Go Bird

Justin Linwood, Lieu Phung, Chaughn Robin, Cole Snyder
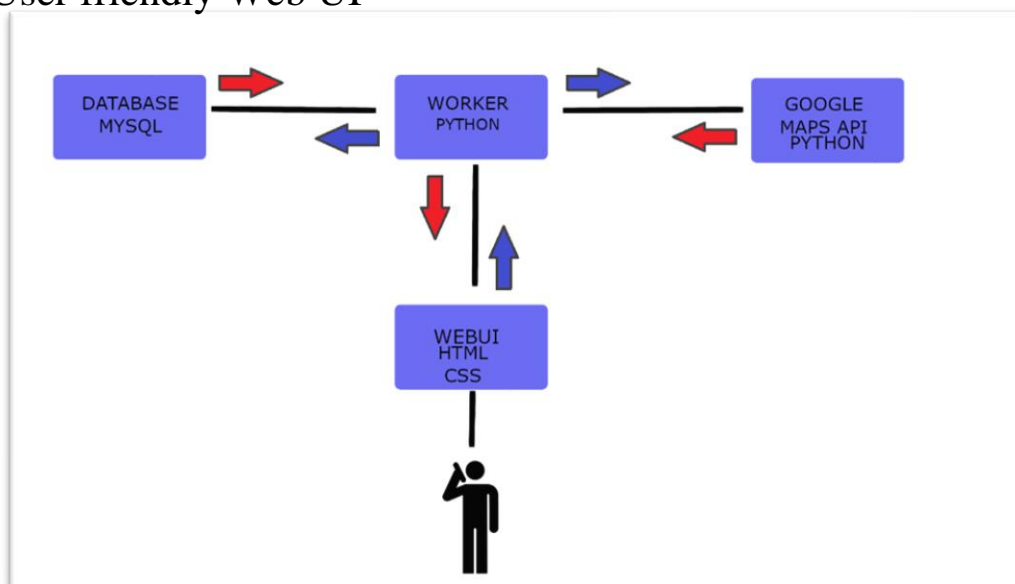
CHAPTER 1:

Purpose:

Navigate parking at West Chester University with ease using our tailored app, simplifying your campus commute and ensuring you're always steps away from where you need to be. GoBird is a parking app that will allow students and faculty at West Chester University to find open parking spots with ease, reducing the stress of searching for parking.

What is GoBird:

GoBird is an attendance tracker for cars parked in West Chester University spaces; it will deliver real-time parking availability updates to the user interface. The user will have a clear image of what areas have availability, and what areas do not while using familiar mapping to get there. Using crowdsourced data from each user we can offer near real-time updates to each user on where they can or cannot park while also displaying this information on the Google Maps interface the users are familiar with.

KEY FEATURES
- Real Time updates
- Google API
- User friendly Web UI

CHAPTER 2:

GoBird will use MySQL for our database to store the encrypted usernames and passwords of our users. The information crowdsourced from users (parking location, availability, etc.) through the Web UI will also be stored in this database.

The Web UI Will be made with HTML and CSS. It will be easy to traverse and understand. The Web UI will also use the Googe Maps API to project an image of the parking spots / map of the area. The API will use the location of the user to show the nearby parking spots, the implementation will be made using Python. We will crowdsource our information from the users about the time they are parking until they leave; they will enter that information in the Web UI and it will be transferred and held in the database. We will also have a user authentication process in the worker which will be made using python as well. This will use user input from the Web UI and authenticate it against user information that has been stored in the database.

Justin Linwood

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Education

West Chester University, West Chester PA

Bachelor of Science – Major Computer Science, Minor Mathematics
Graduation Date: May 2024
GPA: 3.368

Technical Skills

Programming Languages
- Strong understanding and comfort coding complex projects in Java.
- Understanding of C and C++
- Understanding of Python and how to use it working close to hardware

Development Tools
- IntelliJ, JGrasp, Eclipse, Linux, Windows, GitHub, CloudLab, Jenkins

Relevant Coursework

Computer Science courses
- Cybersecurity · Cybersecurity II · Program Concepts and Paradigms · Datacom/Networking I · Software Engineering, Software Security, Artificial Inteligence, Intro to Cloud, Modern Malware
- · Calculus I - III · Linear Algebra, Discrete Mathematics, Statistics, Differential Equations

Certifications

Security+, CompTIA, January 2024
Computer Security, West Chester University, May 2024

Experience

Tony's Place, 4/17 – present

- Bartender
  - Duties included: taking orders, preparing drinks, providing high quality customer service in a high paced environment

References

Jason Howard – Manager - Tony's Place
Jayhoward77@gmail.com | 267-516-0765

John Sedlacsik – Teacher - Hatboro-Horsham School District
jsedlacs@hatboro-horsham.org | 267-475-9402

Lieu Phung

484-425-4683 | lieunphung@gmail.com

EDUCATION

West Chester University   West Chester, PA
Bachelor of Science in Computer Science   *Aug. 2023 – May 2025*

- Related coursework:
  Computer Science I
  Computer Science II
  Computer Science III
  Computer Security & Ethics

Lehigh Carbon Community College   Schnecksville, PA
Associate of Science in Computer Science   *Aug. 2020 – May 2023*

- GPA of 3.82

EXTRACURRICULAR

Programming Contest | *Java*   September 2023

- Participated in West Chester University's programming contest to improve coding skills
- Solved problems correctly in a timely manner

Computer Science Club | Aug. 2023 – Present

WORK HISTORY

Recreation Attendant   August 2023 – Present
West Chester University   *West Chester, PA*

- Ensure patrons have valid identification
- Monitoring patrons to ensure a safe environment
- Clean strength and conditioning equipment
- Properly check-out/in equipment
- Act as a first responder in the event of an emergency

Stocking and Unloading Associate   Aug. 2020 – Aug. 2023
Walmart   *Whitehall, PA*

- Provide customers with any assistance needed in the store
- Unload general merchandise trucks according to each department
- Stock merchandise in its proper location

TECHNICAL SKILLS

Languages: Java
Developer Tools: Visual Studio Code

Chaughn Robin

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EDUCATION

West Chester University of Pennsylvania, West Chester PA
Bachelor of Science in Computer Science, December 2024
GPA: 3.7/4.0 | Dean's List
Computer Science Club, Cyber Security Club

RELATED COURSEWORK:
- *Data Structures and Algorithms*
- *Computer Security and Ethics*
- *Computer Systems*
- *Digital Image Processing*

CURRENT COURSEWORK:
- *Database Management Systems*
- *Programming Language Concepts/Paradigms*
- *Introduction to Cloud Computing*

WORK HISTORY

West Chester University of Pennsylvania, West Chester, PA
Computer Technician   January 2024 – Current
- Analyzed and processed information from students
- Collaborating with students to facilitate a variety of introductory programming courses
- Accommodated and instructed students in different levels of Computer Science curriculum with diverse concepts

PROJECTS

LibGDX (Java Game-Development Framework)
Word-Based iPhone/Android App   January 2024 - Current
Developer
- Programmed a unique "hangman-like" word game based on acronyms and a large library of possible words using Java
- Created icons and artwork for the game using Paint.net
- Utilized LibGDX's portability features to create releases for PC, Android, and iPhone
- Produced several in-game tracking tools to measure player metrics and data for playtesting and further improvement / monetization using Java

Sidescroller Role-Playing Shoot 'Em Up PC Game   August 2023 - Current
Developer
- Constructed several in-game systems for tracking player, player aim, different forms of movement, hitboxes, events and input based on player as well as A.I. characters using Java
- Created fully rigged 3D and 2D models and animations using Blender and Spine
- Recorded audio effects and voice lines using Audacity

RELATED SKILLS

Languages
Java, C++, Python, C#, Haskell, Ruby, SQL
Tools
Eclipse, MS Visual Studio, Blender, Spine, Access, SPSS, MySQL
Operating Systems
Windows, Linux (Kali & Tails), macOS
Skills
- Conceptualizing and designing efficient algorithms for implementation
- Understanding and implementing appropriate data structures
- PC Building and Hardware

Cole Snyder

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Email: 20snyderc@gmail.com

Education

West Chester University, West Chester, PA   *Exp. Grad. Dec 2024.*

- Bachelor of Computer Science
- **Current GPA: 3.431/4** (Deans list)

Experience

Coding   *Started August 2020*

- Partook in Computer Science classes at West Chester University.
    - CSC 141 Computer Sci I (Java).
    - CSC 142 Computer Sci II (Java).
    - CSC 240 Computer Sci III (Java).
    - CSC 231 Computer Systems (C & Linux).
    - CSC 241 Data Structures and Algorithms (Java).
    - CSC 301 Computer Security & Ethics.
- Completed a code academy course that covered Java.
- Completed a code academy course that covered HTML.
- Experience with object orientated programming (Java).
- Won the 2023 CSTA Hackathon at WCU.
- Attended WCPC Coding challenges.

Freelance I.T.   *Started April 2019*

- Successfully completed computer repair and maintenance.
- Executed computers construction.
- Delegated software instillation, management, and set up.
- Administered peripheral repair.

Skills

- Meeting Deadlines.
- Managing Projects.
- Identifying, Analyzing, and creatively solving problems.
- Multi-tasking.
- Time Management.
- Accepting responsibility.
- Ability to work in a team and collaborate effectively.
- Proficient in Microsoft Word and Excel.
- Proficient in Google Workspace applications.
- Proficient and Java.
- Adapting and working with problems with new problems as they arise.