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# computer\_builds.models.resources



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**class Resources**:

Resources base class

Resources (name, manufacturer, total, allocated)

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Args: name (str): user-friendly name of resource instance (e.g. Intel Core i9-9900K) manufacturer (str): resource instance manufacturer (e.g. Nvidia) total (int): inventory total (how many are in the inventory pool) allocated (int): number allocated (how many are already in use), must be smaller than total

#### total

Returns: total (int): total amount of resource

#### allocated

Returns: allocated (int): amount of allocated resource

#### name

Returns: name(str):resource name

#### manufacturer

Returns: manufacturer(str):resource manufacturer

def claim(self, n):

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Claim n inventory items if available Args: n(int): number of items to claim Returns: None

def freeup(self, n):

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Free up n items if possible Args: n(int): number of items to free up Returns: None

def died(self, n):

▶ View Source

Subtract n items from total and allocated (if possible) Args: n(int): number of items to subtract Returns: None

```
def purchased(self, n):
```

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Add n items to the total Args: n(int): number of items to add Returns: None

# category

Returns: category(str):resource category

```
class CPU(Resources):
```

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Resources subclass class for tracking CPU inventory

CPU(name, manufacturer, total, allocated, cores, socket, power\_watts) ► View Source

Args: name (str): user-friendly name of resource instance (e.g. Intel Core i9-9900K) manufacturer (str): resource instance manufacturer (e.g. Nvidia) total (int): inventory total (how many are in the inventory pool) allocated (int): number allocated (how many are already in use), must be smaller than total cores (int): number of cores is even and ranges from 2 to 100 (e.g. 8) socket (str): socket (e.g. AM4) power\_watts (int): number of watts (e.g. 94)

# cores

Returns: cores (int): number of cores is even and ranges from 2 to 100 (e.g. 8)

# socket

Returns: socket (str): socket (e.g. AM4)

#### power\_watts

Returns: power\_watts (int): number of watts (e.g. 94)

#### **Inherited Members**

**Resources** total, allocated, name, manufacturer, claim(), freeup(), died(), purchased(), category

# class GPU(Resources):

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GPU class inheriting from base Resources class without modifications

**GPU**(name, manufacturer, total, allocated)

▶ View Source

Args: name (str): user-friendly name of resource instance (e.g. Intel Core i9-9900K) manufacturer (str): resource instance manufacturer (e.g. Nvidia) total (int): inventory total (how many are in the inventory pool) allocated (int): number allocated (how many are already in use), must be smaller than total

#### **Inherited Members**

**Resources** total, allocated, name, manufacturer, claim(), freeup(), died(), purchased(), category

# class Storage(Resources):

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Intermediate Resources subclass with GB capacity

**Storage**(name, manufacturer, total, allocated, capacity\_GB)

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Args: name (str): user-friendly name of resource instance (e.g. Intel Core i9-9900K) manufacturer (str): resource instance manufacturer (e.g. Nvidia) total (int): inventory total (how many are in the inventory pool) allocated (int): number allocated (how many are already in use), must be smaller than total capacity\_GB (int): storage capacity in gigabytes (e.g. 120)

# capacity\_GB

Returns: capacity\_GB (int): storage capacity in gigabytes (e.g. 120)

# **Inherited Members**

**Resources** total, allocated, name, manufacturer, claim(), freeup(), died(), purchased(), category

# class HDD(Storage):

▶ View Source

Storage subclass with size and rpm

```
HDD(name, manufacturer, total, allocated, capacity_GB, size, rpm) ► View Source
```

Args: name (str): user-friendly name of resource instance (e.g. Intel Core i9-9900K) manufacturer (str): resource instance manufacturer (e.g. Nvidia) total (int): inventory total (how many are in the inventory pool) allocated (int): number allocated (how many are already in use), must be smaller than total capacity\_GB (int): storage capacity in gigabytes (e.g. 120) size (str): storage size (e.g. 2.5") rpm (int): HDD's rpm count (e.g. 7000)

## size

Returns: size (str): storage size (e.g. 2.5")

# rpm

Returns: rpm (int): HDD's rpm count (e.g. 7000)

#### **Inherited Members**

Storage capacity\_GB

**Resources** total, allocated, name, manufacturer, claim(), freeup(), died(), purchased(), category

```
class SSD(Storage):
```

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Storage subclass with interface

```
SSD(name, manufacturer, total, allocated, capacity_GB, interface) ▶ View Source
```

Args: name (str): user-friendly name of resource instance (e.g. Intel Core i9-9900K) manufacturer (str): resource instance manufacturer (e.g. Nvidia) total (int): inventory total (how many are in the inventory pool) allocated (int): number allocated (how many are already in use), must be smaller than total capacity\_GB (int): storage capacity in gigabytes (e.g. 120) interface (str): SSD's interface (e.g. PCIe NVMe 3.0 x4)

#### interface

Returns: interface (str): SSD's interface (e.g. PCIe NVMe 3.0 x4)

## **Inherited Members**

Storage capacity\_GB

**Resources** total, allocated, name, manufacturer, claim(), freeup(), died(), purchased(), category

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