unit.
- Each unit has test cases within them.

UNIT TESTING EXAMPLE

Test Number 1 - Log in Page

Number	Test Case Name	Description	Input	Expected Result	Actual Result/Comments	Test Result (Pass/Fail)
1.1	Login page loads	Correct page loads	N/A	Login page loads and all components are displayed		
1.2	Correct Login - Administrator	Login with valid administrator account and password	Administrator username and password	Administrator Welcome page opens		
1.3	Correct Login - Teacher	Login with valid teacher account and password	Teacher username and password	Teacher Welcome page opens		
1.4	Correct Login - Student	Login with valid student account and password	Student username and password	Student Welcome page opens		
1.5	Incorrect Username Login	Login with invalid username	Username	Error message stating that the username is incorrect is displayed		
1.6	Incorrect Password Login	Login with invalid password	Password	Error message stating that the password is incorrect is displayed		
1.7	Login with empty fields	Login with user name and password field s empty.	N/A	Error message stating that the fields are empty is displayed		
1.8	Select Save My E-Mail Address & Password	Selects Save My E-Mail Address & Password bubble	Save My E-Mail Address & Password	E-mail address & password of user appears everytime this page is accessed		
1.9	Select Save My E-Mail Address	Selects Save My E-Mail Address bubble	Save My E-Mail Address	E-mail address of user appears everytime this page is accessed		
1.10	Select Always Ask For My E-Mail Address & Password	Selects Save My E-Mail Address & Password bubble	Always ask	E-mail address & password of user never appears when this page is accessed		
1.11	Click Register Now - Teacher	User clicks the Teacher Register Now button	Teacher	The Teacher Account Creation page opens		
1.12	Click Register Now - Student	User clicks the Student Register Now button	Student	The Student Account Creation page opens		
					Summary of Tests for this Unit	

INTEGRATION TESTING

- Separate units become a whole.
- Functionality and interaction of integrated units.
- Errors at this stage lead to regression testing.
- System stops working normally.
- System stops completely.
- Find regression bugs causing errors.

INTEGRATION TESTING TABLE

Unit Number	Linked Units
1	2, 3, 4, 5, 6
2	1
3	1
4	7, 8, 9, 10, 11, 12, 18
5	7, 13, 14, 15, 18
6	16, 17, 18
7	4, 5
8	4
9	4
10	4
11	4
12	4
13	5, 18
14	5, 18
15	5, 18
16	6
17	6, 18
18	4, 5, 6, 13, 14, 15, 17

TESTING SUMMARY

- Testing Manager ensures thorough testing.
- Attempting to meet clients pass/fail criteria.
- Tests, errors, resolutions delivered at acceptance test.

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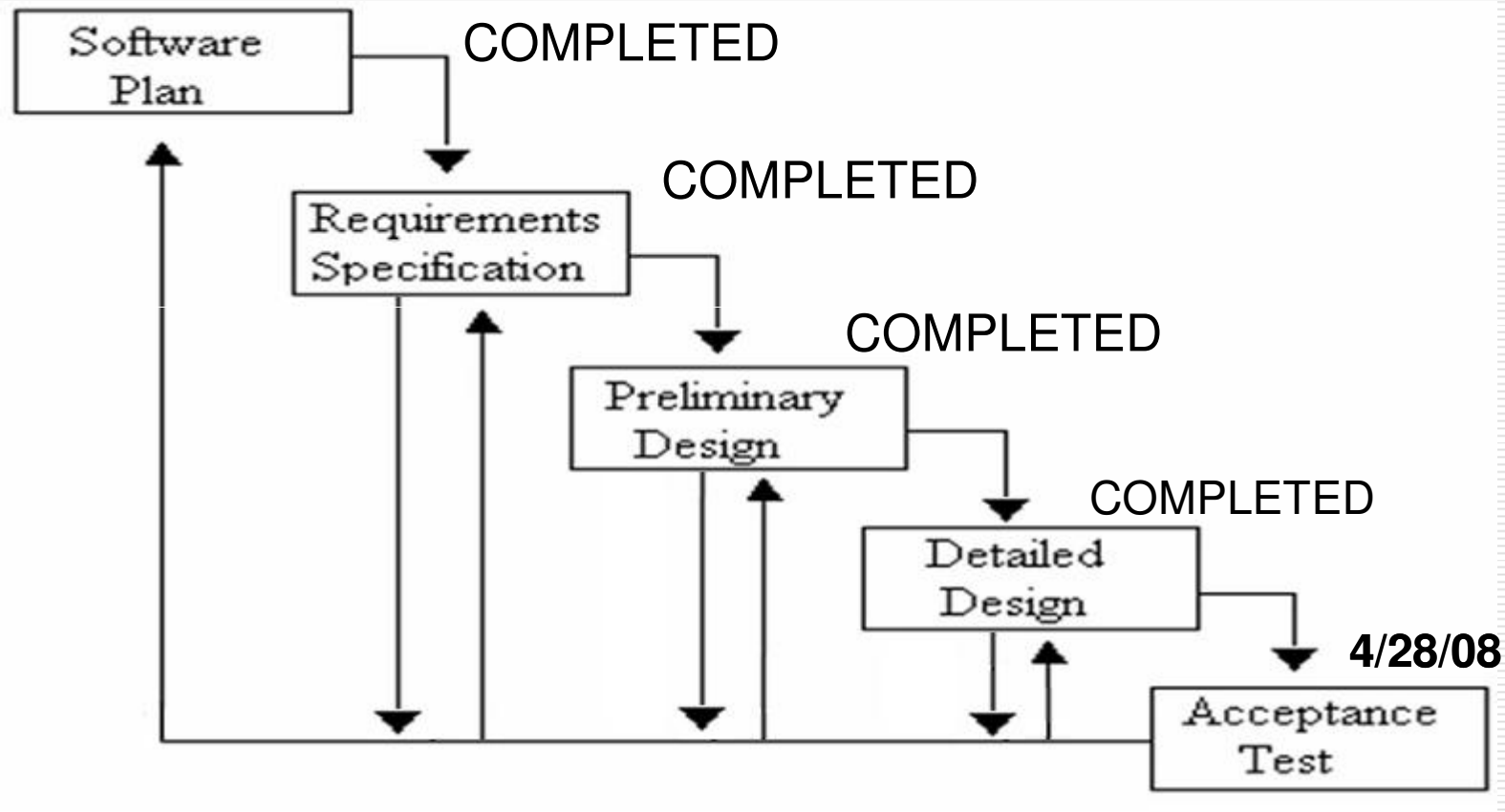
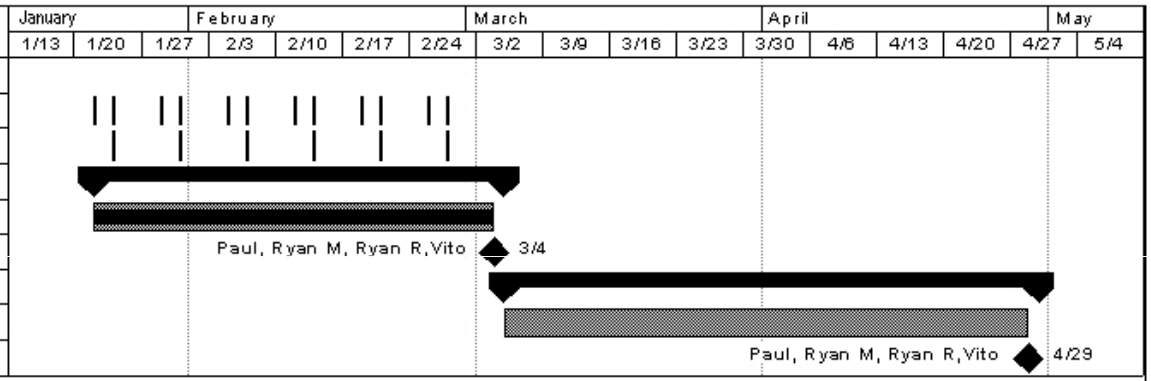
WATERFALL MODEL



DEVELOPMENT TIMELINE

ID	Task Name	Duration
1	Bad Robot Enterprises	
2	Team Meetings	27 days
15	Client Meetings	25 days
22	Detailed Design	31 days
23	Detailed Design Document	30 days
24	Detailed Design Presentation	1 day
25	Acceptance Test	40 days
26	Acceptance Test Document	39 days
27	Acceptance Test Presentation	1 day



Bad Robot Enterprises
Project: Gantt Second Semester
Date: Sun 3/2/08

Task
Progress
Milestone
Summary

Software Engineering II Spring '08 Timeline

AGENDA

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- Test Plan – Vito Urbano
- Timeline – Vito Urbano
- **What's Next, Important Dates, and Questions – Paul Borchers**

SUMMARY - QUESTIONS?

- Problem Definition
- Data Flow Diagrams & Structure Diagram
- Data Identification
- Prototypes
- Test Plan
- **What's Next, Summary, and Questions**

IMPORTANT DATES

- **End of Semester Party**
  - Monday, May 5th at 8:00pm
  - Boland Room
    - Ben Kuhn House (Alumni House)
  - Our Project will be presented.
  - A Team Song will be presented.

IMPORTANT DATES

- **Acceptance Test Due**
  - Monday, April 28th
- **Acceptance Presentation**
  - Tuesday, April 29th
    - 1 hour presentation from 6-9 pm

ANY QUESTIONS?