# University Projects on GitHub

**Spoiling Food Alert System**

Belgium Campus BusITWeek- Still in development

Date 2025

Group Members: Barend Blom: Tarina Snyman

This is a web application displays the users food and shows if the food is spoilt or close to spoiling. The user can add and remove food from the list. The user can also view recepes that may include a specific food item. The user can also view places where they can give their food as donations.

Languages

HTML, CSS, JavaScript

Note-Might change into a java project instead

Link: <https://github.com/TarinaSnyman/BusITWeek-SpoilingFoodAlert>

**Student Management System**

Belgium Campus PRG282 Project-Completed

Date: 2024

Group members: Demica Smit, Iwan Groenewald, Susan Hoffmann, Tarina Snyman

This is a windows forms application that manages student records using text files. The user can add, view update and delete a student. It also generates a summary report of the total number of students, the average age and saves the report in a text file

Languages

C#

Link <https://github.com/MilkyMoonAtNight/PRG282_Student_Management_System>

**BrightPath Academy Prediction**

Belgium Campus MLG382 Project

Date:2025

Group Members: Barend Blom, Marco Jacobs, Petri Loots, Tarina Snyman

Using the given dataset, we analysed the student data to predict academic performance and support BrightPath Academy’s goal of identifying at-risk students. We performed exploratory data analysis, revealing strong predictors. Outliers were managed using the IQR method, and features were scaled and engineered. We trained Logistic Regression, Random Forest, XGBoost, and a deep learning model, with Random Forest and XGBoost excelling at identifying failing students. A Dash web app, deployed on Render, was developed for real-time predictions, enabling educators to prioritise interventions for at-risk students.

Languages and Tools

Python, Dash

Repository link: <https://github.com/BlueBeardone/GuidedProject_MLG382_2025.git>

Website link: <https://guidedproject-mlg382-2025.onrender.com> not working

**Inventory Management with Machine Learning Project**

MLG382 Project

Date:2025

Group Members: Barend Blom, Marco Jacobs, Petri Loots, Tarina Snyman

Using a dataset from Kaggle, we developed a predictive inventory management system to optimise stock levels for a retail business. Exploratory data analysis (EDA) revealed seasonal demand peaks and high-demand product categories. We cleaned the dataset by removing outliers using the IQR method, scaled numerical features, and engineered features by dropping low-variability columns. Machine learning models including Random Forest, MLP, KNN, XGBoost, and Gaussian Naive Bayes were trained to predict high/low demand, with Random Forest selected for its superior performance. A Dash web app, deployed on Render, enables real-time demand predictions, helping businesses adjust stock to minimise stockouts and overstocking.

Languages and Tools:Python, Dash

Repository link : <https://github.com/BlueBeardone/CYO-Project.git>

Website link: <https://cyo-project-psrl.onrender.com> not working

**Community Portal Project**

WPR381 Project

Date 2025

Group Members:Darius Greef ,Kutlwano Thaga, Oarabile Mbewe, Tarina Snyman

The project involved developing a full-stack Community Portal Website to serve as an interactive platform for a community or organisation. The website comprises five pages with dynamic content rendering, modular routing, and a responsive design. Key features include dynamic event rendering, a user-friendly contact form, and consistent styling.

Languages and Tools: Node.js, Express.js, and EJS

Repository Link: <https://github.com/Mbewe-Ob7/legendary-fishstick>

Ask Kyle if he could make the repository public for the PRG381 Project

**BC Student Wellness Management System**

PRG381 Project

Date: 2025

Group Members: Erick Knoetze, Glacious Mukwevho, Kyle Hayness-Smart, Tarina Snyman

The project involved developing a BC Student Wellness Management System to manage student wellness services, split into two milestones.

Milestone 1: JSP web app with PostgreSQL for user registration/login, featuring input validation, hashed passwords, and session management.

Milestone 2: Java Swing desktop app with JavaDB, using MVC and OOP for CRUD operations on Appointments, Counselors, and Feedback

Languages and Tools: Java, JavaDB, PostGreSQL

Link: <https://github.com/Jellyman750/PRG381StudentWellnessApplication> if Kyle makes it public otherwise put it with private/ not on github projects

# University Projects on NOT GitHub

# Personal Projects

These are hobby projects. I work on them when I have time so the development is very slow

**F1 Predictions Website**

Personal project- Still in development

This project predicts the winner, fastest lap and fastest pitstop for the selected race. Race data from 2022 to 2025 was gathered from the F1 site (add link). Exploratory data analysis and feature engineering will be conducted. Different models such as Random Forest and Neural Networks will be implemented and tested to choose the best model for the project.

Languages used

Backend: Python

Frontend: HTML, CSS, JavaScript

Repository Link: <https://github.com/TarinaSnyman/F1Predictions>

**Study Timer**

Personal Project- still in development

This is a website that displays a timer for a students study and break time. It will include a login and register page. When user is logged in they can set their own preference timer. JDBC will be used to store the user details and timer preferences

Languages and Tools

Java, JSP, Servlets

Repository Links: <https://github.com/TarinaSnyman/StudyTimer>

Note: Might make a desktop version that can be downloaded from the website

**Free Lance Work Manager**

Personal Project

Freelance Work Manager is a Java-based desktop application designed to help manage my freelance tasks related to equestrian events. It currently supports tracking scribing work and Prix Caprilli test work, allowing me to keep accurate records of hours worked, earnings, and horses handled.

Language and Tools

Java, Swing, PostgreSQL, NetBeans

Repository Link: <https://github.com/TarinaSnyman/FreeLanceWorkManager>