Project Overview

Automated 104R

Capstone Research Project

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The concept of this project is to take the 104R form that is required to be filled out by most students participating in ROTC to plan out their academic career and make it an automatic form that fills itself out as classes are taken and planned to take.

The why of this is as students take classes, fail classes, and plan out their future classes, the 104R form constantly changes throughout a student’s career. A 104R form that is filled out automatically and reflects the changes in a student’s academic career would be beneficial to represent a student’s classes accurately and quickly.

The goal is to improve the ease of access to this form and make it a more readily used form to help students plan and understand their schedule. As well as to have an already filled out form in which academic advisors and ROTC instructors can easily view and access to ensure the gradational requirements of their students.

Functional Requirements

* Website domain/ access
* Login screen with password
* Main menu
  + Profile
* Auto 104R
  + Able to manipulate.
    - Add/drop classes
    - Add grades
    - Credit Hours
    - Move classes around semester to semester

Process Flow Diagram

User connects to website.

User then is welcomed to my project.

User then can access three different tabs to navigate around.

The user can click on Courses and add course they need to take.

The user can click on myClasses and add classes that they have taken

The user can click on User and input information about themselves

Diagram

Description automatically generatedDatabase Design

Diagram

Description automatically generatedProcess Flow Diagram

Change Log

10/5/22- Added Change log

10/6/22- Added Database design

10/7/22- Database configuration built

10/13/22 – Added projected timeline

10/13/22 – started data collection for data base

10/13/22 – updated timeline

10/20/22 – Expanded process flow diagram

10/26/22

* + updated timeline
  + basic process flow diagram

10/3/22-

* Database build
* Updated timeline

11/15/22-

* Updated timeline

11/30/22-

* Installed ruby on rails

12/7/22

* Updated timeline.
* Got Ruby on rails working.

1/1/23- 3/15/23

* Built Website
* Built database on access.
* Worked on database and website adding more options
* Additional work.

4/5/23

* Functional requirements updated to reflect what I can get done.

4/14/23

* Updated functional requirements.
* Updated website, acquired new tools to redesign.
* Course Catalog is entered manually as a way to list all the courses a student has to take with the ability to remove courses they have taken

4/15/23

* Updated functional requirements.
* Updated Documentation to reflect updated functionality.
* Updated Database and what is involved in the database
* Complete website overall version 2.0
* Added styling.
* Updated projected timeline due to loss of data from original documentation.

4/21/23

* Updated and backdated documentation to reflect loss of data

Projected Timeline

10/20/22-

* Update func requirements

10/27/22-

* MySQL download
* Process flow diagram
* Data collection

11/3/22

* Complete Database
* Get Website and database integration

11/10/22

* Complete Database
  + add dummy data
  + Queries
* Get website
* Make get hub

11/17/22

* Design website

12/8/22

* Initial blog build

1/3/23

1/15/23

* Better design of database

1/25/23

-Work on Website

2/15/23

-Continue building website and polishing database

3/1/23

* Update Blog
* Work on Database

3/15/23

* Add func requirements

4/1/23

* Rebuild Website
* Type up SQL statements.

4/16/23

* Finish Website
* Finish Functional requirements