COSC 380 SPRING INTERNSHIP

BY:VINCENT NIGRO

OMNI TECHNOLOGY PROFESSIONALS, INC.

- Who is Team Omni?

  - OmnitechPro is comprised of 5 individuals with IT and business knowledge.

  - Jeremy Heslop founded OmnitechPro in 2004 when he identified a need for small businesses to implement IT work, with a high level of reliability.

    - He has termed this new methodology of IT service as IT2.0.

    - Omnitechpro.com

- What does Team Omni do?

  - OmnitechPro creates not only IT solutions, but the right IT solutions for any clients specific business needs.

    - Jeremy overlooks the project management and generating new projects from existing and new clients.

    - We have an IT specialist who works directly with Delmarva Heart here in Salisbury.

RESPONSIBILITIES/TASKS

- Responsibilities

  - Work on assigned projects.

  - Assist team members with other projects when needed.

  - Provide IT support assistance.

- Tasks

  - Create website for Worcester County Health Department (WCHD) that was identical to the Maryland.gov template.

  - Create Drupal 8 front-end interface for data extraction algorithm.

  - Update Judy Center's Microsoft Access Database.

  - Assist other team members.

CHALLENGES

- Learning a wide range of languages, interfaces and software in a short amount of time.

  - Joomla, Drupal 8, PHP, HTML, CSS, Javascript, Jquery, Microsoft Access

  - Also had to learn database topics in order to complete a clients request for updated queries.

- Effectively assist team members with other projects.

  - (Built PC for laser cutting software, meeting deadlines for other members Drupal 8 sites, etc.)

- Managing work load for my own personal projects while helping other projects.

WCHD WEBSITE

- Clients wanted matching website to Maryland.gov.
  - Reverse engineered the format and layout.
    - Accomplished this task by inspecting the Maryland.gov site and mimicking its attributes.
- Had to learn how Joomla templates worked.
- Had to learn front-end languages.
  - PHP, Javascript, Jquery, HTML, CSS.

DRUPAL 8 DATA EXTRACTION PROJECT

```
function processURL($nodeId) {
    Timer::start("processURL");

    $node = Node::load($nodeId);
    if(!$node->get('field_tags')->isEmpty())
        $tags = $node->field_tags;
    else
        $tags = [];

    $nurl = $node->title->value;

    $pdfVal = FindTermID('pdf', TAG);
    $imgVal = FindTermID('image', TAG);

    if(!$node->get('field_tags')->isEmpty()){
        foreach($node->field_tags as $tag){
            if($tag == $pdfVal || $tag == $imgVal){
                $data = "";
                $node->body = htmlentities($data);
                $sitetitle = "";
                $node->field_site_title = $sitetitle;
                break;
            }
        }
    }
```

https://hiswai.com/technology/popchain-changer-of-digital-conter
distribution-sector/

View | Edit | Delete

This URL has been processed already.

Submitted by admin on Fri, 07/20/2018 - 15:40
Site Title: POPCHAIN, Changer of Digital Content Distribution Sector – #hiswai

process: On
Tags: website rss

Scrapes
000001 blockchain content distribution

Link
https://hiswai.com/technology/popchain-changer-of-digital-content-distribution-sector/

Blockchain Use Cases

View | Edit | Delete

This scrape list has already been imported.

Submitted by admin on Mon, 07/23/2018 - 14:25
Scraped
Completed
Keywords
blockchain use
Automatic Import
On
Imported
On
Last Scrape
Thu, 08/30/2018 - 12:00
Days To Rescrape
1

Total Urls: (1293)
Not Imported Urls: (476)
https://bitcointalk.org/index.php?topic=4927171.220
http://www.kfbb.com/story/38990546/new-ride-hailing-app-driven-by-blockchain

- Client wanted a front-end website to view database of URL's processed and "scrape objects" that contains a list of URLs that is relevant to that topic.

  - Scrape objects are generated by a preceding C# application that imports new scrape objects.
    - Uses ScrapeBox to generate URLs

- This project is autonomously ran every hour to process unprocessed URLs and ran by using a cron-job task.

  - Scrape objects contain the new URLs that have not been imported and are updated through the C# application.

JUDY CENTER DATABASE

- Due to confidentiality, the database itself cannot be shown due to the personal information that is saved in this private database.

  - Holds student's information that have attended either an event or program.

- Client wanted new queries created for their existing Microsoft Access database.

  - During this project I had to introduce myself to Microsoft Access and the basic's of databases in order to build the necessary queries.

  - Most of these queries kept track of how many students were involved in multiple activities or were part of a particular activity within a certain date range.

    - All of these queries required subqueries to retrieve the required information from the database to calculate the correct query that was wanted.

- Had to fix some forms (specific to Access) that need to be changed due to new dependencies added.

THANK YOU

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