

CS3604 Case Study Library 2

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Client: Professor Dunlap

CS4624: Multimedia, Hypertext, and Information Access

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Outline

- Motivation
- Project Overview
- Work Completed
- Future Work
- Acknowledgements
- References



Motivation

- Give students of CS3604 a way to access previous case study projects
- Improve previous semesters' site
- Ease current burden of work required by professor for site

Project Overview - Work from Previous Semester

- Launched site from VTDLP Access Project Fork
 - AWS Amplify for deployment
 - OpenSearch for GraphQL Queries
 - S3 for file storage
 - DynamoDB for archive, collection, and site metadata
- Python Script for Batch Uploads
 - Allows for batch uploads of case studies to specified collection
- Site Admin Page
 - Allows for simplistic changes to the site
 - Create / edit / delete specified collections / archives
 - Home page changes

Current Home Page

The screenshot shows the top navigation bar with the VT logo and 'UNIVERSITY LIBRARIES' on the left, and a 'MENU' icon on the right. Below this is a dark red breadcrumb trail: 'University Libraries / 3604: Professionalism in Computing'. A light gray navigation bar contains four links: 'HOME', 'BROWSE COLLECTIONS', 'SEARCH', and 'UPLOAD'. The main content area features a large banner with a blue and black background of binary code (0s and 1s). The title 'Professionalism In Computing' is centered in white. Below the banner is a search bar with the placeholder text 'Search by keyword, title, description', a dropdown menu set to 'Title', and a red search button with a magnifying glass icon. Underneath the search bar is the section header 'CS 3604 Case Study Library'. A paragraph of text explains that the site is a repository for case studies conducted by students enrolled in CS3604: Professionalism in Computing, where students can browse previous work or upload their own. At the bottom, there are two red-bordered buttons: 'Browse All Case Studies' and 'Browse Case Studies by Topic'.

VT | UNIVERSITY LIBRARIES

MENU ☰

University Libraries / 3604: Professionalism in Computing

HOME BROWSE COLLECTIONS SEARCH UPLOAD

Professionalism In Computing

Search by keyword, title, description | Title ▾ 🔍

CS 3604 Case Study Library

This site is a repository for case studies that are conducted by students enrolled in CS3604: Professionalism in Computing, in which students can browse case studies done by previous students, as well as upload their own case study.

[Browse All Case Studies](#) [Browse Case Studies by Topic](#)

Project Overview - Problems

- Problems with what we were left
 - Outdated GraphQL API Key causing unresponsive site
 - Case studies categorized by course semester
 - Professor Dunlap required to upload case studies using Python script
 - Hundreds of uploaded case studies in .pptx with no display support

Project Overview - Solutions

- Update GraphQL API Key
 - Notify Professor Dunlap to prevent further site crashes
- Create Collection for Each Course Topic
 - Intellectual Property, Privacy, Artificial Intelligence, etc.
- Create Upload Page for Students
 - Allow student to specify name, title, description, and course topic
- Only allow for PDF and MP4 files to be uploaded

Work Completed - Deployment

- Successfully re-deployed site on Amplify
 - Updated GraphQL API Key
 - Created new VTDLF fork to work with

Provision Test Build Deploy

Started at
11/26/2022, 2:16:17 PM

Build duration
7 minutes 48 seconds



Last commit message
[Reset initial search to title asc](#)

API keys			Delete	Edi
Key	Description	Expires		
<input type="radio"/> [REDACTED]ehtpyn2gd4	dlp-access key	Tue, 24 Oct 2023 16:00:00 GMT		

Work Completed – Browsing

- Created new collection for each course topic
 - Change old collection metadata in Collections and CollectionsMap DynamoDB tables
- Implemented Lambda Function for case study thumbnails



Collections Page


 UNIVERSITY LIBRARIES MENU 

University Libraries / 3604: Professionalism in Computing / Collections


HOME BROWSE COLLECTIONS SEARCH UPLOAD

About Our Collections


Subject: All Sort by: Title (A-Z)   10 per page




Artificial Intelligence
Case Studies relating to Artificial Intelligence Unit




Commerce
Case Studies relating to Commerce Unit




Intellectual Property
Case Studies relating to Intellectual Property Unit



Internet (ICT)
Case Studies relating to Internet (ICT) Unit









Miscellaneous
Miscellaneous Case Studies



Privacy
Case Studies relating to Privacy Unit

Example Search

Algorithm Title  

Search Results: 1 - 10 of 19 Sort by Title (A-Z)  10 per page   

Filter My Results

Category »

Item (19)

Collection »

Artificial Intelligence (17)

Privacy (1)

Miscellaneous (1)

Language »

English (19)

Item

ALGORITHMIC TRACKING

Algorithmic Tracking

Item

Algorithms in Child Welfare Case Study

Algorithms in Child Welfare Case Study

Item

Amazon AI Hiring Algorithm

Amazon AI Hiring Algorithm

Item

Amazon's AI Hiring Algorithm

Amazon's AI Hiring Algorithm

Item

Amazon's Hiring Algorithm

Amazon's Hiring Algorithm

Item

Analytical AI: COMPAS Algorithm Bias

Analytical AI: COMPAS Algorithm Bias

Work Completed – Archive Management

- Removed all archives to re-upload
 - Update to have title, course topic, and name (if possible)
 - Assisted by CS 3604 Honors students
Raseen Nirjhar & Joseph O'Such
 - 800+ re-uploaded
- Files moved to Amplify Storage S3 bucket
 - Easier-to-use API in React

Work Completed - Upload

- Created student upload page
 - Authenticated using Cognito User Pools
 - Accepts name, title, description, files, and course topic
 - Either 1 or 2 files per upload (PDF or MP4)
 - Front-end validation

Upload Page Login

Sign in to your account


Username *

Password *

Forgot your password? [Reset password](#)

No account? [Create account](#)

Student Upload Form

 UNIVERSITY LIBRARIES


University Libraries / 3604: Professionalism in Computing / Case-study-upload


Case Study successfully uploaded! ✕
[Click here to visit Mozilla Leads Campaign for FCC to Reinststate Federal Net Neutrality Law](#)


HOME BROWSE COLLECTIONS SEARCH UPLOAD

Case Study Student Upload


Name: - Anonymous

* Title: 70 / 75 

Description (optional): 0 / 250 

* Course Topic: 

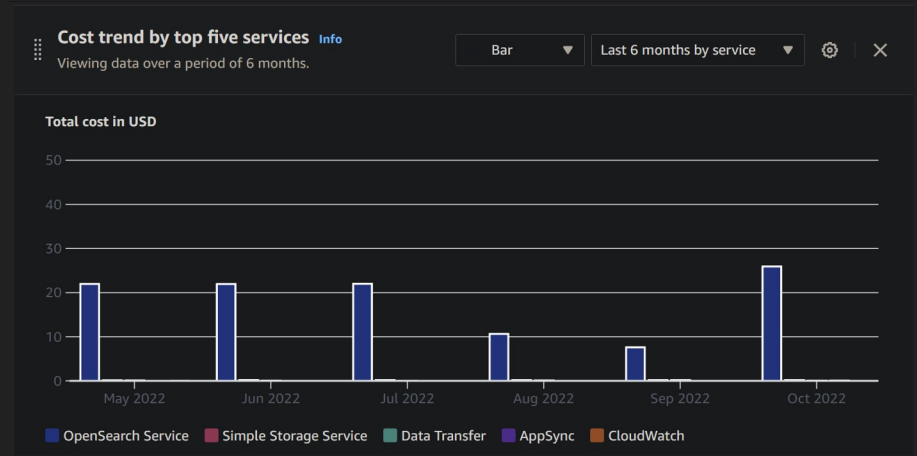
Case Study File(s):

 alliarib_149096_18980599_CS3604 Presentation.pdf

I acknowledge that the information I provided is correct, accurate, adheres to the **VT Honor Code**, and that I cannot alter this submission without contacting Professor Dunlap or the system administrator once it is submitted.

Future Work

- Reducing cost of searching
- CAS Authentication
 - Edit, delete submissions
- Comments for case studies



Daniel Dunlap

Great Case Study! 3 m

Reply

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Acknowledgements

- Dr. Dunlap
 - Project client
- Raseen Nirjhar & Joseph O'Such
 - CS 3604 Honors students assisting with project
- Yinlin Chen
 - VTDLP maintainer
- Dr. Edward Fox
 - Professor

References

[1]

Current Site: <https://casestudies.cs.vt.edu/>

Previous Semester Team's Report: <http://hdl.handle.net/10919/109970>

VTDLDP Access: <https://github.com/vt-digital-libraries-platform/dlp-access>

AWS Amplify: <https://aws.amazon.com/amplify/>

AWS OpenSearch: <https://aws.amazon.com/opensearch-service/>

AWS S3: <https://aws.amazon.com/s3/>

AWS DynamoDB: <https://aws.amazon.com/dynamodb/>

VT CAS: <https://www.middleware.vt.edu/sso/cas.html>

Second Slide Image: <https://www.linkedin.com/pulse/internet-huge-source-information-philip-meyers>