Year 9 Digital Technologies Programme 2021

Station 5- Python Trinket Unit

Digital Technologies Guided Activity:

1. **Designing with Python Trinket:** Learn the functionality and design process using Python Trinket. Be resourceful and creative while keeping in mind that you have 3 session to complete your challenge
2. **3D Dimensions:**Understand the 2D dimension on Python Trinket and discover how the X, the Y axis and degrees can be used for your project. Discover how the compiles the code using binary numbers.
3. **Variables:** Understand variables and how to use them while designing your product. Learn how to create and give variables meaningful names.
4. **Conditionals:** Understand what conditionals are and how to use them in Python Trinket blocks.Learn how to use the 'If...Then' and 'If..Then...Else' blocks.
5. **Iterations:** Learn how to use iterations when using Python Trinket blocks for your design. Recognise when to use the 'Forever' 'While' and 'For' Loop.
6. **Mini Project:** Demonstrate your understanding of the Python Trinket Unit and design and a challenge in your activity group. Your project must have a purpose linked to robotics.
7. **Website Log:** Maintain a design log about your digital outcome using Python Trinket with variables, conditionals and iterations.Describe the use of the design cycle and keeping the end user in mind and the use of the x and y axis and degrees.

Digital Outcome Goals:

Design a digital outcome using Tinkercad blocks with variables, conditionals and iterations with Python Trinket	Use the design cycle and keep the end user in mind. Ensure that you are using the x and y axis and degrees.

Assessment Rubric:D=1-5+,A=6+,M=8+ & E=9+

#	Criteria	Developing	Achieved	Merit	Excellence
1	Designing with Python Trinket				
2	3D Dimensions				
3	Variables				
4	Conditionals				
5	Iterations				
6	Mini Project				
7	Website Log				