

**UUM College of Arts and Sciences**

**STIA1123 PROGRAMMING 2 group i**

**Exercise 1: OOP**

Instructions:

What is the object-oriented example?

For example, say we created a class, Car, to contain all the properties a car must have, color, brand, and model. We then create an instance/behavior/method of a Car type object, myCar to represent my specific car.

Task:

1. Could you please create another 5 object-oriented examples and give all their properties and their instances/behavior/method?

Eg.1

|  |  |  |
| --- | --- | --- |
| Class |  | Human |
| Properties |  | -age=int  -gender=string  -height=double  -weight=int  -career=string  -netWorth=double |
| Method/Behaviour |  | +Eat():void  +Drink():void  +Think():void  +Exercise():void |
|  |  |  |
| Instance (Object) |  | Jeff Bezos |
| undefined |  | -age=57  -gender=’Male’  -height=1.71m  -weight=70kg  -career=CEO of Amazon  -netWorth=180.6 billion USD |
|  | +Eat():void  +Drink():void  +Think():void  +Exercise():void |

Eg.2

|  |  |  |
| --- | --- | --- |
| Class |  | Phone |
| Properties/State/Attribute |  | -screen: string  -brand: string  -colour: string  -chipset:string  -operatingSystem:string  -battery: int |
| Method/Behaviour |  | +charging(boolean plug):void  +calculate(int double):void  +call(int int):void  +browse(string):void |
|  |  |  |
| Instance (Object) |  | OnePlus 9 Pro |
| OnePlus 9 Pro MORE PICTURES |  | -screen: AMOLED  -brand: One Plus  -colour: Forest Green  -chipset: Qualcomm SM8350 Snapdragon 888  -operatingSystem: Android 11  -battery: 4500mAh |
|  | +charging(boolean plug):void  +calculate(int double):void  +call(int int):void  +browse(string):void |

Eg.3

|  |  |  |
| --- | --- | --- |
| Class |  | Youtube Video |
| Properties |  | -length: int  -view:long  -type: string  -uploader:string |
| Method/Behaviour |  | +quality(int resolution):void  +mute(boolean isMute):void  +pause():void  +play():void |
|  |  |  |
| Instance (Object) |  | Rick Astley - Never Gonna Give You Up |
| [Rick Astley - Never Gonna Give You Up (Video) - YouTube](https://www.youtube.com/watch?v=dQw4w9WgXcQ) |  | -length: 213s  -view: 900203143  -type: musicVideo  -uploader: OfficialRickAstley |
|  | +quality(int resolution):void  +mute(boolean isMute):void  +pause():void  +play():void |

Eg.4

|  |  |  |
| --- | --- | --- |
| Class |  | Hamster |
| Properties |  | -colour: string  -size: string  -weight: int  -family: string |
| Method/Behaviour |  | +sleep():void  +rest(boolean move):void  +reproduction():void  +hungry(boolean findFood):void |
|  |  |  |
| Instance (Object) |  | Lucky |
|  |  | -colour: white  -size: Small  -weight: 151g  -family: cricetinae |
|  | +sleep():void  +rest(boolean move):void  +reproduction():void  +hungry(boolean findFood):void |

Eg.5

|  |  |  |
| --- | --- | --- |
| Class |  | University |
| Properties |  | -location: string  -founded: int  -country: string  -type: string |
| Method/Behaviour |  | +cultivatingTalent（）:void  +provideCertification():void  +organiseEvent():void  +holiday():void  +workingDay():void |
|  |  |  |
| Instance (Object) |  | University Utara Malaysia |
| UUM closed for 4 days to curb spread of Covid-19 | Free Malaysia Today (FMT) |  | -location: sintok  -founded: 1984  -country: malaysia  -type: governmentUniversity |
|  | +cultivatingTalent（）:void  +provideCertification():void  +organiseEvent():void  +holiday():void  +workingDay():void |