HIT137 – Group Assignment 1

Group Name: The Three Pythoneers

Group Members:  
Jorden Roderique – S243191

Sean William Le Roux - S375991  
Gabriel Popesco – S393611

We are the three Pythoneers, a group team whose purpose is to collaborate as a Team to develop python coding solutions to customer problems. As a collective we are efficient in problem solving, finding solutions and delivering efficient and effective solutions for the customer.

Working as a team will increase efficiency and speed, but firstly we should touch on the importance of a team for communication and motivation. When you have a team around you, you are more likely to perform and be held up to a standard, especially if the vision is clear and the team is determined to reach their end goal. This allows individuals to motivate and support each other through problem solving, communicating with stakeholders, dealing with management and delivering quality products by the deadline.

Having people with the same vision, by your side supporting you and working to reach the end goal alongside you is the key to success, it is how all strong societies are built and how all projects succeed. Without collaboration we would not be where we are today. Communication for this purpose is key, it is important that our communication is effective, and it allows us to resolve issues efficiently.

On a side note, this is not politics, and it is important that teams steer clear of this. If a team gets too involved in gossip and politics around them, all efficiency will be lost. We all have our respective roles and reasonability's and must collaborate efficiently to ensure the end goal is reached. We as a people when collaborating effectively with the same goal in mind, will reach success.

Increased input from all 3 team members, as opposed to one, allows for faster and more effective coding in all aspects including debugging and handling errors. For example, more eyes on a code means 3x more attention to detail, increasing quality and efficiency.

This also allows for roles to be split depending on the Indvidual strengths and weaknesses.

If a program can be written utilizing multi-threading and parallel processing then you can have coders work on difference processes at once, and in down time focusing on improving quality and efficiency.

One coder may be more experienced in security, so when not busy writing the code structure as per the work breakdown, can focus on ensuring the security code is up to scratch.

The second technician can assist management in overseeing the team, assessing data structure, handling comments and documentation, like a team leader/leading hand.

The third technician's downtime focus will be assessing overall code, ensuring it follows the right work breakdown structure and continually debugging and error handling.

Of course, all technicians will do a bit of this themselves, but when writing complex code and programs, it may be good to cross reference each other to ensure nothing is missed. It also allows for coders to efficiently flow through to the next task without having to backtrack.

A significant benefit of group programming is that it can help catch errors and bugs in real time in the development process. With multiple eyes, each bringing different backgrounds, skills, and creativity, scanning a program's code while contributing, the group members can catch simple logic errors and handle overlooked edge cases before they reach the end user. For instance, during our collaboration on the programming questions, we noticed an edge case where the programs would throw a value error and crash if a user provided input of a type that the program couldn't parse as a number. We addressed this by adding exception handling, which prevents the program from crashing and results in a better user experience.

This active reviewing has two substantial advantages: the first being that they are quicker and easier to fix during development than after being pushed to production, and the second being that the end program provides a far superior user experience.

The Three Pythoneers are united in our commitment to go above and beyond the requirements of our future assignments. We aim to stand out from the other groups by producing work of the highest standard and achieving top marks.