

# Syed Saif Ali Shah

[Saif1004@hotmail.com](mailto:Saif1004@hotmail.com)

[github.com/Saif1004](https://github.com/Saif1004)

## Education

### Leeds Beckett University - Bachelor of Science in Computer Science (2023-2026)

- Fundamentals of Databases – 62%
- Fundamentals of Computer Science – 62.2%
- Computer Programming (Python) – 76.4%
- Object Oriented Programming (Java) – 65.84%
- Computing Systems – 80%

**On track for 2:1 including 2<sup>nd</sup> year module grades**

## Projects

### Coding Projects – Python [github.com/Saif1004/Python-Projects/tree/main/portfolio-Saif1004-main](https://github.com/Saif1004/Python-Projects/tree/main/portfolio-Saif1004-main)

- Designed a motion detection application for logging and analysing cats' presence using algorithms and external file handling.
- Built a password encryption tool with advanced features, incorporating functions and file management.
- Collaborated on Git/GitHub, integrating version control and thorough documentation for project usability.

### Hangman Game – Python

[github.com/Saif1004/Hangman](https://github.com/Saif1004/Hangman)

- Developed a command-line Hangman game in Python, utilizing functions to enhance code efficiency and readability.
- Created a random word selection mechanism with the "random" module to ensure an engaging user experience.
- Optimized runtime using sets to track guessed letters and update progress efficiently.

### Dealing Cards Program – Java

[github.com/OOP-Classroom/oop-portfolio-2024-Saif1004](https://github.com/OOP-Classroom/oop-portfolio-2024-Saif1004)

- Implemented a Card class with encapsulated attributes for suit and facevalue, leveraging object-oriented principles for scalability.
- Built a Deck class to initialize a 52-card deck, integrating algorithms for shuffling and efficient card management via dynamic ArrayList.
- Developed a Deal program to simulate real-world card dealing, using a parameterized deal method to remove and return a specified number of cards from the deck.

### Books Program – Java

[github.com/OOP-Classroom/oop-portfolio-2024-Saif1004](https://github.com/OOP-Classroom/oop-portfolio-2024-Saif1004)

- Designed a Book class with encapsulated attributes (title, author, publisher, date) and implemented getter and setter methods for controlled data access and modification.
- Overrode the toString method to format book details for output, enhancing code usability and readability.
- Developed the Bookshelf program to demonstrate object mutability, dynamically updating and displaying book attributes via setter methods.

### Turtle Graphics – Java

[github.com/OOP-Classroom/oop-portfolio-2024-Saif1004](https://github.com/OOP-Classroom/oop-portfolio-2024-Saif1004)

- Developed a graphical application for creating and manipulating turtle graphics using Java Swing and custom methods.
- Implemented OOP principles, extending the TurtleGraphics class for modular and maintainable code design.
- Designed user commands to enable consistent and repeatable actions, saving and manipulating drawings.

### Cat Breed Website – HTML, CSS, JavaScript, Python

<https://www.felinefriends.site/>

- Designed a responsive multi-page website showcasing cat breeds, utilizing HTML and CSS for well-structured layouts and consistent styling across pages.
- Integrated Django to dynamically manage breed information, creating a relational model with multiple classes (e.g., Breed, Traits, and Images) to support database-driven content.
- Used Django to create and manage a relational database, allowing for easy addition and updating of breed details and images through the admin interface.

## Skills

**Languages:** Python, Java, HTML, CSS, SQL, Django Framework

**References:** Programming Modules. Duncan Mullier - [d.mullier@leedsbeckett.ac.uk](mailto:d.mullier@leedsbeckett.ac.uk)