

Grant Title: **Accelerated Pathways in Advanced Manufacturing (APAM)**

Author: **Community College of Rhode Island**

Link: <http://www.ccri.edu/>

Document: Record Management

DOL Disclaimer Statement:



“This workforce product was funded by a grant awarded by the U.S. Department of Labor’s Employment and Training Administration. The product was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The U.S. Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership.”



Unless otherwise noted - this work is licensed under the Creative Commons Attribution 4.0 International License. To view a copy of this license, visit <http://creativecommons.org/licenses/by/4.0/>.

Abstract

CCRI TAACCCT-3 APAM Grant

"Creation of a Dynamic Web-Based Solution for Management Student's Records"

By *David Dos Santos*

The Community College of Rhode Island was awarded a TAACCCT-3 Grant in March 2014. *"TAACCCT-3 is a U.S. Department of Labor grant awarded to the Community College of Rhode Island to develop streamlined, industry-recognized credentials training to move Rhode Island's unemployed and dislocated workers back into the work force"*¹.

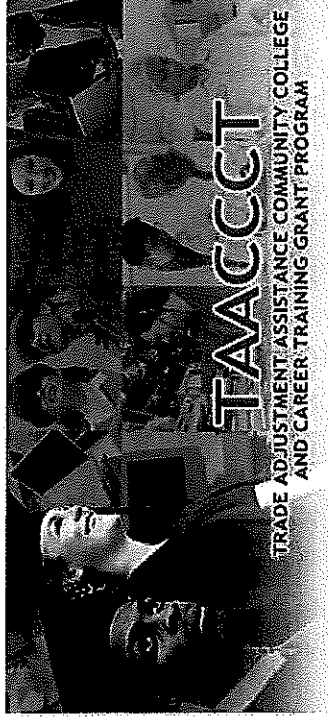
In order to capture the data necessary for tracking the required grant outcomes, a dynamic web-based solution was developed and implemented to allow a limited set of multiusers to sign-in with secured passwords. The web solution was developed using a Server Scripting Language, known as ColdFusion version 9, within a Database environment of MySQL Server version 5.6. Additionally, the system has the capacity to interact with BANNER, "the world's leading higher education ERP."

Solution Structure:

- A well-defined normalized database that provides for an unduplicated headcount tracking of participants' activities
 - Tracking of user's activities; this feature allows the staff to review activities within different components of the project's activities
 - Use of stored procedures, functions, and views to centralize the logic of the application within the Database Server that includes the option of adding in additional layers of security
 - Connect to BANNER to query students' records as well as import the students' data into the treatment/activity database
 - Ability to extract a student's data from uploaded Excel files
 - Ability to work outside of the Campus Network
 - Ability to send emails to students (individual or group)
 - User's authentication is based on Windows Active Directory authentication. If the user is disabled in the College Network Active Directory, then, the user will be unable to sign-in the solution
 - Customization reports in pdf formats with a variety of statistical charts
-

Sign-in

In order to sign-in to the web solution the user has to pass the system security which is based on the Campus Windows Network Active Directory Authentication.



User Authentication:

User name:

Password:

Security:

- **HTTP Secure (https):** The system redirects the user to a secure tunnel, https, if the website origin is not coming from a HTTP secure protocol. This allows the staff to maintain the protection of the privacy and integrity of the exchanged data.
- **Session time-out:** When there is not activity in the application during a 20 minute interval, the system will clean the session variables, forcing the user to sign in in the login page.
- **Ajax secured with API component:** All calls to the Server to retrieve student data areas are reviewed by a server authentication method that avoid a remote call leading to non-secure access/ Once the called method meets the authentication procedures, the flow process resides on the server.
- **SSN:** The data is store in Oracle BANNER.
- **The authentication method is LDAP.** This prevents access to students' records once they stop working at CCRI to student's records.
- **Lock account after multiple failed login attempts.**
- **No Front-side reset password module.** If the account is locked, user has to contact Help Desk to unlock the account, since the account credentials are from Banner.
- **Data sources are highly protected.** Not even the application developer knows the password of the sources.

Start Menu

The start menu has the following options:

1. TAACCCT (Queries)
2. TAACCCT I Students (No-Cost Extension)
3. TAACCCT 3 | Students (Registers)
4. Reports
5. Database
6. User Accounts (Administrator Staff Only)
7. Support
8. Log-out

Version Staff:

November 15, 2015

TAACCCT | Main Menu
CORE > TAACCCT-ADMIN

Start

TAACCCT I Students
Queries

TAACCCT I Students
No-Cost Extension

TAACCCT 3 | Students
Registers

Reports
Query Reports

Database
Metadata

Log out
Clear Session

Support
TAACCCT Help

Directors

This page developed and maintained by the Community College of Rhode Island, 400 East Avenue, Warwick, Rhode Island 02886-1007 - Telephone:(401) 825-4279.
Send comments and suggestions about this page to David.Donahue@ccri.edu

© 2015 COMMUNITY COLLEGE OF RHODE ISLAND

Version Administrator:

November 15, 2015

TAACCCT | Main Menu
CORE > TAACCCT-ADMIN

Start

TAACCCT I Students
Queries

TAACCCT I Students
No-Cost Extension

TAACCCT 3 | Students
Registers

Reports
Query Reports

Database
Metadata

User Accounts
TAACCCT

Support
TAACCCT Help

Log out
Clear Session

Directors

This page developed and maintained by the Community College of Rhode Island, 400 East Avenue, Warwick, Rhode Island 02886-1007 - Telephone:(401) 825-4279.
Send comments and suggestions about this page to David.Donahue@ccri.edu

© 2015 COMMUNITY COLLEGE OF RHODE ISLAND

Search box:

In different places the user will find useful text boxes that allow users to quickly search related data. If the user wants to display all data stored in the table that is related to the search box, press: * Otherwise, start entering the required text, and the system will filter the information



And click the option found

Navigation:

There are multiple ways to navigate within the application, one is to enter in the browser the url of the module:

- <https://webfor.ccri.edu/tact/>
- <https://webfor.ccri.edu/tact/students.cfm>
- https://webfor.ccri.edu/tact/students_extension.cfm
- https://webfor.ccri.edu/tact/students_tact.cfm
- <https://webfor.ccri.edu/tact/report.cfm>
- <https://webfor.ccri.edu/tact/users.cfm>

TAACCCT | Main Menu

CCRI > TAACCCT-ADMIN

Students | TAACCCT 3

CCRI > TAACCCT-ADMIN > TAACCCT 3

The other method is to click the navigation breadcrumbs, by clicking TAACCCT-ADMIN, which it takes the user to the Main Menu, where the user can choose where to go.

TAACCCT | Students (Queries)

This module allows:

- Search dynamically students based on their conditions
- If data is not found, the system will emit an alert.
- When Data is retrieved, it will be placed on DB Records:

Student Search:

Banner:
 First Name:
 Last Name:
 Birth Date:
 Gender:
 Ethnicity:
 Veteran:
 Contacted: Yes No
 Agree to Pace Extension: Yes No
 Program | Credentials:
 Only Records with Email: Yes No

Search ->

Connect to Database

Records Not Found
OK

DB Records Q Search

DB Records Found: 11

NO	IC	54	SHANE	WILLIAMS	05/27/1992	Male	Caucasian	shkwilliams@gmail.com	Trudeau
YES	NO	787	DANIEL	SULLIVAN	05/27/1995	Male	Caucasian	dullivan@mycwi.edu	Trudeau
YES	NO	781	WILLIAM	SCALLION	07/31/1989	Male	Caucasian	3246ns@gmail.com	Trudeau
YES	NO	402	SCOTT	REBER	11/29/1975	Male	Caucasian	scottb.reber@gmail.com	Trudeau
YES	NO	604	LOUIS	LILLI	07/19/1955	Male	Caucasian	louis7145@gmail.com	Trudeau
YES	NO	540	GARY	LAPOINTE	04/12/1966	Male	Caucasian	omhanoire2010@hotmail.com	Trudeau
YES	NO	778	TIN	HINKLE	09/28/1979	Male	Caucasian	tinchoydelirio@yahoo.com	Trudeau
YES	NO	599	HEADRUFF	GALE	09/11/1987	Male	Caucasian	galedruff1@gmail.com	Trudeau
YES	NO	532	PALL	PASTIVA	01/10/1972	Male	Caucasian	pdpastiva12@gmail.com	Trudeau
YES	NO	600	PATRICK	CLEBERT	09/12/1974	Male	Caucasian	patrickc1974@gmail.com	Trudeau
YES	NO	397	CHARLE	BEVEMAN	05/20/1975	Male	Caucasian	aldrat@hotmail.com	Trudeau

Connect to Database

Students (Queries)

This module allows:

- Search dynamically students based on their conditions
- When Data is retrieved, it will be placed on DB Records:

The Contact Students button will send an email to Students that are enrolled in the TAACCCT -1 No-Cost Extension in the PACE 1 Extension.

Contact Students

DB Records Search

DB Records Found: 11

NO	SHANE	WILLIAMS	03/02/1992	Male	Caucasian	row.williams@gmail.com	Trudeau
YES	767 DANIEL	SULLIVAN	03/27/1915	Male	Caucasian	d.sullivan@myvcf.edu	Trudeau
YES	761 WILLIAM	SCULLION	07/24/1989	Male	Caucasian	l241sc@vcf.com	Trudeau
YES	402 SCOTT	REBER	11/29/1975	Male	Caucasian	scott.reber@gmail.com	Trudeau
YES	904 LOUIS	LILLI	07/18/1953	Male	Caucasian	louis71853@gmail.com	Trudeau
YES	540 GARY	LAPORTE	04/12/1966	Male	Caucasian	gmlaporte2010@hotmail.com	Trudeau
YES	778 TIM	HUNGLE	09/20/1979	Male	Caucasian	timothyhungle79@yahoo.com	Trudeau
YES	599 HEADRUFF	GATE	03/11/1967	Male	Caucasian	gateheadruff@gmail.com	Trudeau
YES	352 PAUL	DASILVA	01/10/1972	Male	Caucasian	pddsilva322@gmail.com	Trudeau
YES	600 PATRICK	CLEMENT	09/13/1974	Male	Caucasian	patrickc1974@gmail.com	Trudeau
YES	397 CHRIS	BENJAMIN	05/30/1975	Male	Caucasian	aldard@hotmail.com	Trudeau

TAACCCT 3

How records are displaying when the user's privilege is Staff, instead of Administrator

This module allows:

- Search dynamically students based on their conditions (ID, Name, DOB, Gender, Ethnicity, Veteran, etc.)
- Select a student record from a matched student's group conditions
- Register or update student's record.
- The output of sensitive student's record information (ssn) is based on the user's privilege access (Administrator and Staff). When it is based on Staff, the SSN with placed with dash symbol "-" plus the last four digits.

The screenshot displays the TAACCCT 3 search interface. At the top, there are navigation tabs: Information, Contact, Activity, Programs, Scores (TABE), Employment, DB Records, Search, and Import Banner. Below the tabs is a search form with various fields and dropdown menus. The search results are displayed in a table with columns for ID, Name, DOB, Gender, Ethnicity, Veteran, and SSN. The results are filtered to show 2 records.

Search:

Enrollment Status: Full-time
 CCRJ ID: *****
 First Name: *****
 Last Name: *****
 Birth Date: MM/DD/YYYY
 Gender: Female
 Ethnicity: Hispanic
 Veteran: Select
 Program: Select
 Credentials: Select
 Sort by: Last Name
 Ascending Descending

DB Records Found: 2

ID	Name	DOB	Gender	Ethnicity	Veteran	SSN
30214925	Tyler Cole	06/02/1991	Female	African-American		XXX-XX-7144
30272841	Alpha Austin	03/26/1994	Female	African-American		XXX-XX-0569

User Accounts

This module allows:

1. Create or Update a internal account, which the credentials MUST match the user's Banner login access.

2. Search Accounts (Enter any if you wish any information in the inputs, or simply just click Search. It will display all accounts created)

3. Get User Log of Activities

4. Change User Privilege or Access

(By changing the privilege permission of the account, the user will not get the full length of SSN) When user is staff, SSN will be marked with user ID

Search a User:

Information | Logs | DB Records | Search | Maintenance

Search System's Users:

Banner ID:

Banner User:

First Name:

Last Name:

Privilege:

Information | Logs | DB Records | Search | Maintenance

Information:

Banner User:

Banner ID:

First Name:

Last Name:

Email:

Permissions:

DB Records:

TAAACCT | Users Accounts | November 10, 2015

Information | Logs | DB Records | Search | Maintenance

DB Records - Banner ID:

Search:

Search System's Users

Information | Logs | DB Records | Search | Maintenance

Information:

Banner User	Banner ID	First Name	Last Name	Email	Permissions
Administrative Staff					
Banner User					
First Name:					
Last Name:					
Email:					
Permissions:					

DB Records - Banner ID:

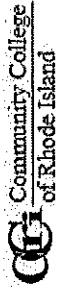
Search:

Search System's Users

Information | Logs | DB Records | Search | Maintenance

Information:

Banner User	Banner ID	First Name	Last Name	Email	Permissions
Administrative Staff					
Banner User					
First Name:					
Last Name:					
Email:					
Permissions:					



Migration of the Current Database System into **MySQL Server** to become
an efficient, friendly-user, and secure system.



CCRI-APAM PROGRAM

Objectives and Activities

Design, develop, migrate and implement a multi-user database system that will allow the Staff working on the Accelerated Pathways in Advanced Manufacturing Program at CCRI-

Warwick to work with an efficient, friendly-user, and secure system.



Benefits of Implementing MySQL Server integrated with .NET App.



1. MySQL privileges and user security
2. Relational Database System
3. Client/Server Architecture
4. Replication
5. Transactions
6. Foreign key constraints
7. Platform independence
8. Speed

