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1 # Packet Interface (packet.py)
2 # Bach Vu
3 # 01/08/2020
4
5 from abc import abstractmethod
6
7 class DT_Packet:
8     def __init__(self, packetType):
9         self.MagicNum = 0x497E
10        self.packetType = packetType
11
12    @staticmethod
13    def intToBinStr(decimal, str_len):
14        return bin(decimal)[2:].zfill(str_len)
15
16    @staticmethod
17    def byteArrToInt(byte):
18        return int.from_bytes(byte, byteorder="big")
19
20    @staticmethod
21    def DT_hex(num):
22        return '0x000' + str(num)
23
24    def isValid(self):
25        """ Check conditions of a Packet Type """
26        return self.header_errorCode()
27
28    @abstractmethod
29    def __repr__(self):
30        """ Output log """
31
32    @abstractmethod
33    def header_errorCode(self):
34        """ Check conditions of a Packet Type """
35
36    @abstractmethod
37    def encodePacket(self):
38        """ Get the actual bytearray store data of this packet """
39
40    @abstractmethod
41    def decodePacket(packet):
42        """ Turn bytearray to object """
43
44
45
46
47
48
```