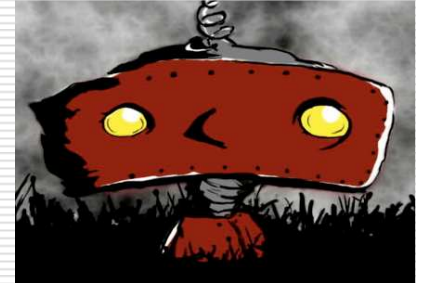


# BAD ROBOT ENTERPRISES

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## INTERNATIONAL ONLINE SURVEY (IOS) PRELIMINARY DESIGN

Roger Bacon Science Center, Room 328  
November 28th, 2007  
8:15 am

# WELCOME

---

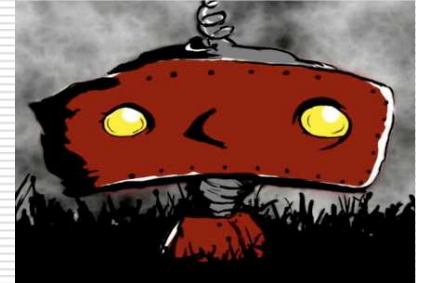


Dr. Darren Lim  
Computer Science  
Siena College

Dr. Manimoy Paul  
Quantitative Business Analysis  
Siena College

# TEAM MEMBERS

---



Paul Borchers.....Team Leader  
pm15borc@siena.edu

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

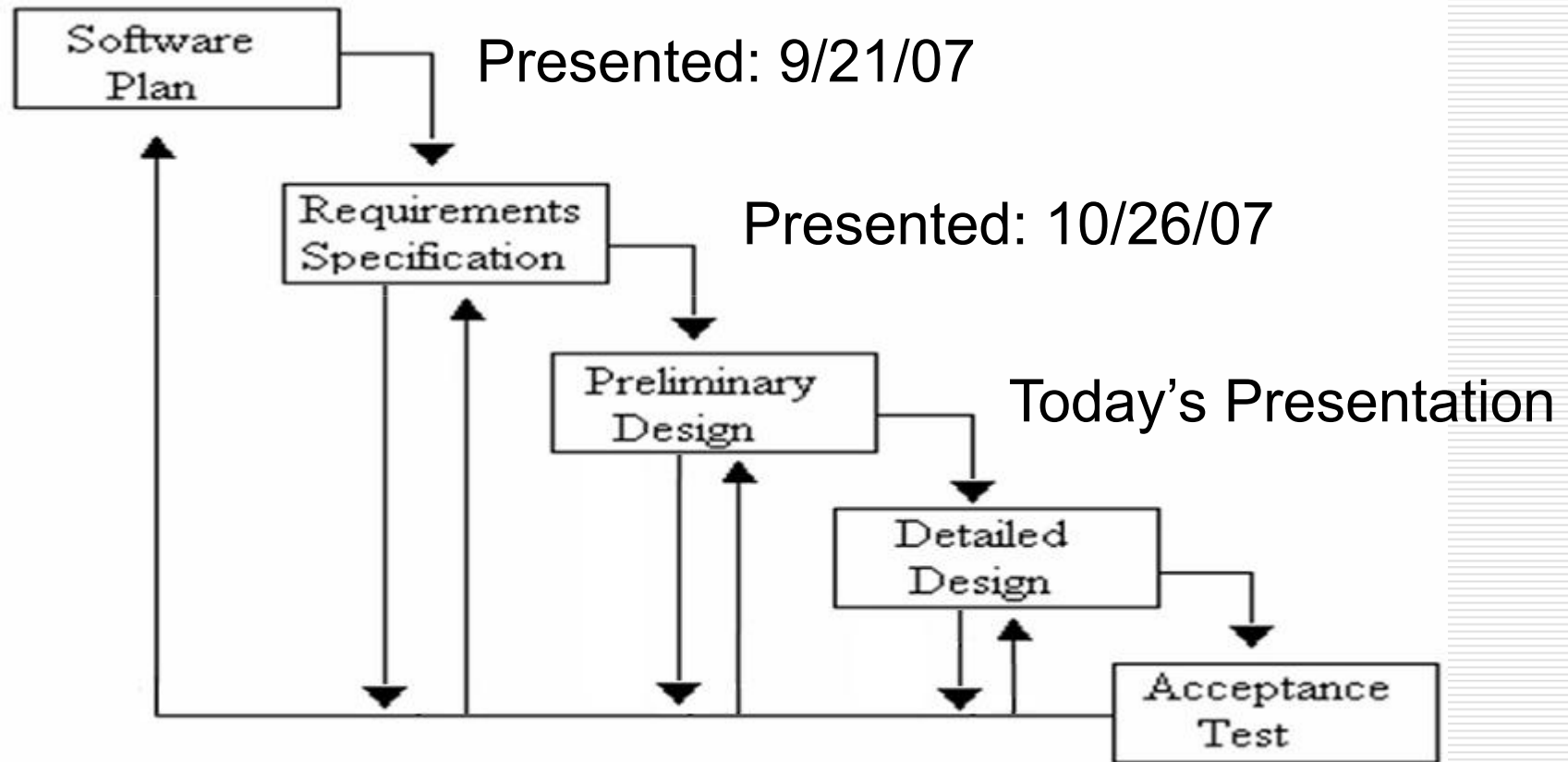
Ryan May.....Webmaster  
r15may@siena.edu

Ryan Rose.....Systems Administrator  
rc26rose@siena.edu



# CURRENT PROGRESS

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# AGENDA

---



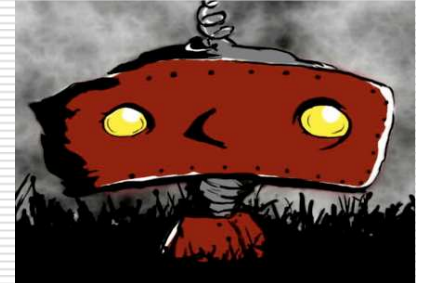
- ❑ Problem Definition – Paul Borchers
- ❑ Data Flow Diagrams & Structure Diagram – Ryan Rose
- ❑ Logical Data Stores – Vito Urbano
- ❑ Prototypes – Ryan May
- ❑ Test Plan – Vito Urbano
- ❑ What's Next, Summary, and Questions – Paul Borchers

# AGENDA

---



- ❑ **Problem Definition – Paul Borchers**
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# PROBLEM DEFINITION

---

- Web based survey creation application.
- To be able to create and distribute surveys.
- Two types of surveys: anonymous and protected.
- Administrators oversee, teachers create, students take.
- Download of results to local computer.

# AGENDA

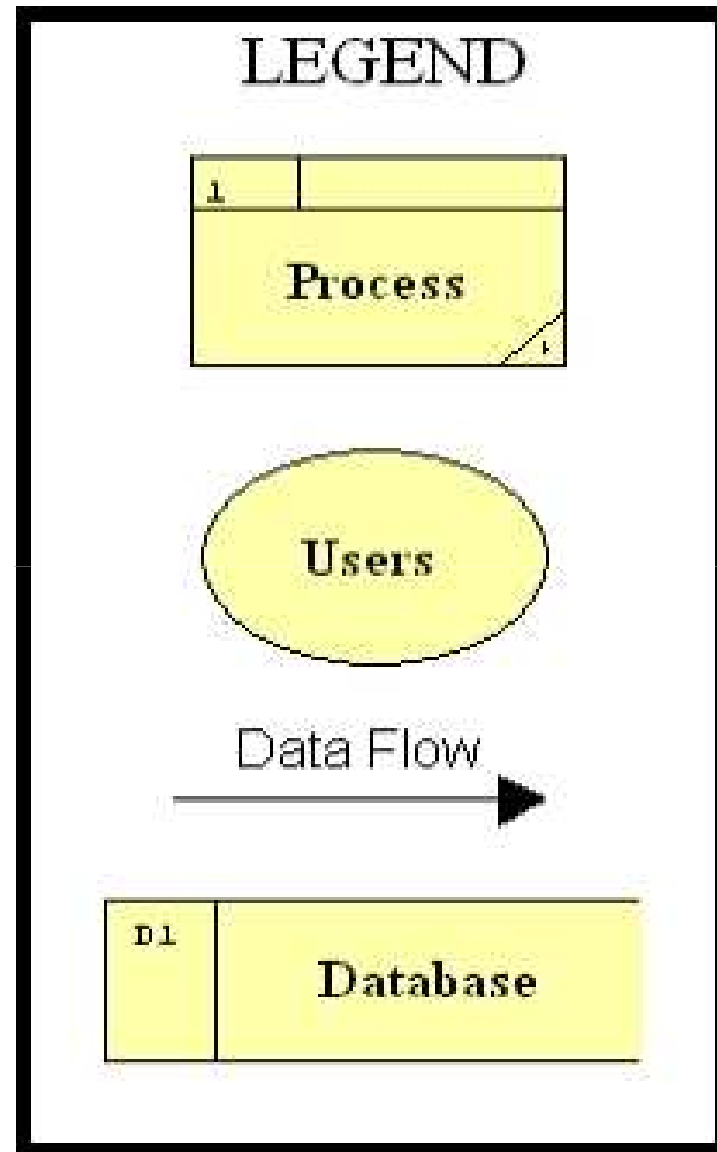
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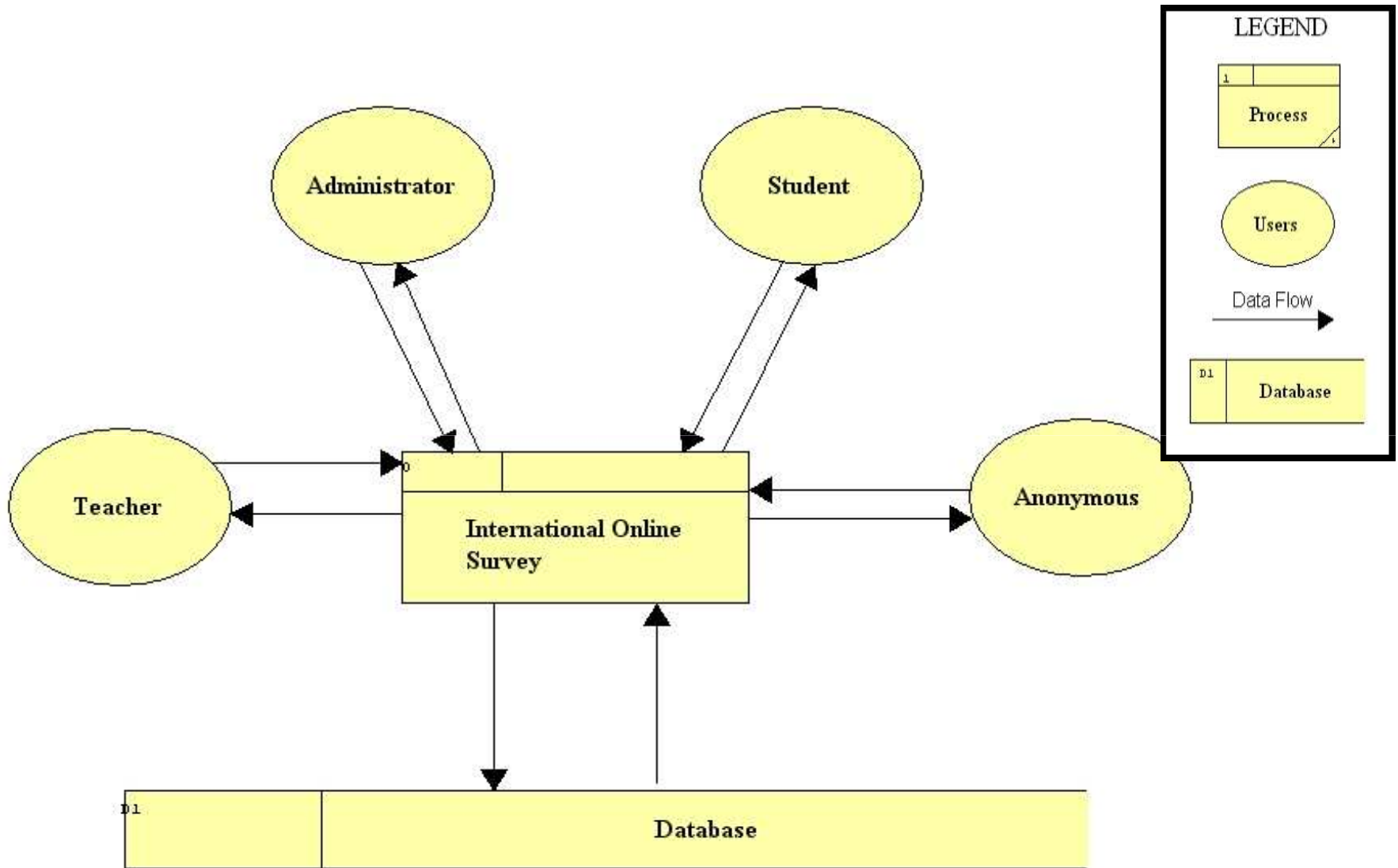
- Problem Definition – Paul Borchers
- **Data Flow Diagrams & Structure Diagram – Ryan Rose**
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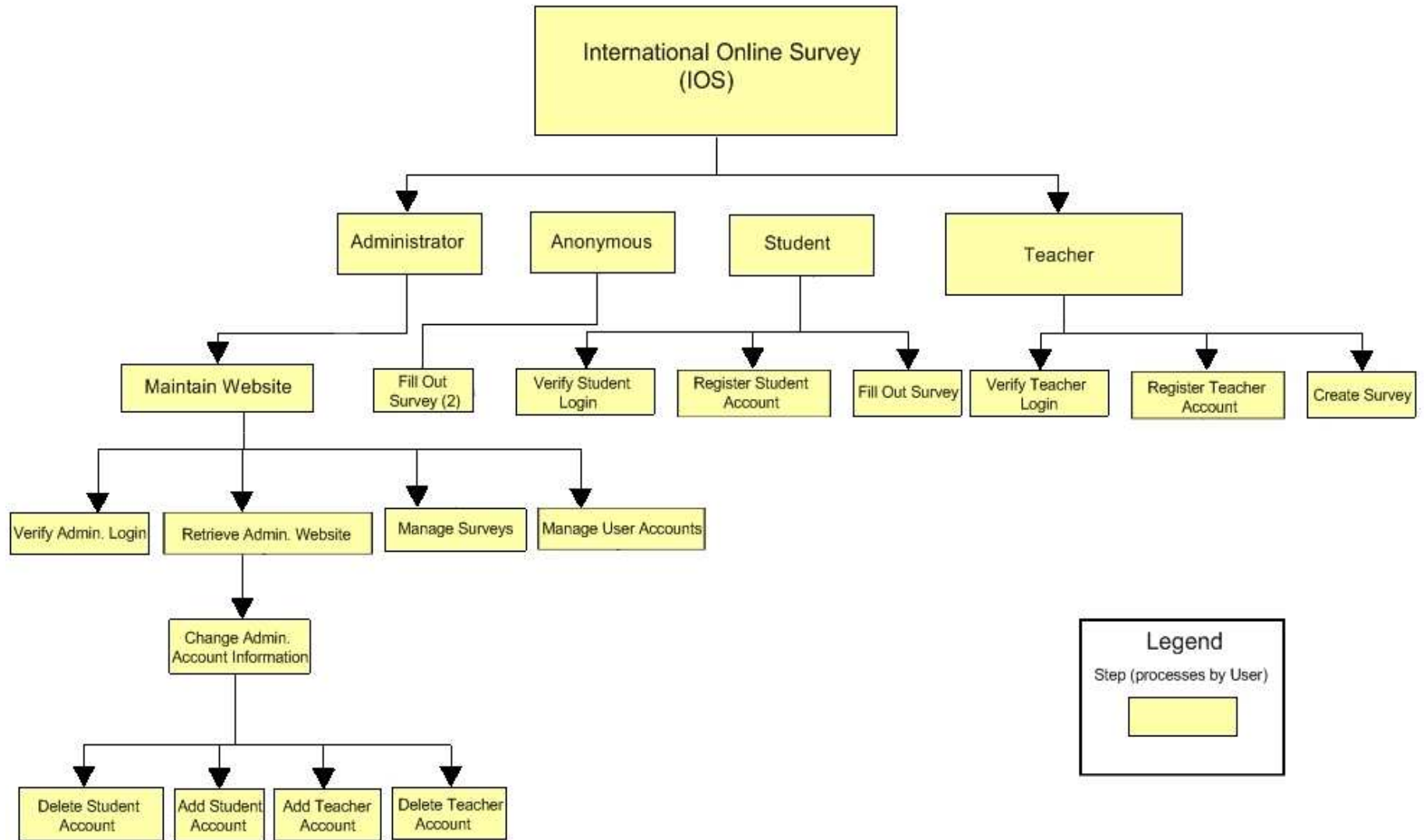
# DATA FLOW DIAGRAM



# CONTEXT DIAGRAM

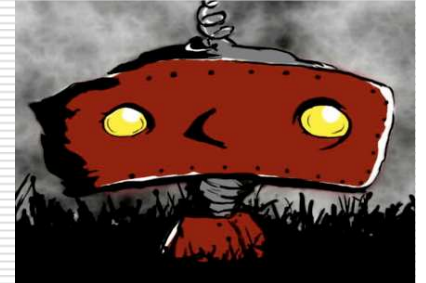


## Structure Diagram



# AGENDA

---



- ❑ Problem Definition – Paul Borchers
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- ❑ **Data Identification – Vito Urbano**
- ❑ Prototypes – Ryan May
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- ❑ What's Next, Summary, and Questions – Paul Borchers

# DATA IDENTIFICATION

---



- Preliminary description of the data stored in the International Online Survey database.
- The data is presented in a layout of a table structure.
- Primary Keys are underlined.

# DATA IDENTIFICATION

---



## □ Table: Survey

### Fields:

ID: NUMBER

-Survey's identification number

Name: VARCHAR(50)

-Survey's name

Password: VARCHAR(12)

-Survey's password if protected

Qtype: VARCHAR(20)

-Survey question type

# DATA IDENTIFICATION

---



Answer: VARCHAR(50)  
-Answer to survey question

Stype: VARCHAR(15)  
-Type of survey

Sdate: VARCHAR(8)  
-Survey date

Slocation: VARCHAR(20)  
-Location of survey

User\_type: VARCHAR(15)  
-The type of user

# AGENDA

---



- Problem Definition – Paul Borchers
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  - Prototypes – Ryan May**
  - Test Plan – Vito Urbano
  - What's Next, Summary, and Questions – Paul Borchers
-



# LOGIN PAGE

IOS

LOG IN NOW

REGISTER

E-mail address:

Password:

[Forgot your password?](#)

Save my e-mail address and password

Save my e-mail address

Always ask for my e-mail address and password

As a Teacher

As a Student

# ADMINISTRATOR WELCOME

## IOS Administrator

[Manage Account](#) | [Create Accounts](#) | [List Current Users](#) |

Welcome - Paul Borchers

### Current Stats

Total Users : 500

Current Users Logged In: 68

Total Surveys Created: 1500

Total Surveys Published: 1100

### Current Users Logged In

Name	Account Type	Delete
<u>Borchers, Paul</u>	Student	<input type="checkbox"/>
<u>User1</u>	Student	<input type="checkbox"/>
<u>User2</u>	Teacher	<input type="checkbox"/>
<u>User3</u>	Student	<input type="checkbox"/>

### Quality Control

Messages from Users	Date
Can my account be .....	12/5/2007
What should I do if .....	12/8/2007

#### Survey Word Alerts

Survey name	# Alerts	Date	Teacher	Ban
Bob's Survey	15	11/6/07	Barker, Bob	<input type="checkbox"/>
Paul	10	11/8/07	Borchers, Paul	<input type="checkbox"/>

### Surveys

Name	Topic	Date	Delete
Test Survey 1	CSIS	11/2/07	<input type="checkbox"/>
Test Survey 2	Math	11/7/07	<input type="checkbox"/>
Test Survey 3	Poly	11/8/07	<input type="checkbox"/>
Test Survey 4	Physics	11/9/07	<input type="checkbox"/>

# ADMINISTRATOR ACCOUNT MANAGEMENT PAGE

The screenshot displays a web interface for account management. At the top, a dark blue header contains the text "IOS" on the left and "Manage Your Account" on the right. Below the header, the form includes the following elements:

- A "New Username" label followed by a text input field.
- A "Change Password" section containing:
  - A "Password:" label followed by a text input field.
  - A note: "The password must contain at least six characters and is case sensitive."
  - A "Password strength:" label followed by three radio button options: "Weak", "Medium", and "Strong".
  - A "Retype password:" label followed by a text input field.
- A "Question:" label followed by a text input field.
- A "Secret answer:" label followed by a text input field.
- A "Submit" button located at the bottom right of the form area.

# ADMINISTRATOR ACCOUNT CREATION PAGE

IOS Create An Account

Email Address :

Type of Account :  Teacher  
 Student

# LIST CURRENT USERS (ADMINISTRATOR)

IOS List Current Users

Sort Users A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

**-OR-**

Search  Students  Teachers  Both

# LIST CURRENT USERS RESULTS PAGE

IOS List Current Users	
Results for A	
<b>Name</b>	<b>Account Type</b>
<b>Alfree, Tom</b>	<b>Student</b>
<b>Arket, Elizabeth</b>	<b>Teacher</b>
<b>Atkins, Gina</b>	<b>Student</b>

# USER PAGE (STUDENT)

IOS

Wiggin, Ender

## Student Profile

**Name:** Wiggin, Ender  
**Age:** 21  
**Gender:** Male  
**Zip Code:** 12211  
**State:** New York  
**Birth Date:** March 15, 1986  
**Education:** under-graduate  
**Major:** Computer Science

## Surveys Taken

Name	Topic	Date
Test Survey 1	CSIS	11/7/07

## Surveys Not Taken

Name	Topic	Date
Test Survey 4	Physics	11/1/07

# USER PAGE (TEACHER)

IOS

Borchers, Paul

## Teacher Profile

**Name: Paul Borchers**

## Active Surveys

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

## Published Surveys

Name	Topic	Date
Soda	Types	11/18/07
NetMeeting	Remote	11/19/07

## Unpublished Surveys

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



# TEACHER WELCOME

The screenshot displays the 'IOS Teacher' interface. At the top, there are navigation links for 'Manage Account' and 'Create a Survey', along with a search bar. Below the navigation is a welcome message: 'Welcome Paul Borchers'. The main content is divided into two columns. The left column is titled 'History' and contains a sub-section 'Completed Surveys' with a table of four surveys. The right column is titled 'Active and Unpublished Surveys' and contains two sub-sections: 'Active Surveys' with a table of two surveys, and 'Unpublished Surveys' with a table of one survey.

**IOS Teacher**

Manage Account | Create a Survey |  search

Welcome Paul Borchers

### History

— Completed Surveys

Name	Topic	Date	Delete	Download
Test Survey 1	CSIS	11/2/07	<input type="checkbox"/>	<input type="button" value=".txt"/>
Test Survey 2	Math	11/7/07	<input type="checkbox"/>	<input type="button" value=".txt"/>
Test Survey 3	Poly	11/8/07	<input type="checkbox"/>	<input type="button" value=".txt"/>
Test Survey 4	Physics	11/9/07	<input type="checkbox"/>	<input type="button" value=".txt"/>

### Active and Unpublished Surveys

— Active Surveys

Name	Topic	End Date	Delete	Stop
Active Survey1	History	11/15/07	<input type="checkbox"/>	<input type="checkbox"/>
Active Survey2	Software	11/16/07	<input type="checkbox"/>	<input type="checkbox"/>

— Unpublished Surveys

Name	Topic	Date	Activate	Delete
Paul Survey	Astronomy	11/18/07	<input type="checkbox"/>	<input type="checkbox"/>

# TEACHER ACCOUNT CREATION

## IOS Create Your Account (Teacher)

**Username :**

**Create your password**

**Password:**   
The password must contain at least six characters and is case sensitive.

**Password strength:**  Weak  Medium  Strong

**Retype password:**

---

**Create your password reset options:**

**Question:**

**Secret answer:**   
Five character minimum; not case sensitive

**Alternate e-mail address:**   
Optional

# TEACHER ACCOUNT MANAGEMENT PAGE

## IOS Manage Your Account

New Username :

Change Password

Password:   
The password must contain at least six characters and is case sensitive.

Password strength:  Weak  Medium  Strong

Retype password:

---

Question:

Secret answer:

# STUDENT WELCOME

**IOS Student**

Manage Account  search

Welcome Paul Borchers

History		
Name	Topic	Date
Test Survey 1	CSIS	11/2/07
Test Survey 2	Math	11/7/07
Test Survey 3	Poly	11/8/07
Test Survey 4	Physics	11/9/07

Non-Completed Surveys		
Name	Topic	Date
Excel	Excel Test	11/19/07
Novell	Novell Test	11/20/07

# STUDENT ACCOUNT MANAGEMENT PAGE

## IOS Manage Your Account

**New Username :**

**Change Password**

Password:   
The password must contain at least six characters and is case sensitive.

Password strength:  Weak  Medium  Strong

Retype password:

---

**Question:**

Secret answer:

---

**Edit Your Account Information**

First name:

Last name:

Gender:  Male  Female

Birth date: Month  Day

State:

ZIP code:

Time zone:

I own or work with a small business

# STUDENT SURVEY PAGE

The screenshot shows a web interface for a survey. At the top, there is a dark blue header with the text 'IOS' on the left and 'Take A Survey' in the center. Below the header, there is a navigation bar with 'Manage Account' on the left and a search box with a 'search' button on the right. The main content area has a light green background and contains four questions:

- 1. What is Software Engineering?**  
This question has four radio button options, each labeled 'sample answer'.
- 2. How much do you like doing Software Engineering:**  
This is a Likert scale question with four radio button options: 'little', 'little more', 'neutral', and 'love it'. Below the options are three rows of items: 'documents', 'tests', and 'presentations', each with a radio button under each of the four scale options.
- 3. What do you do in Software Engineering?**  
This question has a single text input field.
- 4. What are 4 different definitions of Software Engineering**  
This question has four radio button options: 'ACM', 'IEEE', 'Freeman', and 'Bauer'. Each option is followed by a text input field.

# STUDENT ACCOUNT CREATION

## IOS Create Your Account (Student)

**Username :**

**Create your password**

**Password:**   
The password must contain at least six characters and is case sensitive.

**Password strength:**  Weak  Medium  Strong

**Retype password:**

---

**Create your password reset options**

**Question:**

**Secret answer:**   
Five character minimum; not case sensitive

**Alternate e-mail address:**   
Optional

---

**Enter your account information**

**First name:**

**Last name:**

**Gender:**  Male  Female

**Birth date:**

**State:**

**ZIP code:**

**Time zone:**

I own or work with a small business

# TEACHER INITIAL SURVEY CREATION PAGE

IOS Create A Survey

Manage Account | Create a Survey

search

Enter Your Survey's Topic

Enter Your Survey's Name

Make Your Questions:

- Anonymous
- Protected

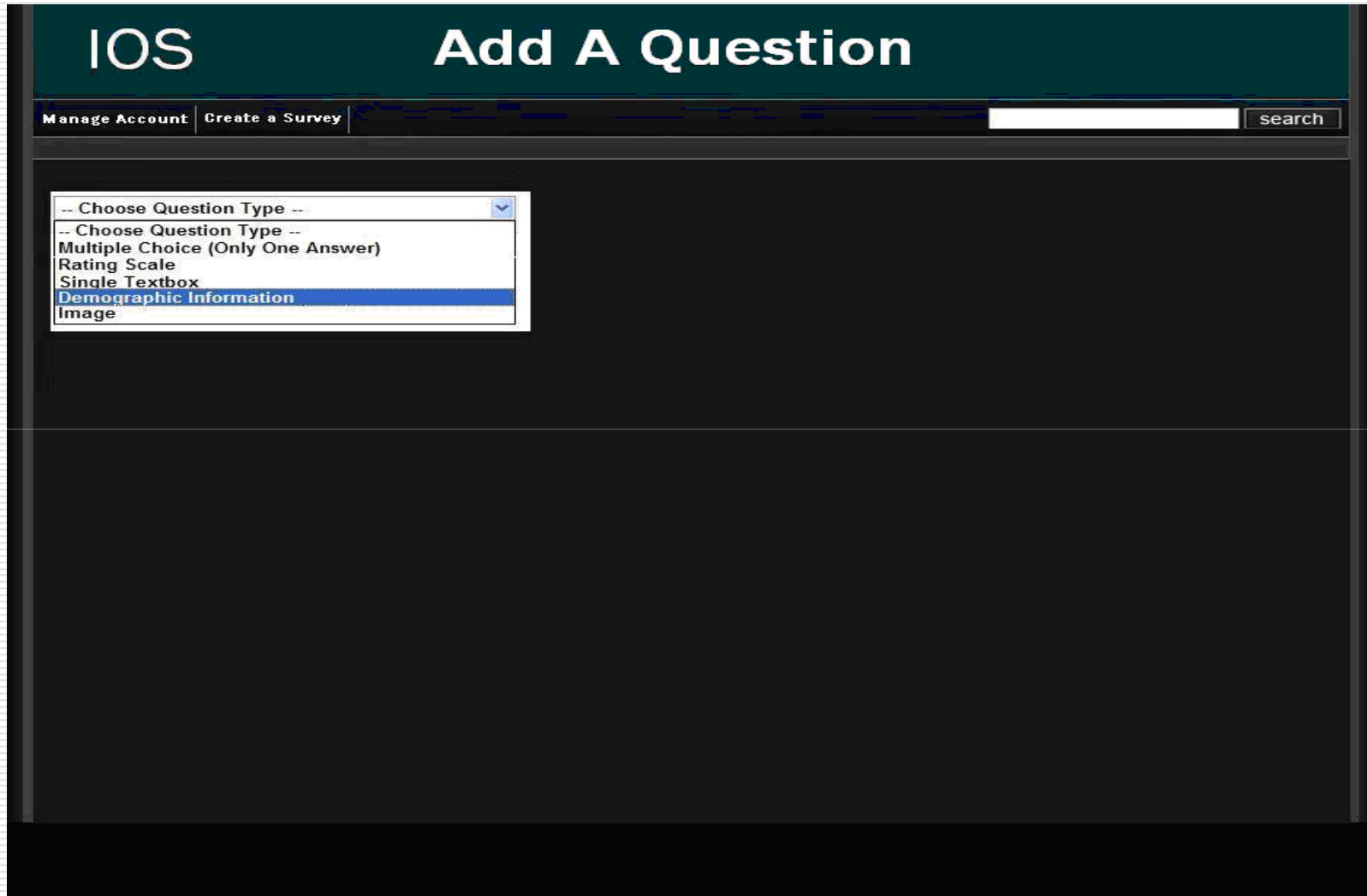
Submit



# TEACHER EDIT SURVEY PAGE (BLANK)



# TEACHER ADD A QUESTION PAGE (BLANK)



# DEMOGRAPHIC

## IOS Add A Demographic Question

[Manage Account](#) | [Create a Survey](#)

-- Choose Question Type --  
-- Choose Question Type --  
Multiple Choice (Only One Answer)  
Rating Scale  
Single Textbox  
**Demographic Information**  
Image

### Contact Information

Name:	<input type="text" value="Ryan May"/>	<input checked="" type="checkbox"/> Visible	<input checked="" type="checkbox"/> Answer Required
Company:	<input type="text" value="Area 51"/>	<input checked="" type="checkbox"/> Visible	<input checked="" type="checkbox"/> Answer Required
Address 1:	<input type="text" value="Classified"/>	<input checked="" type="checkbox"/> Visible	<input checked="" type="checkbox"/> Answer Required
Address 2:	<input type="text" value="Classified"/>	<input checked="" type="checkbox"/> Visible	<input checked="" type="checkbox"/> Answer Required
City/Town:	<input type="text" value="Classified"/>	<input checked="" type="checkbox"/> Visible	<input checked="" type="checkbox"/> Answer Required
State/Province:	<input type="text" value="Classified"/>	<input checked="" type="checkbox"/> Visible	<input type="checkbox"/> Answer Required
ZIP/Postal Code:	<input type="text" value="Classified"/>	<input checked="" type="checkbox"/> Visible	<input checked="" type="checkbox"/> Answer Required
Country:	<input type="text" value="United States"/>	<input checked="" type="checkbox"/> Visible	<input checked="" type="checkbox"/> Answer Required

# RATING SCALE

## IOS Add a Rating Scale 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**

**Row Choices (each choice on separate lines)**

**Column Choices**

Select the number of ratings below

4

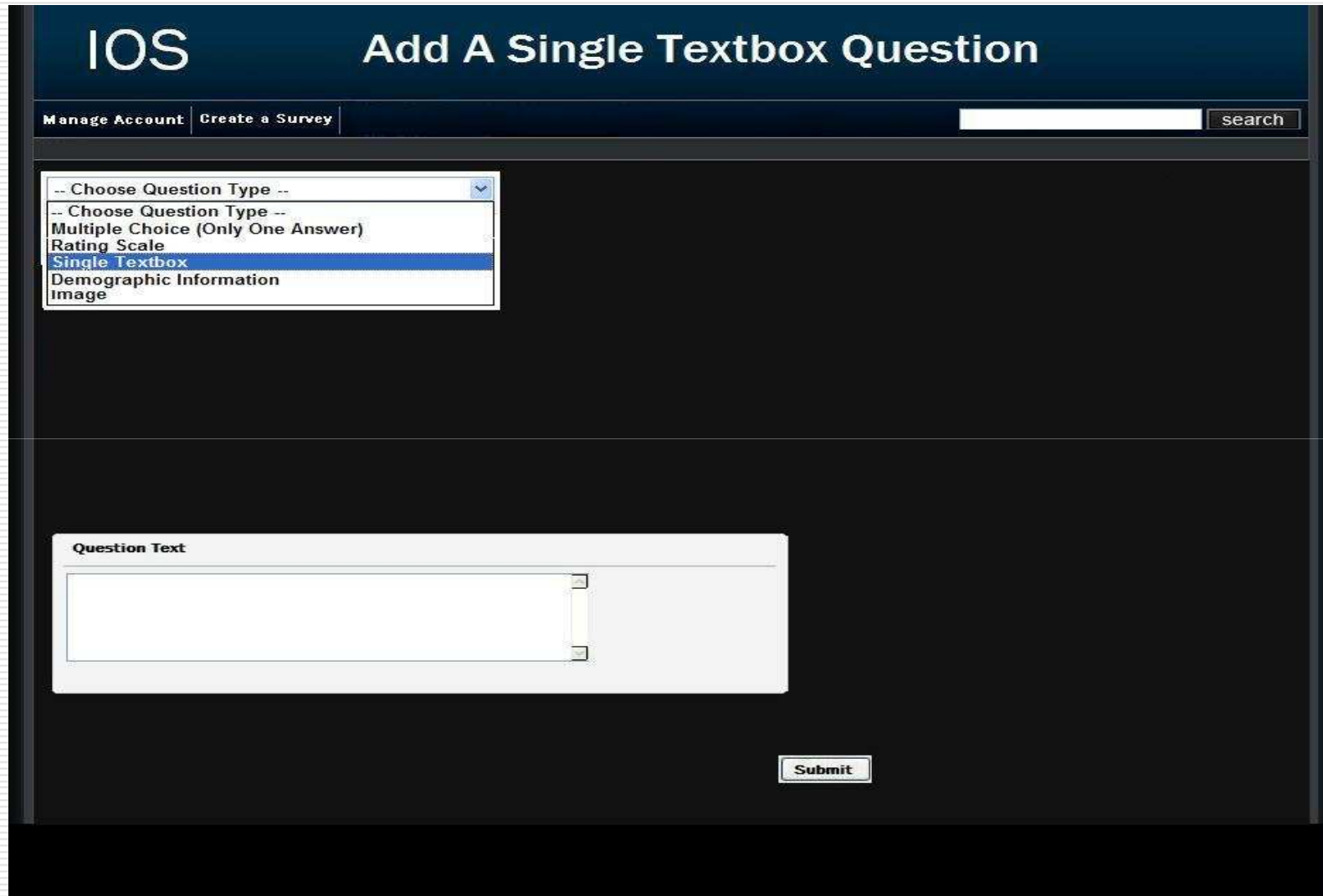
Label:		Weight:	1
Label:		Weight:	2
Label:		Weight:	3
Label:		Weight:	4

Submit

# MULTIPLE CHOICE

The screenshot shows a mobile application interface with a dark blue header. The header contains the text "IOS" on the left and "Add A Multiple Choice Question" in the center. Below the header is a navigation bar with two tabs: "Manage Account" and "Create a Survey". To the right of the tabs is a search bar with the word "search" inside. The main content area is dark grey and contains a dropdown menu titled "-- Choose Question Type --". The dropdown is open, showing a list of options: "-- Choose Question Type --", "Multiple Choice (Only One Answer)", "Rating Scale", "Single Textbox", "Demographic Information", and "Image". Below the dropdown are two text input fields. The first field is titled "Answer Choices (each choice on separate lines)" and the second is titled "Question Text". Both fields have a vertical scrollbar on the right side. At the bottom right of the form is a "Submit" button.

# TEXT BOX



# 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**

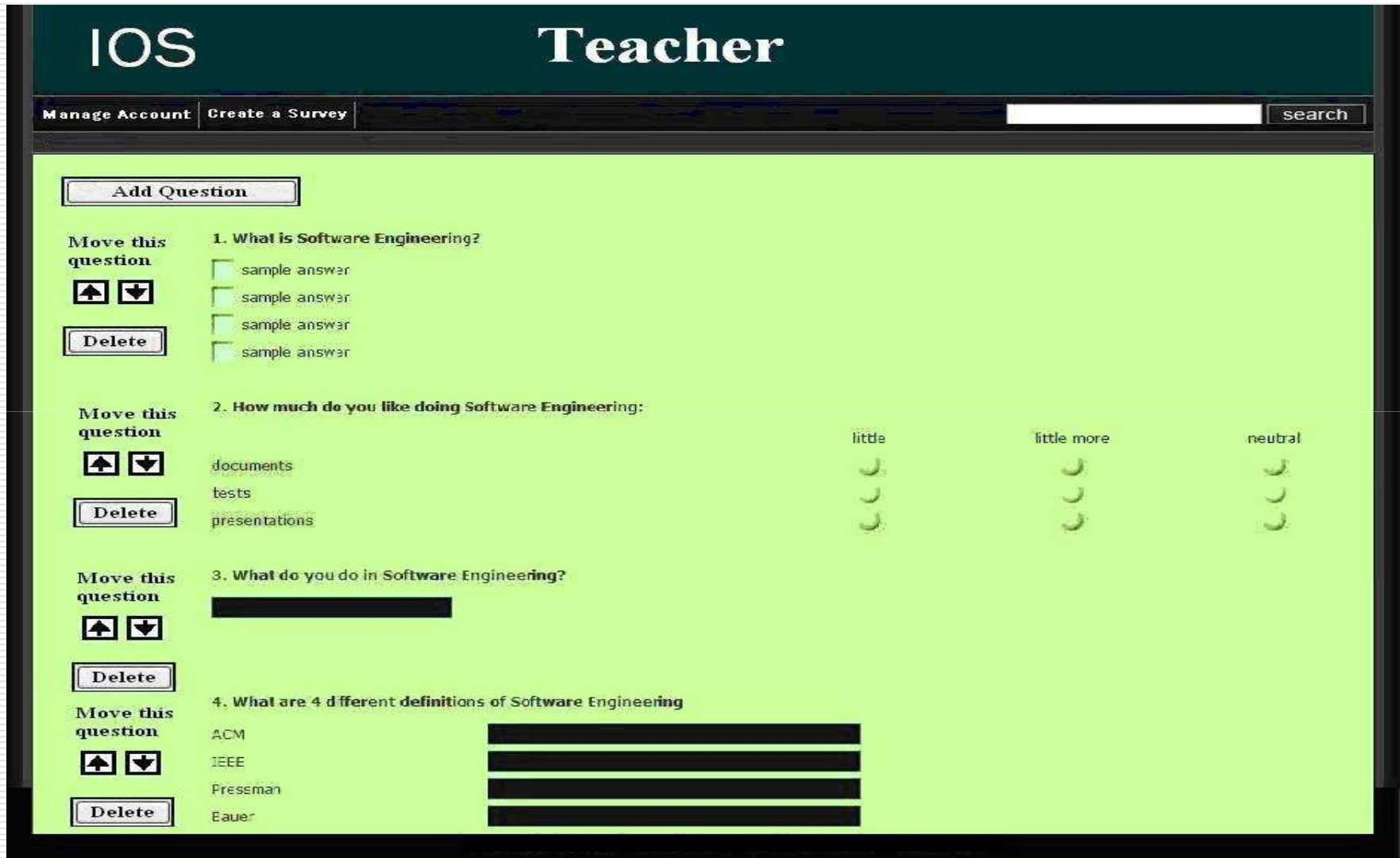
**Image Description**

**Choose New Image**

Upload an Image from your Computer

Type in a URL

# EDIT SURVEY PAGE





# TEACHER PREVIEW OF SURVEY PAGE

The screenshot displays a web interface for a survey preview. The header includes the text 'IOS Preview' and navigation links for 'Manage Account' and 'Create a Survey'. A search bar is also present. The survey content is as follows:

**1. What is Software Engineering?:**

- sample answer
- sample answer
- sample answer
- sample answer

**2. How much do you like doing Software Engineering:**

	little	little more	neutral	love it
documents	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
tests	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
presentations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**3. What do you do in Software Engineering?**

[Redacted]

**4. What are 4 different definitions of Software Engineering**

- ACM [Redacted]
- IEEE [Redacted]
- Preseman [Redacted]
- Bauer [Redacted]

# PASSWORD RECOVERY

IOS

Password Recovery

**\*Please enter your secret answer and your email address. Your password will be emailed.**

Question:

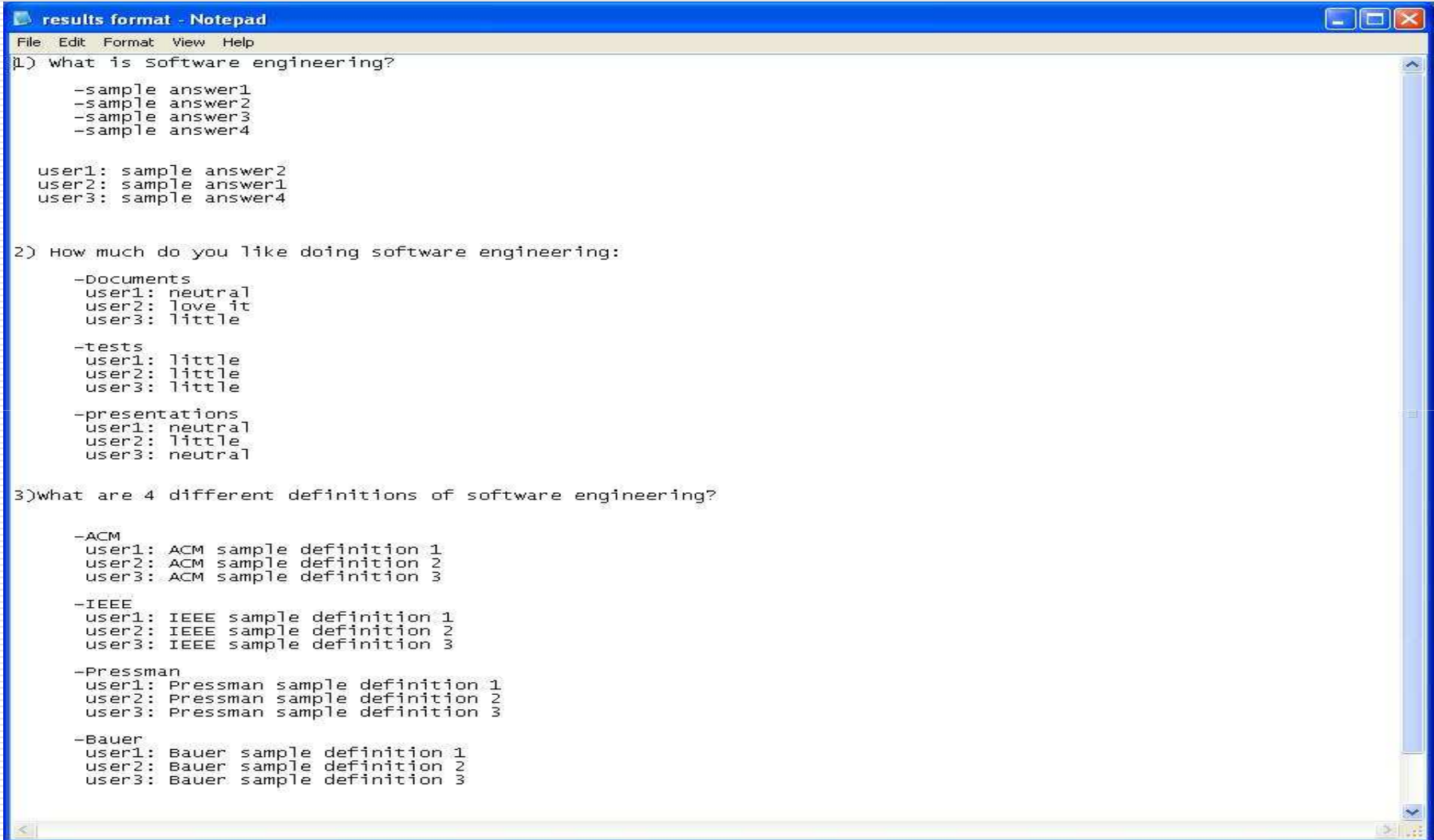
Secret answer:

e-mail address:

# SEARCH RESULTS PAGE

IOS List Current Users	
Results for Alfred	
Name	Account Type
Alfree, Tom	Student
Arket, Elizabeth	Teacher
Atkins, Gina	Student

# FORMAT OF RESULTS DOWNLOAD



```
File Edit Format View Help
1) what is Software engineering?
    -sample answer1
    -sample answer2
    -sample answer3
    -sample answer4

user1: sample answer2
user2: sample answer1
user3: sample answer4

2) How much do you like doing software engineering:

    -Documents
    user1: neutral
    user2: love it
    user3: little

    -tests
    user1: little
    user2: little
    user3: little

    -presentations
    user1: neutral
    user2: little
    user3: neutral

3)what are 4 different definitions of software engineering?

    -ACM
    user1: ACM sample definition 1
    user2: ACM sample definition 2
    user3: ACM sample definition 3

    -IEEE
    user1: IEEE sample definition 1
    user2: IEEE sample definition 2
    user3: IEEE sample definition 3

    -Pressman
    user1: Pressman sample definition 1
    user2: Pressman sample definition 2
    user3: Pressman sample definition 3

    -Bauer
    user1: Bauer sample definition 1
    user2: Bauer sample definition 2
    user3: Bauer sample definition 3
```

# AGENDA

---



- Problem Definition – Paul Borchers
- Data Flow Diagrams & Structure Diagram – Ryan Rose
- Data Identification – Vito Urbano
- Prototypes – Ryan May
- **Test Plan – Vito Urbano**
- What's Next, Summary, and Questions – Paul Borchers

# UNIT TEST CATALOG

---

Test Result	Test Number	Unit Test Name
P F	1	Login Page
P F	2	Teacher Account Creation Page
P F	3	Student Account Creation Page
P F	4	Administrator Welcome Page
P F	5	Teacher Welcome Page
P F	6	Student Welcome Page
P F	7	Administrator/Teacher Account Management Page
P F	8	Administrator Account Creation Page
P F	9	User Page (Teacher)
P F	10	User Page (Student)
P F	11	List Current Users Page (Administrator)
P F	12	List Current Users Results Page (Administrator)
P F	13	Teacher Initial Survey Creation Page
P F	14	Teacher Survey Creation Page
P F	15	Teacher Edit Survey Page
P F	16	Student Account Management Page
P F	17	Student Survey Page
P F	18	Search Results Page

Test Number 3 - Student Account Creation Page

Number	Test Case Name	Description	Input	Expected Result	Actual Result/Comments	Test Result (Pass/Fail)
3.1	Student Account Creation page loads	Correct page loads	N/A	Account Creation page loads with proper items displayed		
3.2	Enter accepted username	Student enters a username that is accepted	Username	The name is accepted and it will be sent to the admin upon submission		
3.3	Enter unaccepted username	Student enters a username that is taken or inappropriate	Username	A proper error message will display explaining the problem with the username		
3.4	Enter accepted password	Student enters a password that is accepted	Password	The password is accepted and is compared to the retype		
3.5	Enter unaccepted password	Student enters a password that is unaccepted	Password	A proper error message will display explaining the problem with the password		
3.6	Retype password correctly	Student retypes password correctly	Password	Password is accepted and paired with username, sent to admin upon submission		
3.7	Retype password incorrectly	Student retypes password incorrectly	Password	A proper error message will display explaining the retype does not match		
3.8	Password strength	After user types in password, the strength of that password is displayed	Password	The strength bar will display weak for an easy to hack password, strong if difficult		
3.9	Select secret question	Student selects a secret question to answer if they want to change password	Secret question	The selected secret question will be sent to the admin upon submission		
3.10	Enter secret question answer	Student enters an answer to the secret question selected prior	Answer to secret question	Answer to secret question will be sent to admin with question upon submission		
3.11	Alternate e-mail address	Student enters an optional alternate e-mail address	E-mail address	The alternate e-mail address is sent to the admin upon submission		
3.12	Enter first name	Student enters their first name	First name	The student's first name is sent to the administrator upon submission		
3.13	Enter last name	Student enters their last name	Last name	The student's last name is sent to the administrator upon submission		
3.14	Select gender	Student fills bubble for male or female	Gender	The student's gender will be sent to the administrator upon submission		
3.15	Enter birth date	Student enters their birth date by selecting month and day and typing in year.	Year of birth	All birth date information sent to administrator upon submission		
3.16	Select state	Student selects their state from the pull down menu	State	State selected is sent to administrator upon submission		
3.17	Enter zip code	Student enters their zip code	Zip code	Zip code sent to the administrator upon submission		
3.18	Select time zone	Student selects their time zone from the pull down menu	Time zone	Time zone will be sent to the administrator upon submission		
3.19	Small business checkbox	Student either checks or unchecks 'I work for a small business'	Small business employee	If student works for small business, info will be sent to admin upon submission		
3.20	Click the submit button	Student clicks the submit button	Left Click	If all fields are filled out correctly, info sent to admin. Error message if missing		
					Summary of tests for this unit	

# AGENDA

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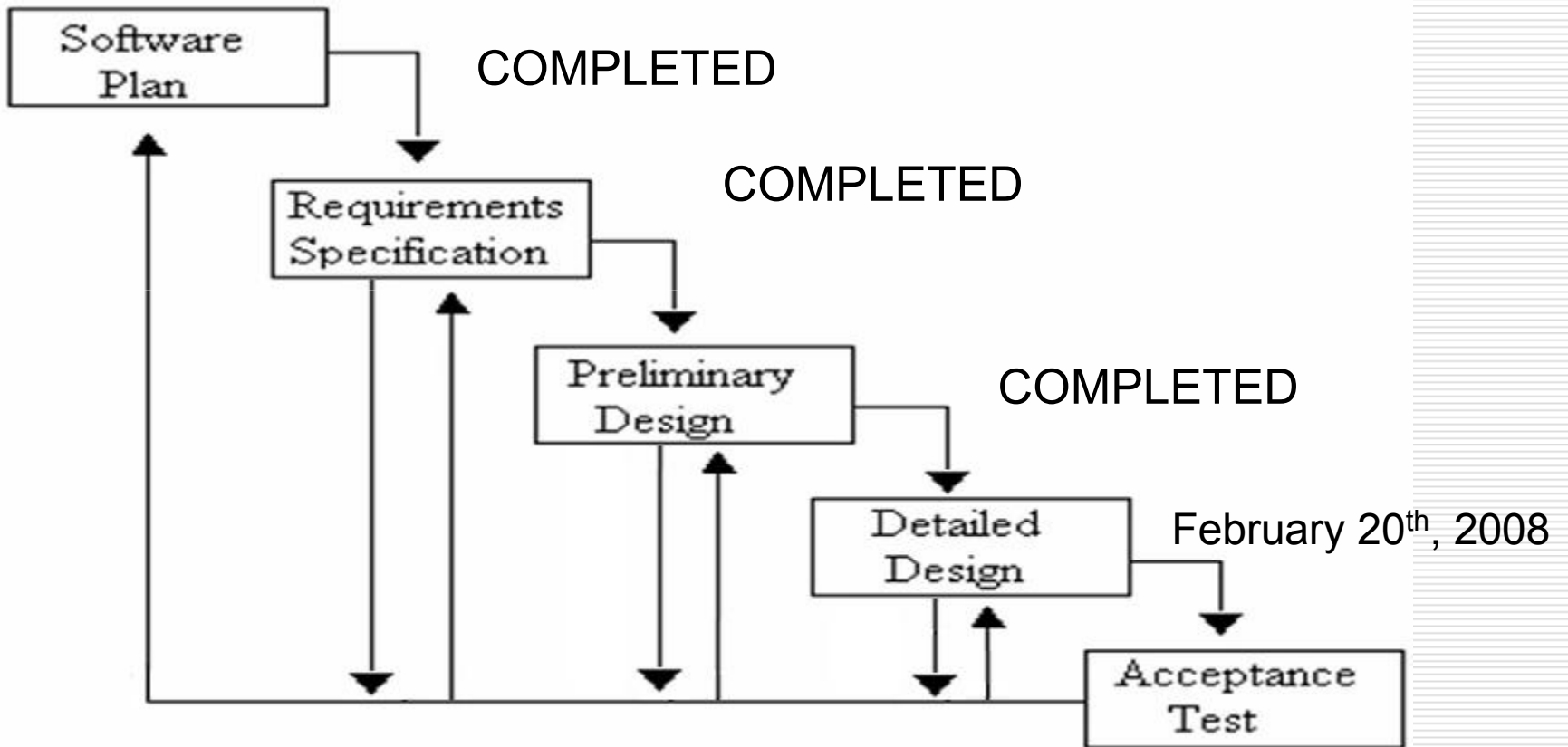


- ❑ Problem Definition – Paul Borchers
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- ❑ **What's Next, Summary, and Questions – Paul Borchers**

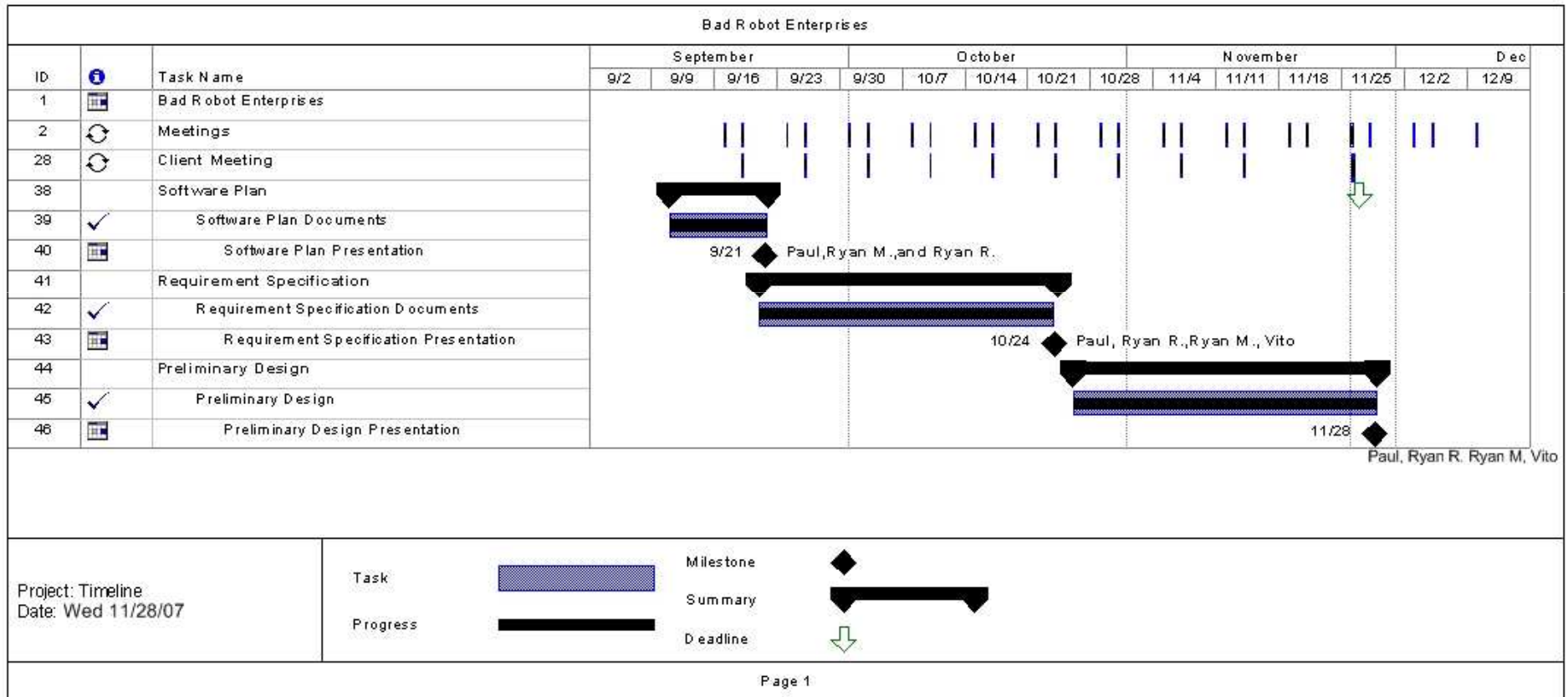




# WATERFALL MODEL

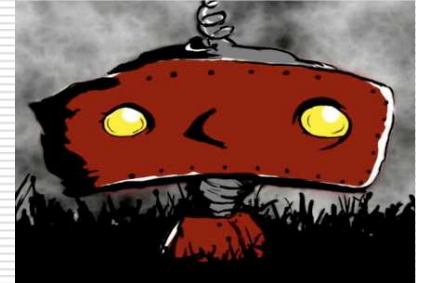


# DEVELOPMENT TIMELINE



# SUMMARY - QUESTIONS?

---



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