Pass Task 16 – Planetary Rover

Related Learning Outcomes

ULO1 – Explain the OO Principles

This exercise demonstrated object encapsulation which creation of each individual private and public data such as device and battery class. Other subclasses such as drill class inherit the property of device class.

ULO2 – Use OO Language and Library

Demonstrated class and constructor declaration, the use of conditional statements (e.g. "if"), and assigning values to parameters. `std::random_device` and `mt19937 mt(rd())` are used to generate random integer for solar panel class.

ULO3 – Design, Develop and Test using an IDE

The code was developed using Visual Studio to build and run the program, as well as integrated debugging features to step and inspect values. TestRover.cpp are used to make sure program run well, I've created a few test to test all the device, detach and attach of device and battery.

ULO4 – Communicate using UML Diagrams

I learned how to interpret a UML class diagram and write the related code.

ULO5 – Describe Elements of Good OO Design

The exercise demonstrated correct use of C++ coding conventions.