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# ACCEPTANCE TEST

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**CLIENT: DR. ERIK EDDY**  
**TEAMMATE EVALUATION SOFTWARE**

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## INTRODUCTION

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### **1.1 Product Overview:**

Teammate Evaluation will be a core web application on the TEAMS 101 (Team Evaluation and Management System) dashboard, and it will give students an easily-accessible interface to provide teammate evaluations periodically during group projects. Dr. Erik Eddy realizes the importance that team evaluations hold within a group dynamic, not only in regards to the final grade for the assignment, but for the overall cohesiveness and harmony of the group. Team Evaluation will not only provide Siena College students with the ability to communicate more productively, it will provide professors and administrators the ability to be better acquainted with the team member's participation and performance.

## REQUIREMENTS INVENTORY

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### **2.1 User Case Narratives:**

#### **2.1.1 Student Perspective: Create Account**

The student signs into the Siena College computer with his username and password. The student clicks the email from his professor containing the link to the TEAMS101 portal. The student navigates to the Teammate Evaluation application by clicking the icon on the portal, and clicks "Create Account". The web page prompts the student to enter his first name, last name, Siena email address and asks them to create a new password. After inputting the information on the form, the student clicks "Create Account" and the web page redirects the user to a login screen which will then allow the student to login and take evaluations.

#### **2.1.2 Student Perspective: Complete Evaluation**

The student signs into the Siena College computer with his username and password. Next, the student opens a web browser and logs in to his Siena email account. The student clicks the email from his professor containing the link to the TEAMS101 portal. The student navigates to the Teammate Evaluation application by clicking the icon on the portal. The student enters his username and password and clicks "Login". Once logged in, the student clicks "Complete Evaluation" from the navigation bar. The student rates each team member based on performance. Once completed, the student clicks "Submit" which locks in their evaluation responses and notifies the faculty member that an evaluation has been completed.

The student then proceeds to log off of Teammate Evaluation, and the application returns to the home screen.

### 2.1.3 Student Perspective: View Evaluation Results

The student signs into the Siena College computer with his username and password. Next, the student opens a web browser and logs in to his Siena email account. The student clicks the email from his professor containing the link to the TEAMS101 portal. The student navigates to the Teammate Evaluation application by clicking the icon on the portal. The student enters his username and password and clicks “Login”. The student clicks on the “View My Evaluations” tab from the navigation bar. From this page, the student can view a list of classes that they are currently enrolled in, and he chooses one to view his individual report. Once the specific course has been chosen, the student is shown a list of reports, organized by date. The student selects one individual report to view by clicking a specific date. Once the student has finished examining their individual report, he logs off of Teammate Evaluation by clicking “Log out”, and the application returns to the home screen.

### 2.1.4 Faculty Member Perspective: Establish Class Roster/Team Profile

The faculty member signs into the Siena College computer with his username and password. Next, the faculty member opens a web browser and navigates to the TEAMS101 portal. The faculty member navigates to the Teammate Evaluation application by clicking the icon on the portal. The faculty member enters his username and password and clicks “Login”.

The faculty member clicks “Create New Class” from the navigation bar and the web page changes to the “Class Roster” form. The faculty member enters each student’s Siena email address and clicks “Save Class Changes”. The web page returns to the “Class Roster” default page with the newly established class listed as a hyperlink to the class profile page. The faculty member clicks the hyperlink to the class page they just created and the web page changes to the class profile.

The faculty member clicks “Add New Team” on the class profile page. The faculty member selects students from the class roster by clicking the plus sign next to their name. The web page automatically updates with the selected team members. Once all team members have been added to the team, the faculty member clicks “Submit”. The web page returns to the class profile home page and the faculty member continues the “Add New Team” process until all students are assigned to a team. After this process is completed, the faculty member logs off of Teammate Evaluation by clicking “Log out”, and the application returns to the home screen.

## 2.1.5 Faculty Member Perspective: Manage Evaluations

The faculty member signs into the Siena College computer with his username and password. Next, the faculty member opens a web browser and navigates to the TEAMS101 portal. The faculty member navigates to the Teammate Evaluation application by clicking the icon on the portal. The faculty member enters his username and password and clicks “Login”.

The faculty member selects “Manage Evaluations” from the navigation bar and the web page changes to the “Manage Team Evaluations” web page. From this web page, the faculty member can view a list of pre-existing team evaluations that they have previously created. The faculty member is able to Edit and Delete existing evaluations, as well as create new evaluations. The faculty member is also able to send an invitation to complete the evaluations to specific teams.

The faculty member selects “Create New Evaluation” from the “Manage Evaluations” web page, and the page changes to the “Create New Evaluation” form. The faculty member enters evaluation questions into the text boxes in the evaluation form, and once all questions have been entered, he clicks the “Submit Evaluation” button at the bottom of the page. The browser returns to the “Manage Evaluations” web page and the newly created evaluation is listed under the existing evaluations.

The faculty member now clicks “Edit” next to a pre-existing evaluation and the browser changes to the “Edit Existing Evaluation” form. The faculty member clicks the “Delete” button next to existing questions to delete them, and enters new questions into the text box at the bottom of the form. Once the faculty member is done editing an evaluation, he clicks “Submit Evaluation” button at the bottom of the page. The browser returns to the “Manage Evaluations” web page.

The faculty member is also able to click “Delete” next to a pre-existing evaluation in order to delete an entire Team Evaluation from the Database.

Finally, the faculty member clicks “Send Evaluation to Teams” and the browser changes to the “Sent Evaluations to Teams” web page. The faculty member selects the pre-existing Team Evaluation that they want to invite teams to take, and selects the teams from the list of classes that they want to send the evaluation to. Once all teams are selected, the faculty member selects “Send to Teams” button from the bottom of the web page. The web browser confirms that the evaluations have been sent with a confirmation text box, and returns to the home page. The faculty member logs off of Teammate Evaluation by clicking “Log out”, and the application returns to the home screen.

### 2.1.6 Faculty Member Perspective: View Team Evaluations

The faculty member signs into the Siena College computer with his username and password. Next, the faculty member opens a web browser and navigates to the TEAMS101 portal. The faculty member navigates to the Teammate Evaluation application by clicking the icon on the portal. The faculty member enters his username and password and clicks “Login”.

The faculty member selects “View Team Evaluations” from the navigation bar and the web browser changes to the “View Team Evaluations” web page. The faculty member then selects a class from the list of classes on the web page, and the browser changes to the selected class’s individualized report. From this page, the faculty member can view a summarized report of the ranking of teams in the class, as well as view which teams have completed the evaluations and which have not. The faculty member clicks a team from the list of teams for the class, and the web browser changes to the “Team Profile” page. From this page, faculty members can click team members to view their individualized reports, and view which team members have completed evaluations for their peers.

After the faculty member has viewed all team evaluations, he logs off of Teammate Evaluation by clicking “Log out”, and the application returns to the home screen.

### 2.1.7 Administrator Perspective: Manage User Permissions

The administrator signs into the Siena College computer with his username and password. Next, the administrator opens a web browser and navigates to the TEAMS101 portal. The administrator navigates to the Teammate Evaluation application by clicking the icon on the portal. The administrator enters his username and password and clicks “Login”.

The administrator clicks “Edit User Permissions” from the navigation bar, and the web browser changes to the “Edit User Permissions” web page. The administrator can view every user account in the database, and is able to search for existing users. The administrator enters a username into the search box, and selects the user account from the results. The web browser changes to the “User Profile” web page. Here, the administrator clicks the “Faculty Member” check box next to the username, and clicks “Save Changes”. The web page changes to show a confirmation of the changes, and automatically notifies the user that they have been given faculty member permissions. The administrator is also able to uncheck the “Faculty Member” box to remove a user as a faculty member.

After the administrator has finished managing permissions, he logs off of Teammate Evaluation by clicking “Log out”, and the application returns to the home screen.

## 2.2 Functional Requirements Inventory:

An outline list below discusses the required functionality of Teammate Evaluation as organized by the user type. Teammate Evaluation will be web-based software and the application will be accessible on all Internet browsers and mobile platforms.

### 2.2.1 Student User Level

- Capable of logging onto the system
  - A failed login will result in an error message
- Can fill out teammate evaluation form for each teammate
- Can access own evaluation report and view other’s anonymous reports
  - Cannot access own evaluation report unless three teammates have submitted reports for this user
- Can log out of system

### 2.2.2 Faculty User Level

- Capable of logging onto the system
  - A failed login will result in an error message
- Can fill out teammate evaluation reports for any student in class
- Can assign teams/replace team members
- Can view all student evaluations for any team and who submitted them
- Can log out of system

### 2.2.3 Administrator User Level

- Capable of logging onto the system
  - A failed login will result in an error message
- Can fill out teammate evaluation reports for any student in class
- Can assign teams/replace team members
- Can view all student evaluations for any team and who submitted them
- Can grant administrator privileges to other users
- Can log out of system



## **2.3 Non-Functional Requirements:**

The non-functional requirements will explain the specific properties of TEAMS-101. These following specifications are not definable features, but rather traits that will help with ease of use for the system. As such, these specifications cannot be measured objectively. Below is a list of TEAMS-101's non-functional requirements:

- Teammate Evaluation will be efficient
- Teammate Evaluation will be user-friendly
- Teammate Evaluation will require little maintenance and will be stable
- Teammate Evaluation will be easily accessible by all users

## **2.4 Future Enhancements:**

As a future enhancement, Dr. Erik Eddy would like Teammate Evaluation to be accessible for students at other colleges and universities to use. One problem with this possible modification is the integration of our software with other schools software, as some universities may opt to use alternative Software which NOVA Tech would not have permissions to access. Other possible enhancements may include updates to front end specifications of the TEAMS101 website as well as the functionality that accompanies the updates.

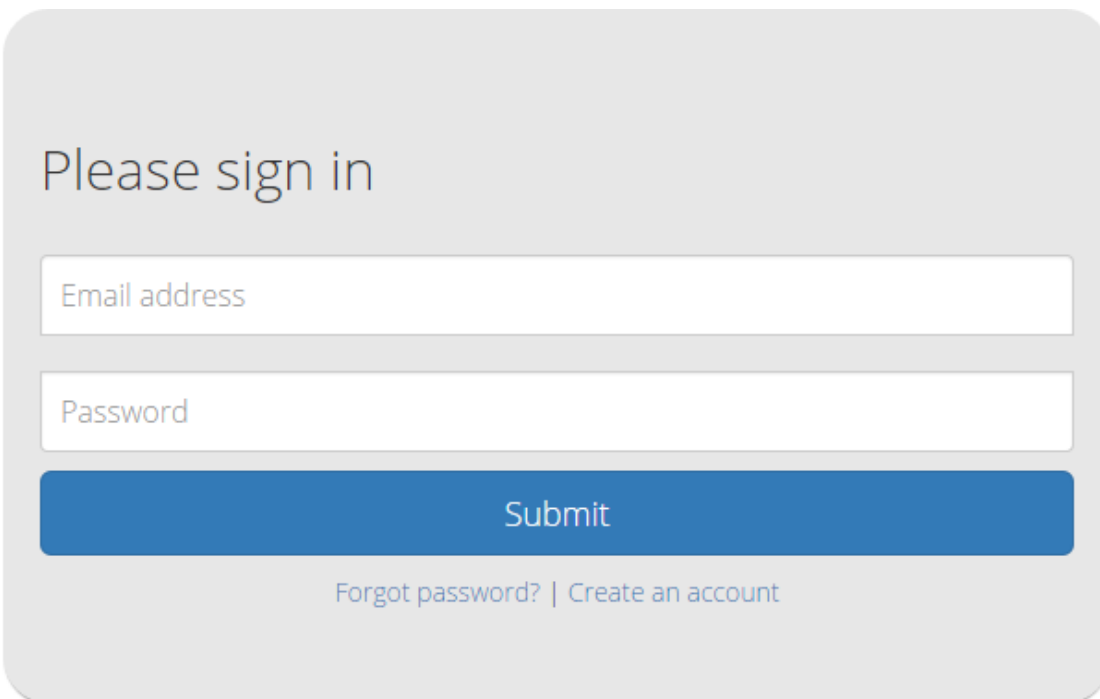
## EXTERNAL DESIGN SPECIFICATION

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### 3.1 User Displays and Report Formats:

To show the design and display ideas for the Teammate Evaluation Software and TEAMS101 web application consider the following pictures of various functions of NOVA Tech's system.

#### 3.1.1 Login



The image shows a login form with a light gray background and rounded corners. At the top, the text "Please sign in" is displayed in a dark gray font. Below this, there are two input fields: the first is labeled "Email address" and the second is labeled "Password". Both fields are white with a light gray border. Below the input fields is a blue button with the text "Submit" in white. At the bottom of the form, there is a link that reads "Forgot password? | Create an account" in a smaller, lighter gray font.

### 3.1.2 Create Account

## Create Account

First name

Last name

Email

Password

Confirm password

Faculty Member?  Yes  No

### 3.1.3 Student Homepage

## Team Evaluation



# Welcome back!

The TEAMS education and online support system provides education about what it takes to be a good team member based on the most recent research and access to a cutting-edge online support system that helps student teams maintain top performance.

Get started today

© Nova Tech 2014

## 3.1.4 Student Select Course

## Team Evaluation



Choose your course section:

Choose your team number:

Choose your name:

Next

## 3.1.5 Student Take Evaluation

## Team Evaluation

Home	Take Evaluations <b>4</b>	My Evaluations	Log out
------	---------------------------	----------------	---------

## Sara Pinti

For this teammate, please **check the appropriate box** if you observed the behavior while working on this case. Focus on the past 2 weeks of working together. Check the box once even if you observed the behavior multiple times.

You may have observed "poor", "good", and "great" behaviors from the same person. That is fine. Simply check the box for any of these behaviors that you observed.

If you did not observe the behavior, you can leave it **blank**.

Remember, few teammates are truly "great". Be honest in your evaluation.

## "Do the Work" Behaviors

Poor Teammate	Good Teammate	Great Teammate
<input type="checkbox"/> Does not work on task	<input type="checkbox"/> Participates in meetings	<input type="checkbox"/> Motivates teammates
<input type="checkbox"/> Takes group off task	<input type="checkbox"/> Share information openly	<input type="checkbox"/> Balances work on task with focus on team needs

## 3.1.6 Faculty Homepage/Create Course-Section

## Team Evaluation

Setup	My Classes	Create Custom Evaluations
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## Setup courses, sections and teams

Section	Classes	Teams	Edit
Calculus I	MWF 11:30 - 12:30, MWF 9:00 - 11:00, T 6:00 - 9:00	1	
History 102	TR 6:00 - 7:10, MWF 8:00 - 9:10	2	
Philosophy103		3	
History 102	TR 6:00 - 7:10, MWF 8:00 - 9:10	2	

Add New

Section	<input type="text"/>
Classes	<input type="text"/>
Teams	<input type="text"/>
Evaluations	<input type="text"/>
Submit	<input type="button" value="Submit"/>
Test	<input type="button" value="Test"/>

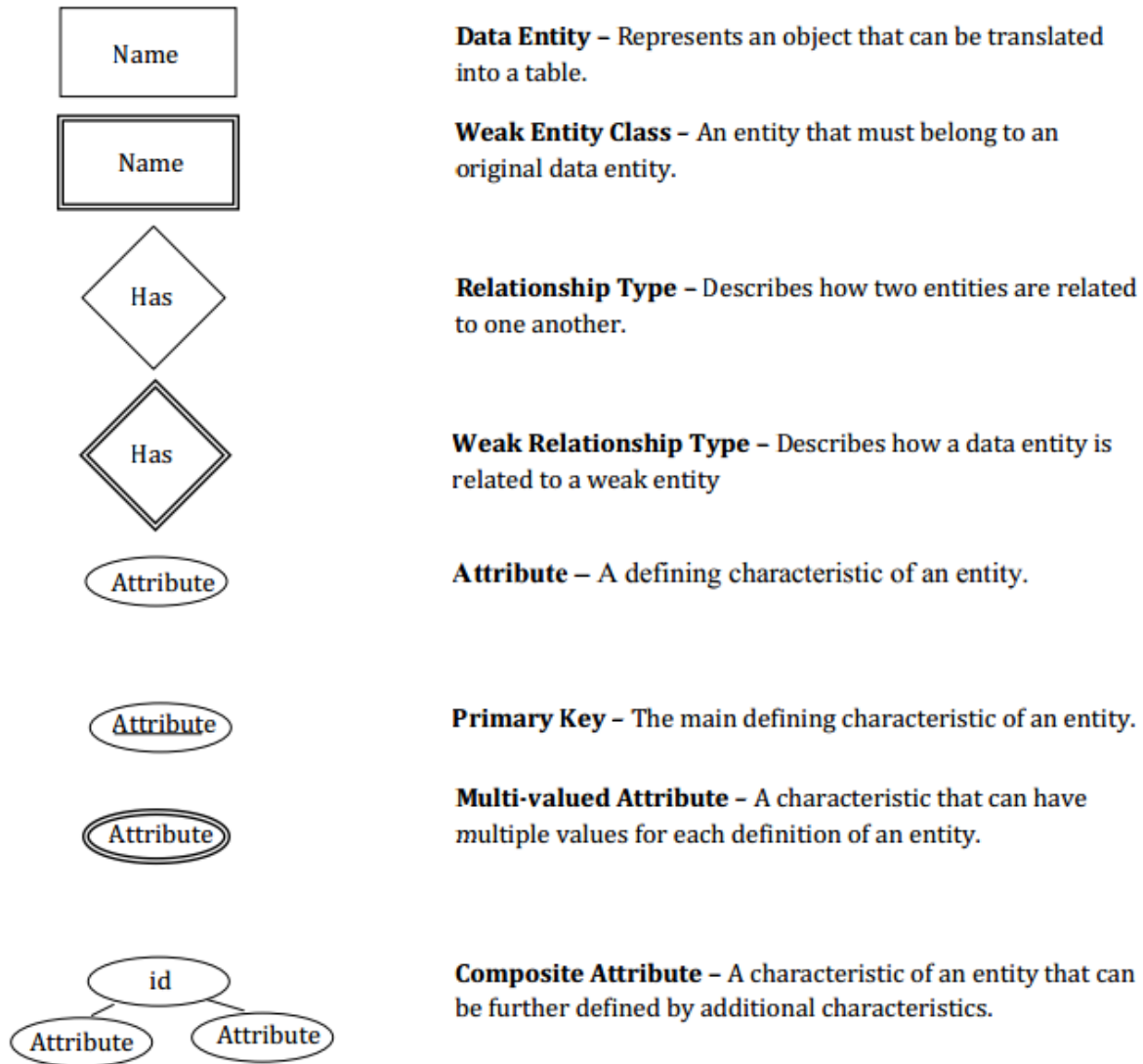
### 3.2 Logical Data Dictionary:

Data Name	Data Type	Data Size	Description	Acceptable Input	Good Example of Input	Notes
Username	String	6-15 Chars	Username	A-Z, a-z, 0-9	Dj04ferr	
User_pass	String	6-15 Chars	Password	A-Z, a-z, 0-9, ASCII 33-47	Pdj901584480	
UserID	String	6-15 Chars	Student ID	A-Z, a-z, 0-9	901445531	Unique
User_Fname	String	1-30 Chars	Username	A-Z, a-z	Jonny	
User_Lname	String	1-30 Chars	Username	A-Z, a-z	Doe	
User_email	String	6-50 Chars	Email	A-Z, a-z, 0-9	Dj04ferr@siena.edu	

PW_reset	Boolean	4-5 Chars	Password Reset Button	TRUE, FALSE	true	
User_Level	Integer	1 Integer	User Permission Ranking	0,1,2	2	0 = Student 1 = Faculty 2 = Admin
TeamID	String	6-15 Chars	Team Id	A-Z, a-z, 0-9	113	Unique
Number_on_team	Integer	1-2 Integers	Number of team members	1-10	4	
ClassID	Integer	6-15 Chars	Class Id	A-Z, a-z, 0-9	17A	Unique
Member_ID	String	6-15 Chars	ID for a team member	A-Z, a-z, 0-9	901445531	Unique
Member_FN	String	1-30 Chars	User First Name	A-Z, a-z, ', -	Hannah	
Member_LN	String	1-30 Chars	User Last Name	A-Z, a-z, ', -	Cooper	
Team_Number	Integer	1-2 Integers	Team Number	0-20	9	
Faculty_Member	String	1-15 Chars	Faculty member name	A-Z, a-z, ', -	Lim	
Faculty_ID	String	6-15 Chars	Faculty member ID number	A-Z, a-z, 0-9	901584480	Unique

### 3.3 E/R Diagram Legend:

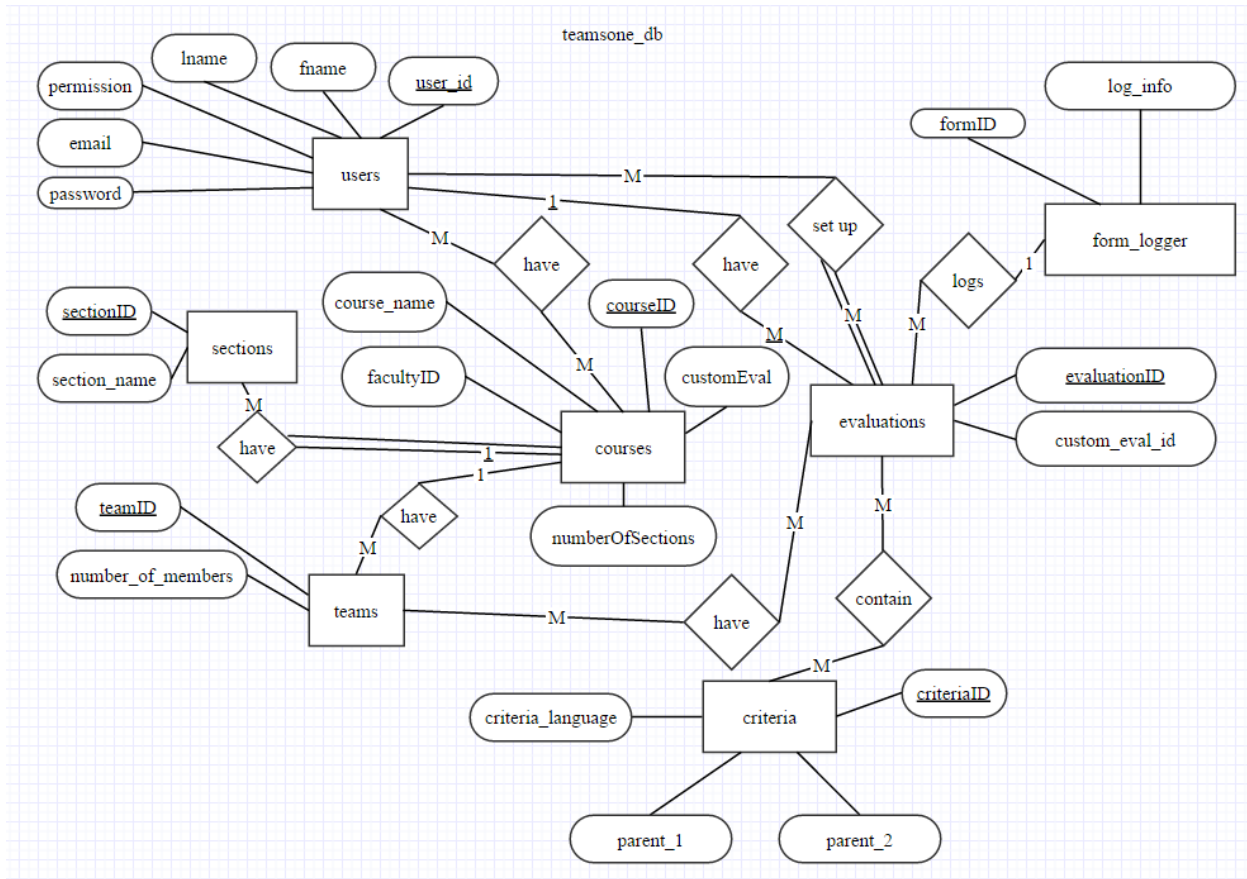
An ER Diagram is an entity-relationship model that abstractly describes a database.



### 3.3.1 E/R Diagram

The following image is the ER Diagram for Teams101 - Team Evaluation.





### 3.4 Relational Schema:

From the ER Diagram, a relational schema can be made. The relational schema is another way to describe a database.

users (user\_id, fname, lname, email, password, permission)

courses( courseID, course\_name, facultyID, customEval, numberOfSections )

sections (sectionID, section\_name)

teams ( teamID, number\_of\_members )

evaluations (evaluationID, custom\_eval\_id)

criteria ( criteriaID, criteria\_language, parent\_1, parent\_2)

parent\_1 would be the column (based on criteria spreadsheet below)

parent\_2 would be the row that it is in

criteria\_language is the actual language of the criteria i.e. "is ready for work"

criteria\_ID starts at 1 and goes up from there, to more easily access certain criterias

form\_logger (formID, log\_info)



### 3.5 Database Tables:

Nova Tech will utilize certain tables that are described in both the E/R Diagram and Relational Schema as previously shown. These tables include courses, criteria, evaluations, form\_logger, sections, teams, and users. The tables have been created in order to be able to reference multiple things within the functionality during the development of the software. This will not include additional tables that will be added during the finalization of the software product.

## ARCHITECTURAL DESIGN SPECIFICATION

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### 4.1 UML Deployment Diagram Legend:

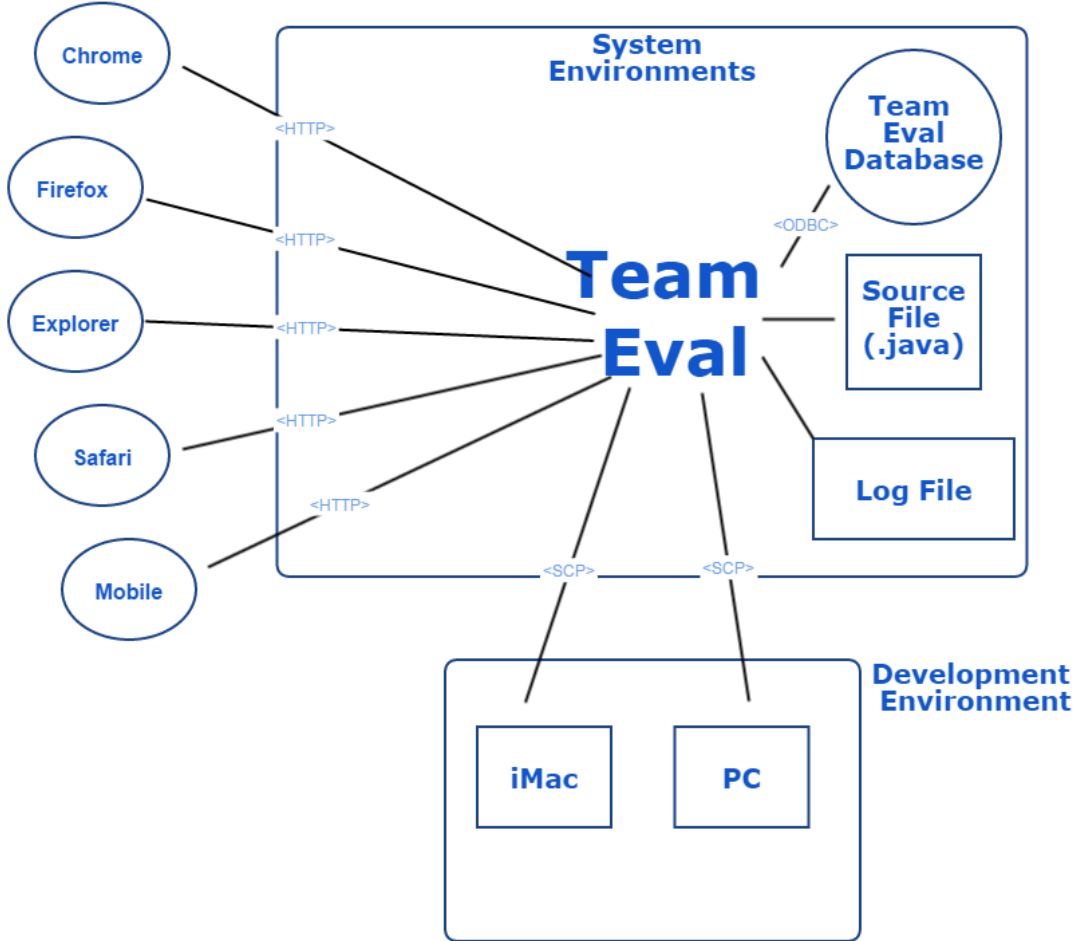
<p style="text-align: center;"><b>&lt;HTTP&gt;</b></p>	<p><b>HTTP - Hypertext Transfer Protocol defines how messages are formatted and transmitted, and what actions web servers and browsers should take in response to various commands.</b></p>
<p style="text-align: center;"><b>&lt;SCP&gt;</b></p>	<p><b>SCP - Securely transfers computer files between a local host and a remote host</b></p>
<p style="text-align: center;"><b>&lt;ODBC&gt;</b></p>	<p><b>ODBC - Open Database Connectivity is a standard programming language middleware for accessing database management systems.</b></p>
	<p><b>System Boundary - This is where all the interactions occur. Represents what is within the system and outside of it.</b></p>
	<p><b>Connection - Displays a relationship between boundaries.</b></p>

### 4.1.1 UML Deployment Diagram







# Deployment Diagram



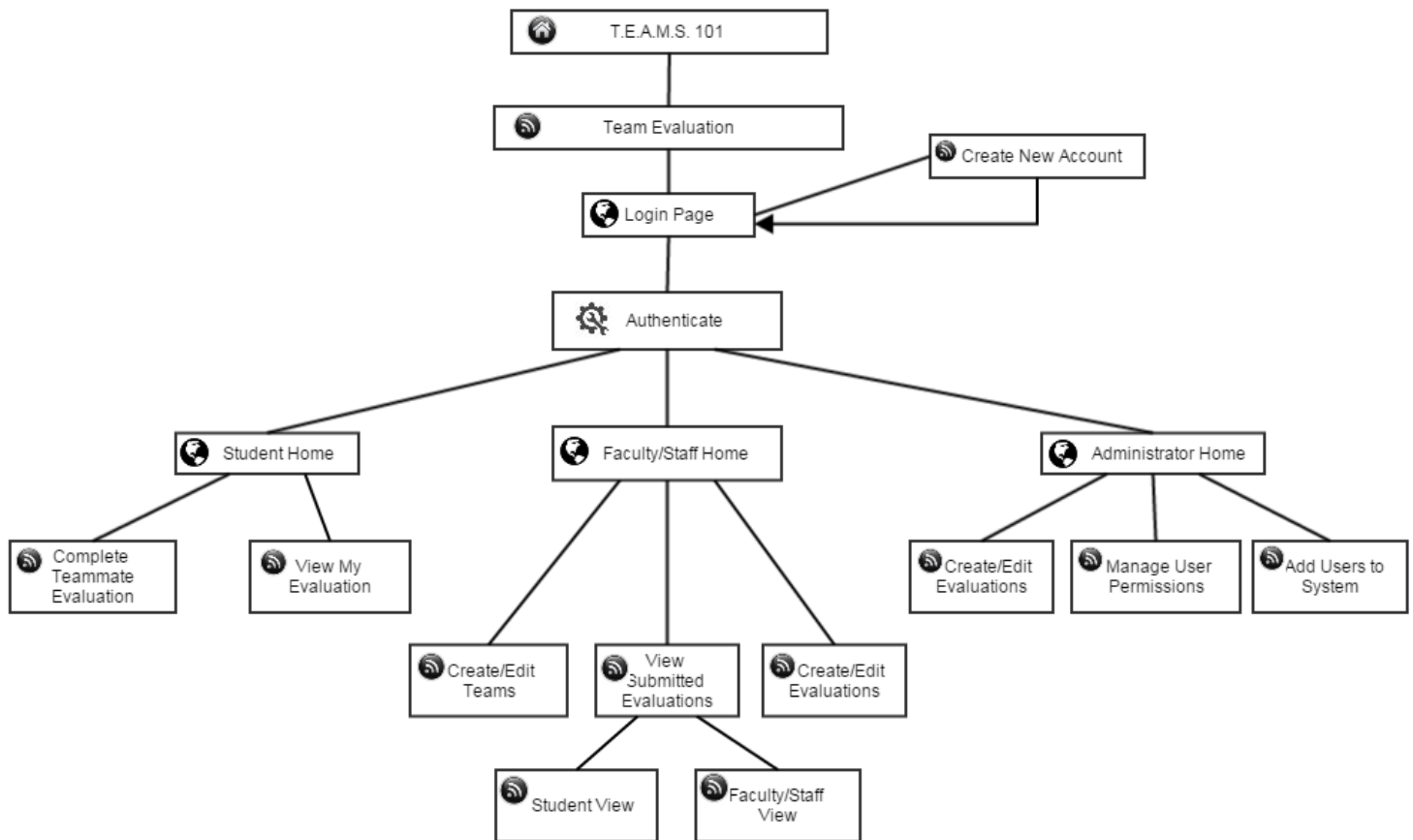
## User/Testing Environments



## 4.2 Website Map Legend:

	<p><b>Home Page:</b> The first page a user accesses when navigating to T.E.A.M.S. 101</p>
	<p><b>System Interaction:</b> Option visible on current web page for user to interact with</p>
	<p><b>Web Page:</b> Name of web page user is currently accessing</p>
	<p><b>System Action:</b> Action being carried out by system</p>
	<p><b>Page Redirect:</b> Relocates a user to another web page</p>
	<p><b>Link:</b> Connection between web pages and system interactions</p>

#### 4.2.1 Login Website Map



## 4.3 Development and Production Environments:

### 4.3.1 Development Environment

Window's Computer (Software Lab):

Model: Dell OptiPlex 760

Operating System: Windows Vista

Proc: Intel Core 2 Duo E7500 @2.93GHz

RAM: 4GB

HDD: 500GB

Software:

Adobe Dreamweaver, Google Chrome, Internet Explorer, Mozilla Firefox, MySQL, Notepad ++

NOVA Tech will also be using personal laptops throughout the development process.

### 4.3.2 Production Environment

Server Hostname: oraserv.cs.siena.edu

CentOS 5.2 (final)

Kernel: 2.6.18-92.el5

Intel Xeon 2.66 GHz CPU

8 GB of Memory

Java SE Runtime Environment (build 1.6.0 10-rc-b28)

GCC Version 4.1.2 20071124 (Red Hat 4.1.2-42)

NOVA Tech will be using a web based application located on a server provided by Dr. Eddy. Team Evaluations will utilize an Oracle database with an Apache Web server.

### 4.4 Deliverables:

Nova Tech will create the software Teammate Evaluation as well as the TEAMS101 Web Application with the following functionality which will be considered our deliverables for the project.

- A login screen for users
- Provide proper landing pages based on user permissions
- Allow for the evaluation of team members maintaining anonymity
- Create a customized report based on team member evaluations and send to user
- Allow administrators to see which students have completed the evaluations
- Allow administrators to see what each students said regarding other group members

Nova Tech will also provide for the Software Engineering Deliverable:

1. A CD-ROM (or DVD) with the following:

- a. A full copy of your team files from your team directory, including, of course, all website files (all folders, files, images, etc).
  - b. The above team files should, of course, include all files associated with your project, including all documentation (e.g. Software Plan, etc) and PowerPoint presentations.
  - c. The website files should reference all "local" URLs as relative links. You could have one subdirectory named team-public\_html (for the team website files) and other subdirectory named project-public\_html (for the project website files).
  - d. There should be a README.TXT file that explains what files are where (this README.TXT should be at the highest level directory).
  - e. Be sure to provide any needed usernames/passwords (and database names) and documentation related to gaining access to any database(s) that you use as part of your project.
  - f. The lyrics to your team song; a copy of a sound/music file for your team song; and, an audio/video recording of your team song. Place these in a subdirectory named SONG.
2. Blackboard submissions
    - a. Acceptance Test document
    - b. Acceptance Test presentation
    - c. Music Video
  3. Hard copies of the Acceptance Test document
    - a. 1 for your clients
    - b. 1 for Academic Celebration
  4. Hard copies of Acceptance Test PowerPoint presentation
    - a. 1 (or more) for your clients
  5. Evaluation forms, work logs, and (for team leads only) attendance sheets

## 4.5 Data Flow Diagrams:

Note - See Appendix

## 4.6 Source Code:

Note - See Appendix



## 5.1 Explanation of Test Plan/Strategy:

The Teammate Evaluation Software will be tested on all four major browsers. Nova Tech will test all the functional requirements of the Teammate Evaluation Software. Testing will be broken into modules and each module will be tested separately. Once a module is completely functional and passes all tests, the module will be tested via interactions with other modules. When this testing is complete, all the modules will be tested as an entire interactive system.

Nova Tech will also test the non-functional requirements of the Teammate Evaluation Software. This includes testing the system for user-friendliness by reviewing new user interactions in the system.

## 5.2 Test Results:

Note - See Appendix

## APPENDIX

### 6.1 Timeline:

At Risk	Task Name	Q1			Q2			Q3			Q4			Q1			Q2			Q3		
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	<a href="#">Need Help? Learn more about this template.</a>																					
	<b>Team Evaluation</b>																					
	<b>Detailed Design</b>																					
	Detailed Design																					
	Detailed Design Due																					
	Detailed Design Presentation																					
	<b>Acceptance Test</b>																					
	Acceptance Test																					
	Acceptance Test Due																					
	Acceptance Test Presentation																					
	<b>Meetings</b>																					
	Team Meetings																					
	Client Meetings																					

### 6.2 Glossary of Terms:

**Actor:** Actors that interact with the system through users/actors can be human or non human

**Agile method:** Agile software development is a group of software development methods in which requirements and solutions evolve through collaboration between self-organizing, cross-functional teams

**Apache HTTP Server:** Apache Hypertext Transfer Protocol Server, Web server application

**Apple Safari:** Web browser designed by Apple

**Data Stores:** A component of a Data Flow Diagram that represents a location in which information or data is stored

**Database:** Organizes data, typically through a computer, so that the data is easily accessible

**Data Flow:** Data/information flowing to or from a process in a Data Flow Diagram

**Data Flow Diagram:** A graphical representation of the "flow" of data through an information system

**Data Store:** Location where data is held temporarily or permanently in a Data Flow Diagram

**External Entities:** A component of a Data Flow Diagram that represents any human or non-human user of a Software System

**Functional Requirements Inventory:** Defines what the system will be able to do and what is testable about the system

**Gantt Chart:** Bar chart typically used to project scheduling

**GIMP (GNU Image Manipulation Program):** Image retouching and editing tool released as free and open-source software by creators Spencer Kimball and Peter Mattis

**Google Chrome:** Web browser designed by Google

**Inclusion Arrow:** An arrow that points from a scenario to another scenario to show that something must be included for the scenario

**Inheritance Arrow:** An arrow that points from one use to another; the use of being pointed at is the parent and the other is the sub

**Internet Explorer:** Web browser designed by Microsoft

**Level-0 Diagram:** A data flow diagram that represents a system's major processes, data flows, and data stores at a high level of detail

**Level-1 Diagram:** Provides an overview of the major functional areas of the undertaking

**Mozilla Firefox:** Web browser designed by Mozilla Foundation and the Mozilla Corporation

**mySQL (Structured Query Language):** Programming language designed to manage data and develop databases

**Non-Functional Requirements Inventory:** Requirements that are not necessarily specific features that exist in a system, but what the system is intended to do

**Nova Tech:** Team name

**Notepad++:** Text editor specializing in syntactic highlighting of various programming languages

**Oracle Database:** An object-relational database management system produced and marketed by Oracle Corporation

**Oraserv Database:** Siena College's database server

**Participation Line:** Shows what scenarios an actor can interact with in a UML Use Case Diagram

**Process:** Transforms or manipulates data in a Data Flow Diagram

**Prototype:** An early sample, model or release of a product built to test a concept

**Scenarios:** The actions that occur within a system and how the user interacts with the system

**SQL:** Structured Query Language, language used to query databases

**SQL Developer:** Program used to create and modify database

**System Boundary:** The boundary between the system and the external entities in a Data Flow Diagram

**TEAMS 101 - Team Evaluation:** Project name

**UML Use Case Diagram:** A type of behavioral diagram to present a graphical overview of the functionality provided by a system

**UML (Unified Modeling Language):** A specification language used in software engineering

#### **Unit Te**

**sting:** A testing method where the system is broken down into units and each unit is tested

**UPC (User Permission Chart):** Chart that demonstrates the permissions of the different users in Team Evaluation

**Visual Paradigm:** a UML CASE Tool supporting UML 2, SysML and Business Process Modeling Notation (BPMN) from the Object Management Group (OMG). In addition to modeling support, it provides report generation and code engineering capabilities including code generation. It can reverse engineer diagrams from code, and provide round-trip engineering for various programming languages.

**Website Map:** A list of pages of a website accessible to users






### **6.3 Sources of Information:**

The information that Nova Tech will utilize in creating this software will primarily come from the client, Dr. Erik Eddy, Dr. Fryling via our class lectures, and Dr. Lim in our lab activities. Auxiliary information may come from various other technical classes that our team members have taken, including Database Management and Web Application Development.

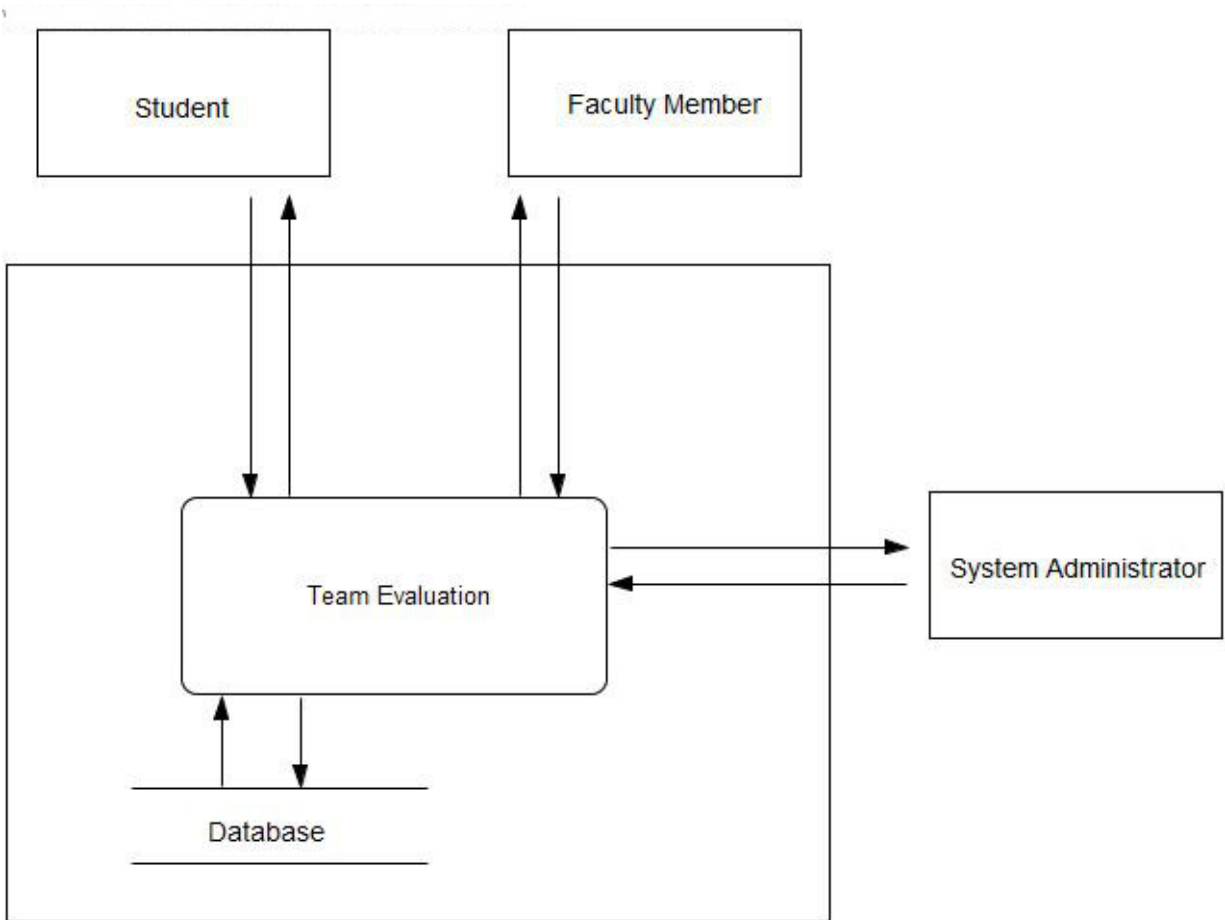
### **6.4 Data Flow Diagrams:**

The data flow diagrams will contain the context diagram, a level 0 diagram, and multiple level 1 diagrams. These diagrams visually depict the movement of data between both internal processes and external entities. From these diagrams, the structure of the system can be analyzed as well as the ways in which data moves throughout the system, outside of the system, and is stored and retrieved. The following symbols will be used in the data flow diagrams:

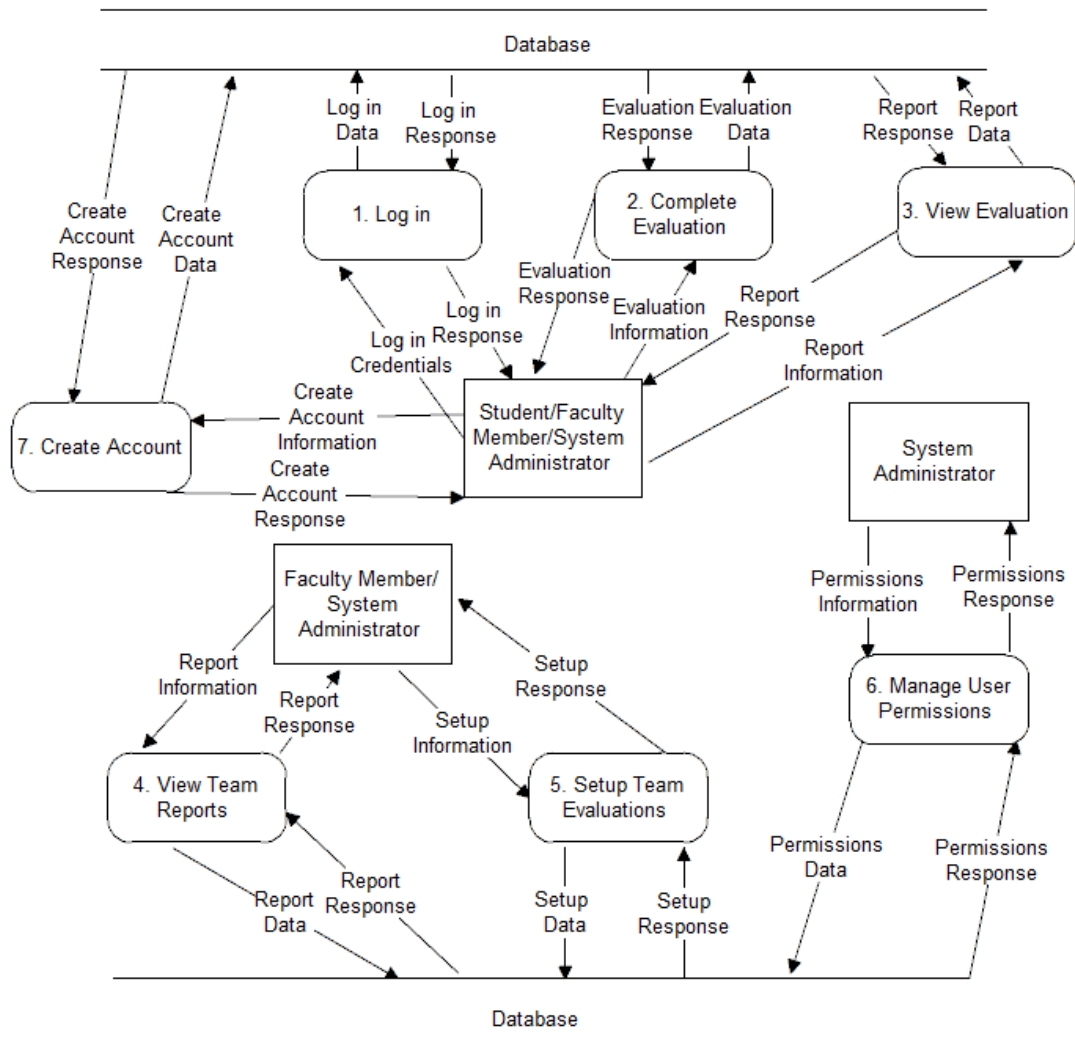
## 6.4.1 Data Flow Diagram Legend

	<b>Process:</b> System components that can receive, modify, and output data.
	<b>Entity:</b> Contributes data and information to system. Entities can also receive information from the system.
	<b>Data Flow:</b> Indicates the movement of data to or from a process.
	<b>Data Store:</b> The location where data is held either temporarily or permanently.
	<b>System Boundary:</b> The definition between internal processes and external entities.

## 6.4.2 Context Diagram



### 6.4.3 Level 0 Diagram

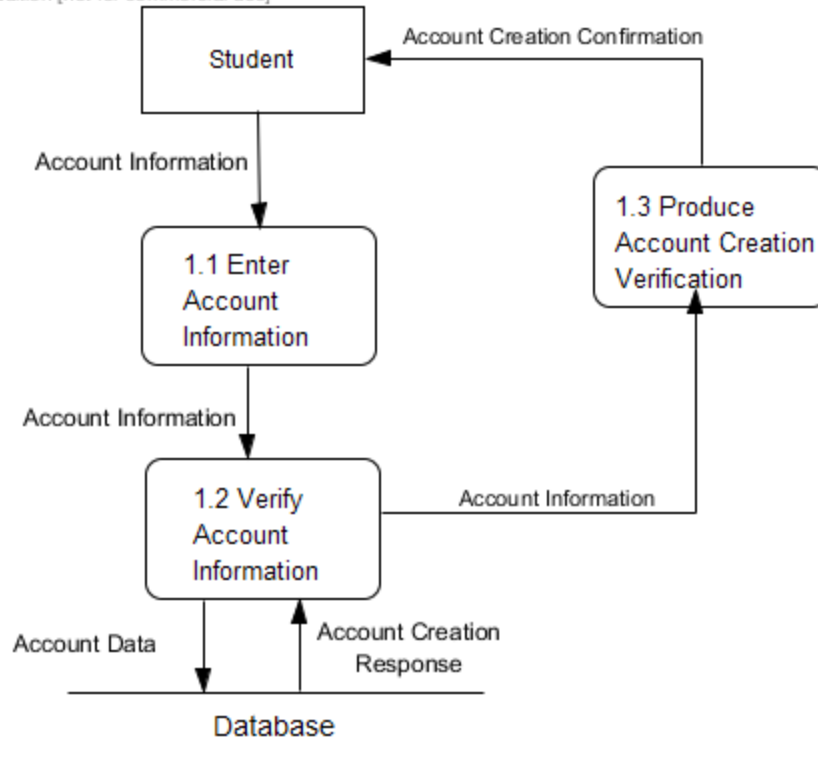


**Notes:**  
 System Administrator has access to all processes  
 Faculty Member has Student access to all processes

## 6.4.4 Level 1 Diagrams

### 6.4.4.1 Create Account

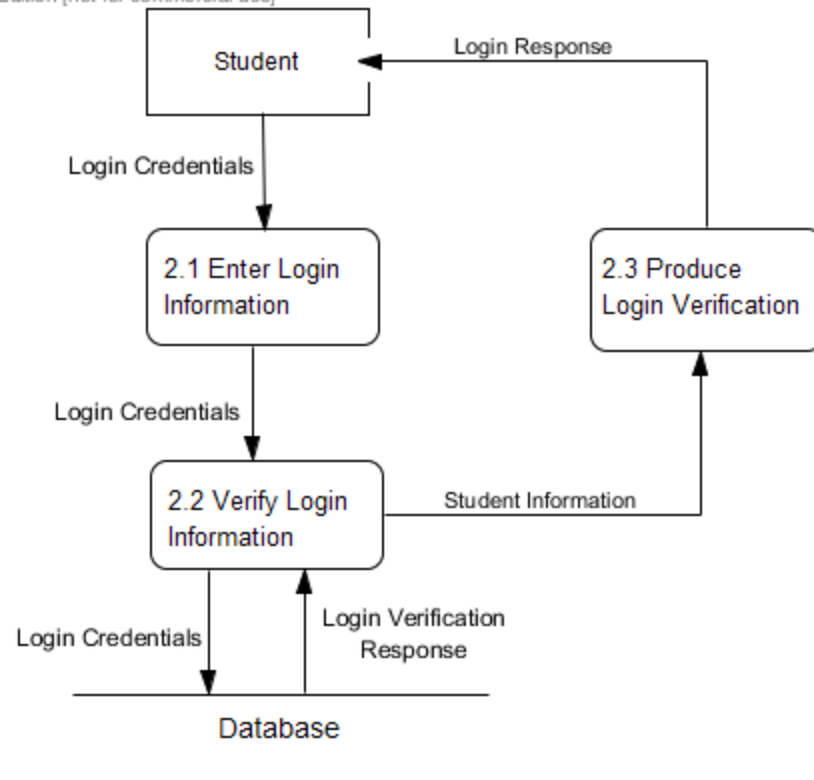
Visual Paradigm Community Edition [not for commercial use]





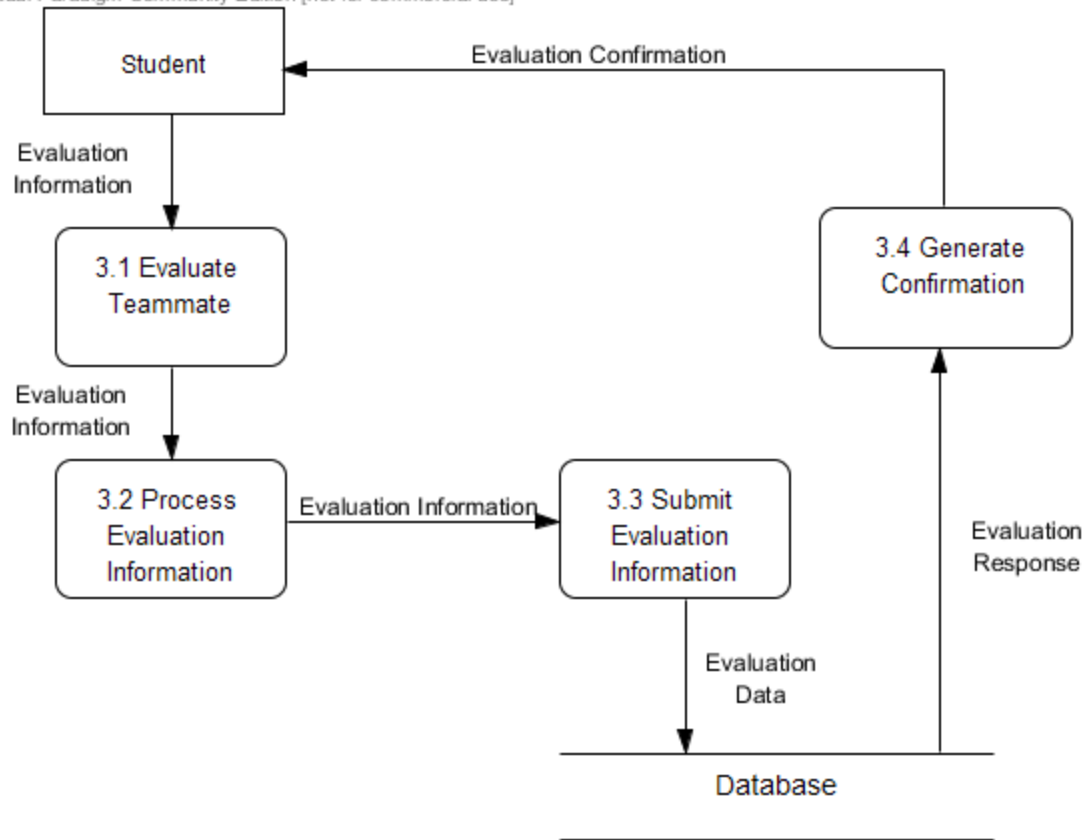
## 6.4.4.2 Login

Visual Paradigm Community Edition [not for commercial use]

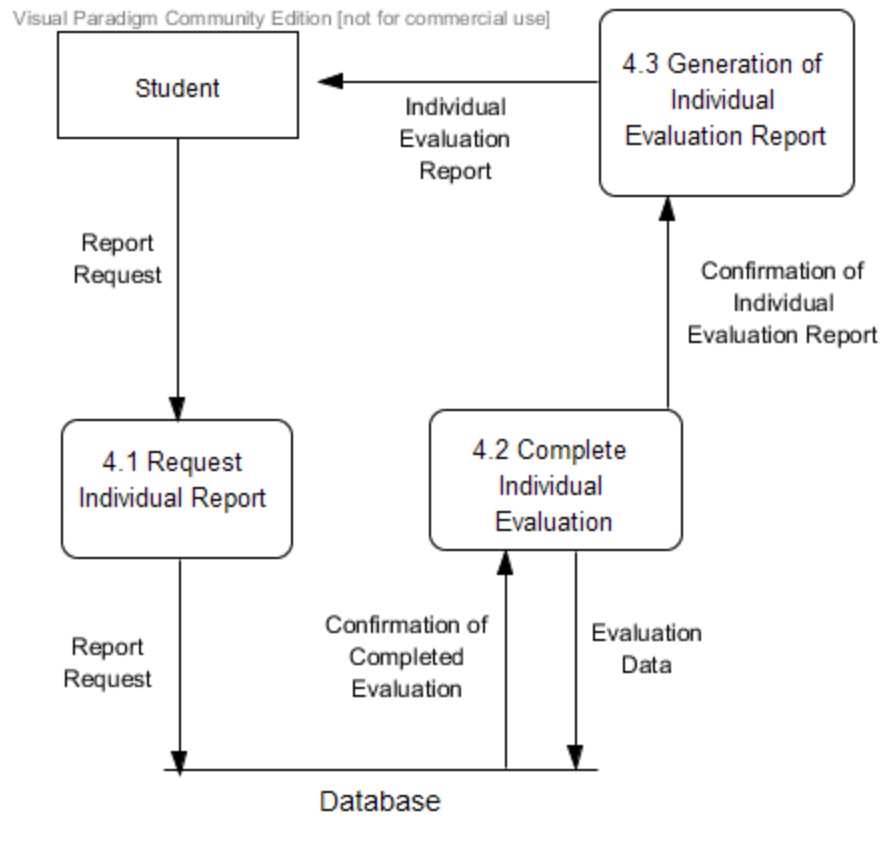


### 6.4.4.3 Evaluate Teammate

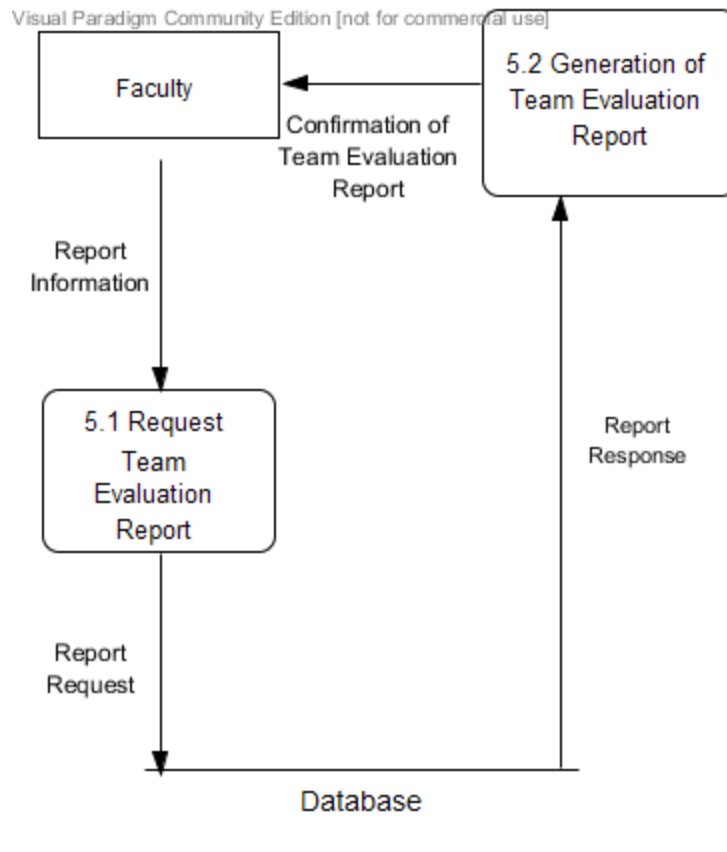
Visual Paradigm Community Edition [not for commercial use]



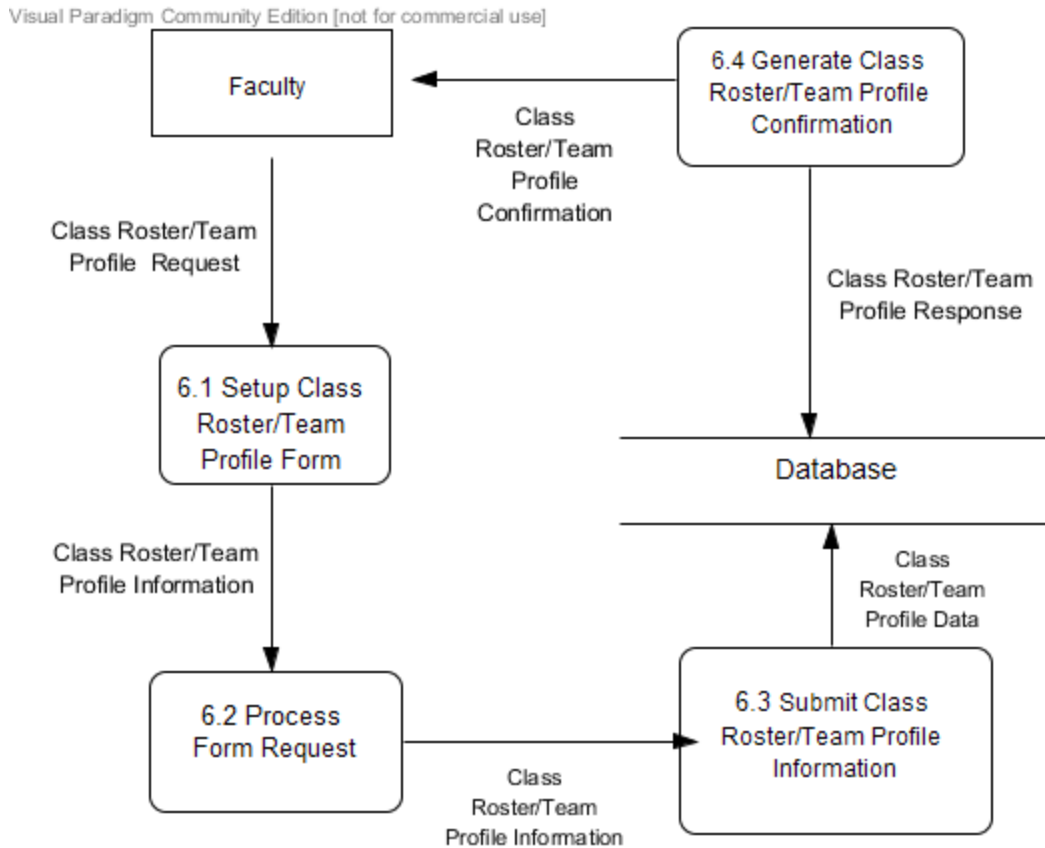
#### 6.4.4.4 View Individual Report



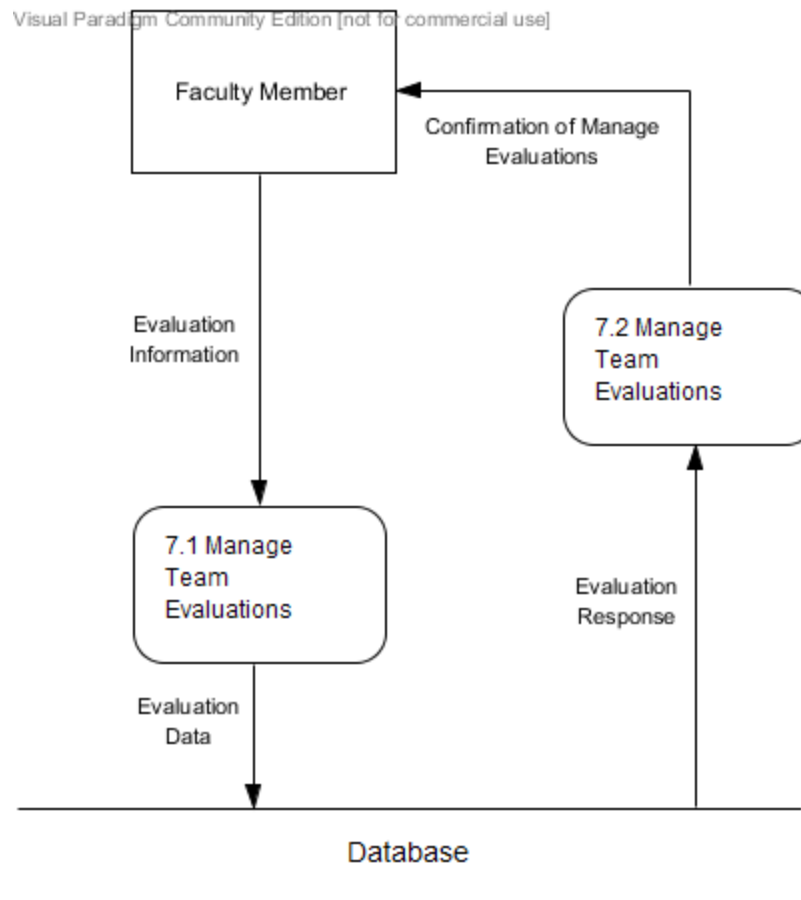
### 6.4.4.5 View Team Report



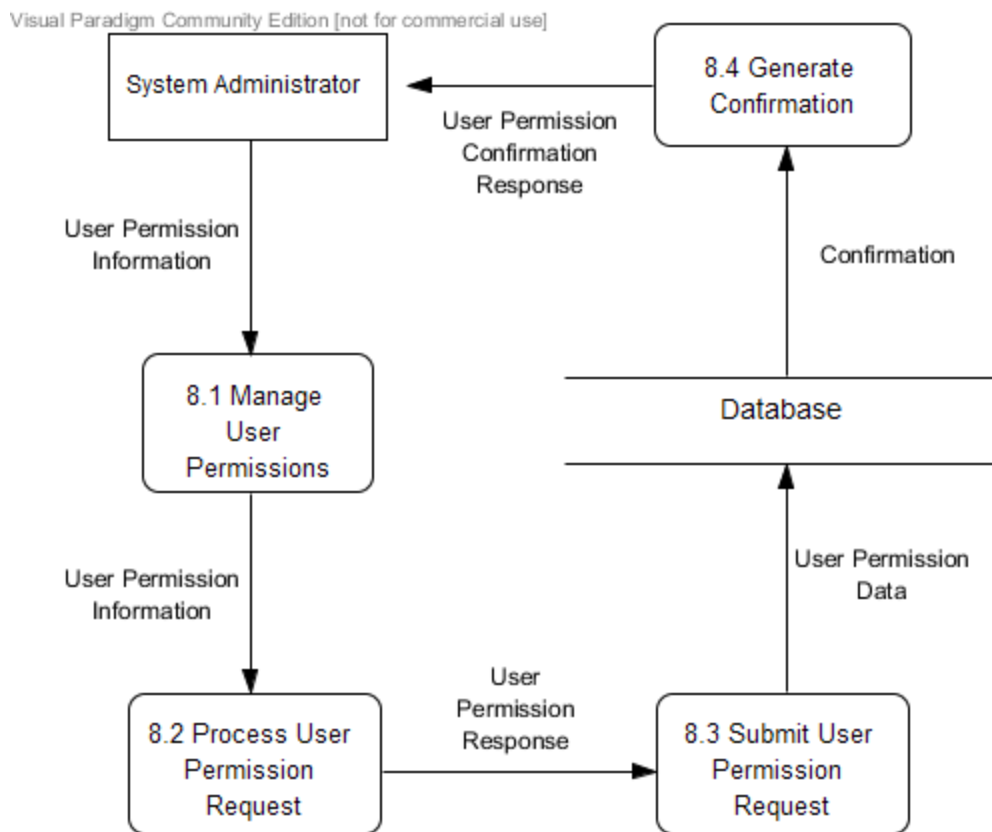
### 6.4.4.6 Establish Class Roster/Team Profile



### 6.4.4.7 Manage Team Evaluations



### 6.4.4.8 Manage User Permissions



## 6.5 Source Code:

### 6.5.1 TEAMS 101 Application Platform Home

Visit <https://github.com/novatechnology/teams101/blob/master/index.php> to view the code.

### 6.5.2 About TEAMS 101

Visit <https://github.com/novatechnology/teams101/blob/master/about.php> to view the code.

### 6.5.3 Team Evaluation Log In

Visit [https://github.com/novatechnology/teams101/blob/master/team\\_evaluation/login/login.php](https://github.com/novatechnology/teams101/blob/master/team_evaluation/login/login.php) to view the code.

### 6.5.4 Team Evaluation Create An Account

Visit [https://github.com/novatechnology/teams101/blob/master/team\\_evaluation/login/create-account.html](https://github.com/novatechnology/teams101/blob/master/team_evaluation/login/create-account.html) to view the code.

### 6.5.5 Team Evaluation Home Page

Visit [https://github.com/novatechnology/teams101/blob/master/team\\_evaluation/home.php](https://github.com/novatechnology/teams101/blob/master/team_evaluation/home.php) to view the code.



# 6.6 Test Results:

## 6.6.1 Test Directory

System Test - Test Results for All Unit Tests						
Team Name		NOVA Tech				
Project Name		Team Evaluation				
Client Name		Dr. Erik Eddy				
Directory of Unit Tests (note: this could also be called an Index or a Catalog)						
Pass/Fail Status	Unit Number	Unit Test Name	Date Last Tested	Comments or brief description	Integrated with these units	
F	90%	1	<a href="#">Create Account</a>	04/14/15	Allows a user to create an account.	
P	100%	2	<a href="#">Login</a>	04/19/15	Allows a user to sign into Team Evaluation.	
F	75%	3	<a href="#">Take Evaluations</a>	04/20/15	Allows a user to complete an evaluation.	1,2
P	100%	4	<a href="#">Setup Evaluation</a>	04/19/15	Allows user to setup an evaluation	
F	100%	5	<a href="#">My Evaluations</a>	04/19/15	Allows user to view an evaluation	
63.89% of Test Cases Passed (99.44% passes the Ivory Snow Test)						

## 6.6.2 Unit Test 1

Create Account on Team Evaluation										
Unit 1										
Allows user to create an account.										
Test Cases										
Pass/Fail Status	Test Number	Description	Action to perform test (input)	Steps to be Executed	State Before Test	Expected result	Observed result	Comments	Tested By	Test Date
P	1.001	Null first name Field	Leave username blank.	Fill out remainder of form and press submit.	Empty form	Display "Please enter Username" message.	Displays Invalid Name notification to user		Kevin, Sara	3/9/15
P	1.002	Null last name Field	Leave username blank.	Fill out remainder of form and press submit.	Empty form	Display "Please enter Username" message.	Displays Invalid Name notification to user		Kevin, Sara	3/9/15
P	1.003	One Password Field is Null	Leave either initial password or confirm password blank.	Fill out initial password or confirm password.	Null password fields.	Display "Cannot leave Password blank" message.	password null: invalid password and passwords do not match notification confirm password: password do not match notification		Kevin, Sara	3/9/15
P	1.004	Both Password Fields Are Blank	Leave both initial password and confirm password blank.	Press submit	Null password fields.	Display "Cannot leave Password blank" message.	both show notification. differing notifications for password and confirm password fields		Kevin, Sara	3/9/15
P	1.005	Password Contains Illegal Characters	Enter special character into password field.	Press submit	Empty form	Display "Invalid Password, please try again" message.	Nothing happened. Tested on Chrome and IE	Tried symbols like: < > ( ) . ; % \$ & with no yield.	Kevin, Sara	4/14/15
P	1.006	Username Contains Illegal Characters	Enter special character into username field.	Press submit	Empty form	Display "Invalid Username, please try again" message.	Notification to user that email invalid		Kevin, Sara	3/9/15
P	1.007	Initial Password Is Not At Least 6 Characters Long	Enter a password with less than 6 characters.	Press submit	Empty form	Display "Password must be at least 6 characters long" message.	Nothing happened. Tested on Chrome and IE	Typed 1 character, then 3, then 5. No result.	Kevin, Sara	4/14/15
F	1.008	Username is Already Taken	Enter a username that has already been created.	Press submit	Empty form	Display "Username is not available. Please try again." message.	Clears form no error message about username being taken		Kevin, Sara	3/9/15
P	1.009	Initial Password and Confirmed Password Do Not Match	Enter different passwords into initial and confirm password.	Press submit	Empty form	Display "Passwords do not match" message.	Confirm password does not match notification		Kevin, Sara	3/9/15
P	1.010	Email Is Not a Siena Email Account	Enter an email that does not end in "@siena.edu"	Press submit	Empty form	Display "Please enter a Siena College email address" message.	Creation of account works for non siena email accounts		Kevin, Sara	3/9/15
F	= Unit Summary tests			passing		9 passed		Date of last test =		4/14/15
	10			90%		1 failed				

## 6.6.3 Unit Test 2

Login to Team Evaluation										
Unit 2										
Allows user to Login to Team Evaluation										
Test Cases										
Pass/Fail Status	Test Number	Description	Action to perform test (input)	Steps to be Executed	State Before Test	Expected result	Observed result	Comments	Tested By	Test Date
P	1.001	Username Contains Illegal Character	Enter a special character into username.	Enter password and press submit.	Null username and password.	Display "Username is not valid" message.	box rumbles informs user of invalid username or password	Used kw30\$conn@siena.edu	Kevin,S	3/9/15
P	1.002	Password Contains Illegal Character	Enter a special character into password.	Enter username and press submit.	Null username and password.	Display "Password is not valid" message.	box rumbles informs user of invalid username or password	Used characters like < > ( ) % \$ # ;	Kevin,S	3/9/15
P	1.003	Username and Password Do Not Match	Enter a username with an incorrect password.	Press submit.	Null username and password.	Display "Username and password do not match" message.	box rumbles informs user of invalid username or password		Kevin,S	3/9/15
P	1.004	Null Username Field	Leave username blank.	Enter password and press submit.	Null username and password.	Display "Enter a username" message.	box rumbles informs user of invalid username or password		Kevin,S	3/9/15
P	1.005	Null Password Field	Leave password blank.	Enter username and press submit.	Null username and password.	Display "Enter a password" message.	box rumbles informs user of invalid username or password		Kevin,S	3/9/15
P	1.006	Null Username and Password Field.	Leave username and password blank.	Press submit.	Null username and password.	Display "Enter a username and password" message.	box rumbles informs user of invalid username or password		Kevin,Sara	3/9/15
P	1.007	Username Does Not Exist	Enter a username that has not been created.	Enter password and press submit.	Null username and password.	Display "Invalid username" message.	box rumbles informs user of invalid username or password		Kevin,S	3/9/15
P	1.008	Link to Forgot Password	Click "Forgot Password" Button	Click "Forgot Password" Button	Null username and password.	Opens Email Text Box page.	Opens Email Text Box page.		Sara	4/19/15
P	1.009	Forgot Password enter email	Enter Email into Forgot password text box	Click "Forgot Password" Button and enter email	Blank email text box.	Email able to be entered	Email able to be entered		Sara	4/19/15
F	1.010	Submit email for forgot password send	Press Send Password button	Click "Forgot Password" Button and enter email and press Send Password	Email entered in box	"Email Sent"	Nothing		Sara	4/19/15
P	1.011	Correct Username and Password.	Enter valid username and password.	Press submit.	Null username and password.	No error message. Proceed to home page.	Redirect to Teammate Evaluation Page		Kevin,S	3/9/15
F	= Unit Summary		91% passing		10 passed		Date of last test =		4/19/15	
	11 tests				1 failed					

## 6.6.4 Unit Test 3

Take Evaluations on Team Evaluation										
Unit 3										
Allows user to complete a course evaluation.										
Test Cases										
Pass/Fail Status	Test Number	Description	Action to perform test (input)	Steps to be Executed	State Before Test	Expected result	Observed result	Comments	Tested By	Test Date
P	1.001	Test the "Take Evaluations" link	Click "Take Evaluations" and see if it takes you to Take-Evaluations.php	Click "Take Evaluation"	Team Evaluation Page	Directs to Take-Evaluations.php	Directs to Take-Evaluations.php		Sara	4/20/15
P	1.002	Test the "Complete Evaluation" link	Click "Complete Evaluation" and see if it takes you to take-evaluations-2.php coinciding to the relevant course	Click "Complete Evaluation"	Team Evaluation Page	Directs to take-evaluations-2.php coinciding to the relevant course	Directs to take-evaluations-2.php coinciding to the relevant course		Sara	4/20/15
F	1.003	Leave Entire Survey Blank.	Leave Entire Survey Blank.	Press Next.	Blank survey.	Display "You must select necessary behaviors for this teammate." message.	Moves onto next teammate, no error.		Sara	4/20/15
P	1.004	Necessary Behaviors Evaluated For All Team Members	Evaluate all team members and all behaviors.	Press Submit.	Blank survey.	No error message, display confirmation.	No error message, display confirmation.		Sara	4/20/15
F	<b>= Unit Summary</b>			<b>75% passing</b>	<b>3</b>	<b>passed</b>		<b>Date of last test =</b>		<b>4/20/15</b>
	<b>4</b>	<b>tests</b>			<b>1</b>	<b>failed</b>				

## 6.6.5 Unit Test 4

Setup Courses Sections and Teams on Team Evaluation										
Unit 4										
Allows faculty to setup courses sections and teams										
Test Cases										
Pass/Fail Status	Test Number	Description	Action to perform test (input)	Steps to be Executed	State Before Test	Expected result	Observed result	Comments	Tested By	Test Date
P	1.001	Leave "Section" Blank	Only fill in other parts of form.	Press Submit.	Blank form.	Entry not submitted. Nothing changed.	Entry not submitted. Nothing changed.		Sara	4/19/15
P	1.002	Leave "Courses" Blank	Only fill in other parts of form.	Press Submit.	Blank form.	Entry not submitted. Nothing changed.	Entry not submitted. Nothing changed.		Sara	4/19/15
P	1.003	Leave "Teams" Blank	Only fill in other parts of form.	Press Submit.	Blank form.	Entry not submitted. Nothing changed.	Entry not submitted. Nothing changed.		Sara	4/19/15
P	1.004	Leave "Evaluation" Blank	Only fill in other parts of form.	Press Submit.	Blank form.	Entry not submitted. Nothing changed.	Entry not submitted. Nothing changed.		Sara	4/19/15
P	1.005	Leave Form Blank	Fill in nothing.	Press Submit.	Blank form.	Entry not submitted. Nothing changed.	Entry not submitted. Nothing changed.		Sara	4/19/15
P	1.006	Leave "Section" Blank	Only fill in other parts of form.	Press Submit.	Blank form.	Entry not submitted. Nothing changed.	Entry not submitted. Nothing changed.		Sara	4/19/15
P	1.007	Leave "Courses" Blank	Only fill in other parts of form.	Press Submit.	Blank form.	Entry not submitted. Nothing changed.	Entry not submitted. Nothing changed.		Sara	4/19/15
P	1.008	Leave "Teams" Blank	Only fill in other parts of form.	Press Submit.	Blank form.	Entry not submitted. Nothing changed.	Entry not submitted. Nothing changed.		Sara	4/19/15
P	1.009	Leave "Evaluation" Blank	Only fill in other parts of form.	Press Submit.	Blank form.	Entry not submitted. Nothing changed.	Entry not submitted. Nothing changed.		Sara	4/19/15
P	1.010	Leave Form Blank	Fill in nothing.	Press Submit.	Blank form.	Entry not submitted. Nothing changed.	Entry not submitted. Nothing changed.		Sara	4/19/15
P	= Unit Summary			100% passing		5 passed			Date of last test =	4/19/15
	5	tests				0 failed				

## 6.6.6 Unit Test 5

My Evaluations on Team Evaluation										
Unit 5										
Allows user to complete a course evaluation.										
Test Cases										
Pass/Fail Status	Test Number	Description	Action to perform test (input)	Steps to be Executed	State Before Test	Expected result	Observed result	Comments	Tested By	Test Date
P	1.001	Test the My Evaluations link	Click "My Evaluations" and see if it takes you to My-Evaluations.php	Click "My Evaluation"	Team Evaluation Page	Directs to My-Evaluations.php	Directs to My-Evaluations.php		Sara	4/20/15
P	1.002	Click "View Evaluation" and view the evaluation score	Click "view evaluation" for the coinciding course of evaluation and view results	Click "View Evaluation"	My Evaluations page.	Evaluation result of coinciding course displayed.	Evaluation result of coinciding course displayed.		Sara	4/20/15
F	= Unit Summary			100% passing		2 passed			Date of last test =	4/20/15
	2	tests				0 failed				