A L E C S W E E T

alecsweet@utexas.edu

469-667-5506

305 E 31st St.
Austin, TX 78705

linkedin.com/in/alec-sweet

https://alecsweet.github.io/

EDUCATION

University of Texas at Austin
Bachelors of Science in Computer Science, May 2021
Relevant Coursework
- Software Engineering
- Computer Systems
- Computer Organization and Architecture
- Data Structures
- Matrices
- Probability and Statistics
- Discrete Mathematics
- Algorithms/Complexity
- OOP
- Compilers
- Wireless Networks

LANGUAGES

Language	Experience	Level
Java	7yrs	Proficient
C/C++	2yrs	Familiar
Python	1yr	Familiar
JS	1yr	Familiar
HTML5/CSS	1yr	Familiar
C#	.5yrs	Beginner
Lua	.3yrs	Beginner
Bash	2.5yrs	Beginner
SQL	.5yrs	Beginner

TECHNOLOGIES

GitHub/GitLab/Git
OpenGl ES 2.0
Docker
Apache: Maven, POI
Amazon MWS
AWS: RDS, Elastic Beanstalk
Flask/SQLAlchemy
Selenium
Jsoup
jQuery
IDEs: Eclipse, Android Studio, Visual Studio
Agile Methodology

PROJECTS

Pixel Invaders, Sole Developer
Android Mobile Game: Planned Release October 2020
https://github.com/alecsweet/Pixel_Invaders
- Wrote 15,000+ lines of code with core Java 8 and OpenGl ES 2.0
- Developed a linear collision detection algorithm which handles dynamic pixel by pixel destruction of multiple 2D pixel grid structures with free rotation
- Developed a linear blob detection algorithm which allows the efficient detection of stray pixel groupings
- Built a multithreaded engine that runs at 60fps under normal circumstances with budget hardware (Snapdragon 808 CPU+ and an Adreno 418 GPU+)

Pixel Invaders Website, Sole Developer
Pixel Invaders Exhibition Website: Planned Completion August 2020
https://alecsweet.github.io/Pixel_Invaders
- Developed from scratch using JavaScript with jQuery, HTML5, and CSS
- Implemented responsive website architecture that formats properly given almost any hardware and resolution
- Created an efficient full-page parallax effect with dynamic user interactivity to mirror the Pixel Invaders in game environment

PolicyAnd.Me, 5 Developer Team
Website Database for US Policy Information: December 2019
https://PolicyAnd.me, https://gitlab.com/Uongjo/cs373-idb
- Constructed database hosted with AWS' RDS using MySQL populated with US policy information ascertained from other RESTful APIs
- Created a RESTful API for data which is documented with Postman
- Helped Implement a backend with Flask and SQLAlchemy hosted by AWS' Elastic Beanstalk to retrieve data for our frontend
- Adhered to an Agile working environment with CI, test-driven development, pair programming, frequent team meetings, roughly 2-week sprints, goal setting, time estimations, and rotating team leads

PintOs, 3 Developer Team
A Basic, Private Iteration of Stanford's PintOs: May 2015
- Worked constructively with a team through effective communication, use of GitHub, and pair programming techniques
- Implemented basic OS functionalities including threading, virtual memory, process management, and a file system

WORK EXPERIENCE

Product Listing / Independent Software Development
KdProTools, Online | June 2016 – May 2018
- Responsible for developing software with Amazon MWS integration to search, gather, and compare product data in order to create and populate product listings
- Developed web scraping scripts with Selenium, Jsoup, and Apache POI to gather supplier information and export it to Excel spreadsheets
- Developed software to handle price updating for a 30,000+ item inventory
- Analyzed and resolved issues with 3rd party product management software

Notable Performance:
- Increased average gross monthly sales from ~$61,000 to ~$134,000 and net profit by 224% over a 1.5-year period