* **Nour Eldin Mohamed Gaber**

**AI Course Session 1**

* **Task 1:**

1. **SkillDNA :** SkillDNA is interactive platform that you can use to find out all related skills needed for a certain job.
2. [**Agora for Educational Development**](https://www.f6s.com/company/agoraforeducationaldevelopment) **:** Agora is mobile application that connects education to the real world . mobile application that uses machine learning to identify the objects that surround children in real life, and then using augmented reality, we transform those objects into learning tools through creating interactive learning experiences that are gamified, engaging, relevant, and skill building.
3. **Partum Electronics :** Partum Electronics offers voice controlled smart home devices that makes your home appliances connected to each other, all connected to the internet. Our system currently consists of, Ray and, Controller. Ray is A wifi touch panel that converts your existing light switches to smart ones. Installation process is very easy, without causing any damage. In less than 60 minutes, we just unplug your existing light switch and plug Partum's Ray, with small amount of configuration
4. **Webville\_ :** Product photo-editing is a labor intensive task for e-commerce businesses. Artville is an AI STUDIO that helps e-commerce businesses automate their product retouching and photo-editing processes. This includes background removal, resizing, compression, auto-cropping, new background placement, logo and stickers placement among other features. It's a SaaS product that comes in the form of a website, a chat bot, and API's for seamless integration.

* **Task 2 :**

|  |  |  |
| --- | --- | --- |
|  | **Compiled Languages** | **Interpreted Languages** |
| **Definition** | Compiled languages are converted directly into machine code that the processor can execute. As a result, they tend to be faster and more efficient to execute than interpreted languages. They also give the developer more control over hardware aspects, like memory management and CPU usage.  Compiled languages need a “build” step – they need to be manually compiled first. You need to “rebuild” the program every time you need to make a change. In our hummus example, the entire translation is written before it gets to you. If the original author decides that he wants to use a different kind of olive oil, the entire recipe would need to be translated again and resent to you. | Interpreters run through a program line by line and execute each command. Here, if the author decides he wants to use a different kind of olive oil, he could scratch the old one out and add the new one. Your translator friend can then convey that change to you as it happens.  Interpreted languages were once significantly slower than compiled languages. But, with the development of [just-in-time compilation](https://guide.freecodecamp.org/computer-science/just-in-time-compilation), that gap is shrinking.  Interpreters run through a program line by line and execute each command. Here, if the author decides he wants to use a different kind of olive oil, he could scratch the old one out and add the new one. Your translator friend can then convey that change to you as it happens.  Interpreted languages were once significantly slower than compiled languages. But, with the development of [just-in-time compilation](https://guide.freecodecamp.org/computer-science/just-in-time-compilation), that gap is shrinking. |
| **Examples** | C, C++, Erlang, Haskell, Rust, and Go. | PHP, Ruby, Python, and JavaScript. |

* **Task 3 :**

|  |  |  |
| --- | --- | --- |
|  | **Open source languages** | **Non open source** |
| **Definition** | There is no one who owns open-source programming languages per se. They are widely available and are generally maintained by a group. Also, they are frequently freely given under various open-source licences. This means that open-source languages are largely open, allowing anybody to alter them, and they are not usually proprietary. | They are programming languages where the source code for the compiler or interpreter is not published by the commercial compiler vendor. |
| **Examples** | C++ and C , Java , Javascript ,PHP ,Scala ,  R programming , Python | VBScript, c#, Matlab, Microfocus COBOL, and IBM’s mainframe, AIX, and linux compilers. |

* **Task 4 :**

**R-programming language :**

R is a [programming language](https://en.wikipedia.org/wiki/Programming_language) for [statistical computing](https://en.wikipedia.org/wiki/Statistical_computing) and graphics supported by the R Core Team and the R Foundation for Statistical Computing. Created by statisticians [Ross Ihaka](https://en.wikipedia.org/wiki/Ross_Ihaka) and [Robert Gentleman](https://en.wikipedia.org/wiki/Robert_Gentleman_(statistician)), R is used among [data miners](https://en.wikipedia.org/wiki/Data_mining), [bioinformaticians](https://en.wikipedia.org/wiki/Bioinformatics" \o "Bioinformatics) and [statisticians](https://en.wikipedia.org/wiki/Statistician) for [data analysis](https://en.wikipedia.org/wiki/Data_analysis) and developing [statistical software](https://en.wikipedia.org/wiki/Statistical_software). Users have created packages to augment the functions of the R language.

* **Task 5 :**

**Non-oop languages :**  Assembler , C , Fortan , COBOL , Forth , Pascal