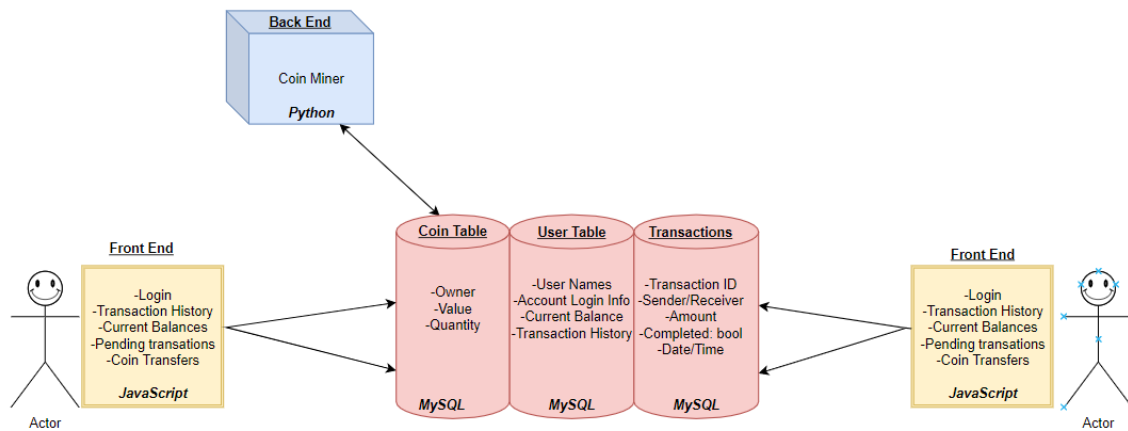


Group 3's Balance Transfer Web Application

Declan Teofilak, Meredith Urban, Shomari Turner, Collyn Gregory, Patrick Ryan

CSC 468-01 Introduction To Cloud Computing
Professor Ngo

Balance Transfer Diagram



Project Summary

Our team is envisioning a 24/7/365 best-of-breed coin trading and generating website that allows the user to log into an account, view previous transactions, their account balance, and send money to other registered users, whilst generating new coins with the provided coin miner. The reason why we picked this project is to reflect what's happening in our world today and focus on empowering users with a service that allows them to quickly and synergistically cooperate on a cloud based level; a way to create efficiency in today's diverse, globalized environment.

Here's our action items: We will create a seamless front-end that holistically utilizes Javascript, HTML, and CSS to provide a simple but intuitive user facing experience. The database will have three tables, "Transactions", "Users", and "Coin Types". When the user logs into the site, there will be a listing with their current account balance and a customizable summary amount of recent transactions. Beyond that, a menu icon will be available with options to change their password and view a separate detailed transaction page. The interface for performing that transaction will again aim for ease of use and simplicity, with a text box to choose the user, and a text box to choose the amount to send. Features that could be added would be user statistics, "friending" certain users for quicker transactions, and visualizing market trends for the currency the user has.

Technical Requirements

Front-End

The front-end will remain written in Javascript. The idea would be that the user can trigger events that post back directly to the database. The database would post and verify whether the coins are there/the user exists, and then store the transaction. The front-end would also effectively handle the actual trading of the coins. One user will request a trade from another, causing the user on the receiving end of the trade to be notified that a trade is pending. If the user accepts the transfer, the database records the transactions. It may be possible to set a time limit on valid pending requests, in order to account for changes in market value of the coin. The end result will aim to simulate popular applications such as Zelle or CashApp, but in a more straightforward manner and with a self contained digital currency.

Back-End

Our back end element will be a reworked version of the given coin miner program, which will be responsible for creating the digital coins traded in the market. The digital coin aims to mimic cryptocurrency, and thus the value of said coin may fluctuate based on trading frequencies. The back end code will be re-written in Python. Most of us have at least familiarity with it, if not a lot of exposure, and it works well with MySQL. Additionally, Python is one of the easiest languages to get a code up-and-running, making it a great choice for prototyping. Something that may be beyond the scope of the project would be proper password security, location data, and live updates (where a simple post back from the page wouldn't suffice).

Database

Initial research makes it seem that a rewrite into MySQL is likely our best bet for the database portion of the project. The User table will hold users first and last names, usernames (userID), passwords, coins attached to the user, current balance, and transaction history(pending/completed transactions). The Coin Type table will hold the amount of coins, the value of the coins, and the coins attached to the user. The Transaction table will have pending transactions, completed transactions, a transaction ID, the sender and receiver (userID), the amount that was transferred, and the date and time of the transfer. The database will use MySQL to implement the necessary data to interact with the front and back end.

DECLAN TEOFILAK

PROFILE

Address
Media, PA

Phone Number
(xxx) xxx-xxxx

Website
<https://github.com/Declan-Teofilak>

Email Address
dt946386@wcupa.edu

LinkedIn
Declan Teofilak

AWARDS

**West Chester University
Science and Mathematics
Dean's List** May 2021
West Chester University

**Phi Theta Kappa
Honors Society** April 2019
Phi Theta Kappa

PROGRAMMING LANGUAGES

C#
Very Fluent

Java
Very Fluent

Python
Competent

C
Learning

JavaScript
Learning

SKILLS

**Team
Management**
Intermediate

**Scalable
Problem
Solving**
Intermediate

**Creative
Thinking**
Expert

**Teambuilding
& Training**
Novice

INTERESTS

Automotive Technologies
**Video Games and Interactive
Entertainment**
Photography
**Wildlife and Nature
Preservation**

OBJECTIVE

Highly motivated new graduate with experience in retail sales, team leadership, and software engineering. I am looking for a fulfilling, challenging, and engaging job that allows me to utilize my solution engineering abilities to optimize results and create growth for myself and my company.

WORK EXPERIENCE

Endevor LLC (May 2020 - Present)
Software Developer / Data Analyst

- Front-End and Back-End development using the Microsoft stack
- Large and small scale web application development
- Crafted solutions in multiple sectors of Endevor's expansive application suite
- Engineered web-based software from the idea and inception phase all the way through to the deployment phase

Benjamin Lovell Shoes (December 2018 - May 2020)
Sales Associate (Key Holder)

- Worked directly with clients to find them their best fitting footwear
- Excelled in product knowledge and client retainment
- Lead a fast-paced, high energy sales floor
- Opened and closed the store, managed the sales desk, and helped during events

EDUCATION

West Chester University of Pennsylvania 3.79 GPA
Bachelors Computer Science

Delaware County Community College 3.4 GPA
Associates Computer Science

Phi Theta Kappa Honor's Society Graduate

PROJECTS

Calculators
<https://github.com/Declan-Teofilak/calculators>

Calculator applications of varying levels of complexity, written in Java during my second year of college

Tic-Tac-Toe
<https://github.com/Declan-Teofilak/tictactoe>
Tic-Tac-Toe game written in Java using Swing

REFERENCES

Bruce Kershaw
Sales Lead (J. Lorber)
bkershaw@jlorber.com

Dave Cassamassa
Hiring Manager (Benjamin
Lovell Shoes)
dave@soleprovisions.com

Ken Guilles
Store Manager (Clarks)

Shomari Turner

Consideration in Technical Support Engineer

Lansdale, PA 19446

(XXX) XXX-XXXX

turnershomari98@gmail.com

EXPERIENCE

Planet Fitness - 758 Allentown Rd, Lansdale, PA 19446

Front Desk Associate

May 2021 - Present

Responsible for providing a premium level of customer service, custodial duties, and greeting members.

Venture 3 Systems (dba: Telikin) - 2805 Sterling Dr, Hatfield, Pennsylvania 19440

Technical Support Associate

August 2020 - February 2021

Responsibilities included enriching and improving the lives of customers by providing them phone-based support of Telling/Wow Computer, while also helping them learn how to use Web-based applications.

Montgomery County Community College, 340 DeKalb Pike, Blue Bell, PA — Service Clerk

February 2019 - December 2020

Responsible for providing clerical, data entry, and other tasks assigned for the Registrar Office.

Montgomery County Community College, 340 DeKalb Pike, Blue Bell, PA — Student Ambassador

November 2018 - December 2020

Volunteers, orchestrate, and lead students to events or resources on campus.

SKILLS

Responsible

Exceptional Customer Service

Remarkable Teamwork

Organized

Programing Languages

JavaScript

C

SQL

HTML/CSS

AWARDS

Certificate of Achievement:

Student Leadership

Symposium - Received in

February 2019

Certificate of Completion:

Student Services Training

Program - Received in May

2019

EDUCATION

North Penn High School, 340 S Valley Forge Rd, Lansdale, PA— *High School Diploma*

June 2016

Montgomery County Community College, 340 DeKalb Pike, Blue Bell, PA — *Certificate in Cyber Security*

May 2020

Description- provides graduates a solid foundation in data communications, router configuration, server operating systems, computer hardware and network security

Montgomery County Community College, 340 DeKalb Pike, Blue Bell, PA — *A.A.S in Computer Networking: CYBER SECURITY CONCENTRATION*

December 2020

Description- Prepares graduates with knowledge and skills in computer and network security, ethical hacking, computer forensics, data networking, and computer hardware and support.

Meredith Urban

meredithu915@gmail.com | (717) 639 6075

Education

West Chester University (Ant. Fall 2022) B.S. Computer Science, Minor in Applied

Statistics *Current Cumulative GPA: 3.845*

Dean's List: Fall 2019, Spring 2020, Fall 2020, Spring 2021, Fall 2021

Upsilon Pi Epsilon member (Ant. Spring 2022)

Topics Studied:

Java Programming, Data Structures & Algorithms, Database Management, Software Engineering, Computer Security, Computer Systems, Code Refactoring, Programming Language Theory, Discrete Math, Calculus I, Statistics I and II, Simple/Multiple Linear Regression, Model Building

Topics for Spring 2022 include: Artificial Intelligence, Cloud Computing, User Interfaces, Technical Writing

Cedar Crest High School (2019) High School Diploma

Cumulative GPA: 4.035

Skills

Strong skills in Java

Experience with Python, SQL, R, C++, C, HTML/CSS, OCaml, IBM SPSS

Experience

Yogey's Miniature Golf and Ice Cream (May 2015-June 2019) Golf Attendant, Manager

Utilized scheduling, inventory, and security systems, performed customer service, communicated with staff via verbal and electronic methods.

Penn State Hershey Medical Center (May 2019-August 2021) Custodian

Coordinated with several teams to ensure prompt and thorough sanitization of various locations on campus.

Volunteer and Leadership Experience

Clinical Supply Volunteer **Good Samaritan Hospital** (2017-2019)

Leadership Intern **Camp Invention, National Inventors Hall of Fame** (2017-2018)

Section Leader **West Chester University Incomparable Golden Rams Marching Band** (2020)

Contrabassoonist **West Chester University Wind Ensemble/Symphony** (2021-present)

Bassoonist **West Chester University Wind Ensemble/Symphony, Concert Band** (2019-present)

Bassoonist **Pennsylvania Chamber Winds** (2020-present)

PATRICK RYAN

E: pjr.patrickr@gmail.com | T: 484-612-3937

EXECUTIVE SUMMARY

A senior at West Chester University studying Computer Science. Although, I must admit, I'm not interested in Computer Science at all. I picked the major a few years ago because I thought it would make me look smart. Naturally, I'm regretting the decision. But anyways, my main interests are persuasion, conversational hypnosis, and marketing.

PROFESSIONAL SKILLS AND INTERESTS

- Social Engineering
- Copywriting
- Neuro-Linguistic Programming
- Persuasion
- Conversational Hypnosis

EDUCATION

B.S. Computer Science. West Chester University (West Chester, PA)

- Overall GPA: 3.52/4.0
- Expected Graduation: Spring 2022

PROFESSIONAL SKILLS DEMONSTRATED

Content Marketing – Stock Spinoff Investing

Oct 2021 – Dec 2021

Investment research company focusing on spinoffs.

- Used twitter as main traffic source
- Converted \$19,067 in new yearly recurring revenue in two months (~20% increase in ARR)
- Responsible for 976 new Twitter followers (~25% increase in followers)
- Reason for leaving: I wasn't passionate about it and I can't be the one to know if you'll agree, but in my opinion, if you're not passionate about something then you'll never achieve mastery

GoPuff - Delivery Driver

March 2021 – Present

A food delivery service – if you don't know, now you know

- I hold the fastest delivery speeds at multiple locations (*despite the fact* that I drive a Prius)

Collyn Gregory

Church St, West Chester, PA 19382

collyn.r.gregory@gmail.com

PROFESSIONAL SUMMARY

Soon-to-be graduate with a BS in Computer Science and several years of experience working in both Java and C#. Proficient in Photoshop, Blender, and Unity Engine. Currently looking to become a game developer or software engineer.

EDUCATION

West Chester University of Pennsylvania, West Chester, PA

Bachelor of Science, Computer Science, May 2022

Boyertown Area Senior High, Boyertown, PA

High School Diploma, May 2017

EMPLOYMENT HISTORY

Sales Associate, Sherwin-Williams. West Chester, PA

Feb. 2021 - Present

- Suggest specific product purchases to meet customers' needs.
- Sell products being promoted and keep records of sales.
- Keep areas neat while working and stock items in correct locations.
- Respond to customers' questions and complaints.
- Arrange shipping of merchandise as well as necessary documentation.

Courier, DoorDash. West Chester, PA

Oct. 2019 - Feb. 2021

- Obey traffic laws and follow established traffic and transportation procedures.
- Safely and efficiently transport food items within a given amount of time.

Manual Labor, CJ Robinson. East Greenville, PA

May 2018 - Jul 2018

- Loading and unloading pallets of wax.
- Wrapping pallets & arranging delivery paperwork.
- Pulling slabs of wax out of molds.
- Cleaning spilled wax & other factory debris.

Sales Associate, Manatawny Green Mini Golf. Pottstown, PA

May 2017 - Oct 2017

- Cook and prepare food items, such as sandwiches, hot dogs, and ice cream dishes.
- Perform cleaning duties such as sweeping, mopping, and washing dishes, to keep equipment and facilities sanitary.
- Brew coffee and tea, and fill containers with requested beverages.
- Accepting payment and/or making change using a cash register.
- Groundskeeping

SKILLS

- Blender
- Unity Engine
- Photoshop
- Python
- C#
- Java