**1.1.11 Activity: Research Computing Devices**

In this activity, you will perform research to determine the most appropriate computing device for your current or future vocation.

1. Answer the following questions about the computing needs of your chosen vocation.
   * What do you primarily use a computing device for?
   * Does this job require frequent traveling?
   * Approximately what percentage of your time do you work at the same desk?
   * What software applications do you need to install and use most frequently?
   * Do these applications demand high-end graphics capabilities?
   * How often do you need to keep multiple application windows open at the same time?
2. Which of the following computing devices would best address your needs?
   * High-end desktop computer system
   * Basic desktop computer system
   * High-end laptop computer system
   * Economical laptop computer system
   * Tablet (e.g. Apple iPad, Microsoft Surface Pro)
   * Smartphone (e.g. Apple iPhone, Samsung Galaxy S)
3. Write a one-page summary of your answers to the above questions.

The computing device that I use is primarily for programming in C#, Unity 3D VR development and running larger datasets for machine learning and statistical models. This job may require travel, but I will most likely be a remote employee, probably working from a beach cottage in the Indian Ocean. Eighty to ninety percent of my time will be spent working from the same desk. Regarding the previously mention work activity and applications I will be running, the breakdown is as follows:

|  |  |  |
| --- | --- | --- |
| Work activity | Software applications needed | Percentage of time |
| Software engineering: C# | Visual Studio | 70% |
| VR design & development | Unity, Blender | 20% |
| ML modeling: Python | Anaconda, IPython | 10% |

These applications do indeed demand high-end graphics capabilities. While software design and development in Visual Studio will be relatively light on computing resources, virtual reality and machine learning are certainly at the other end of the spectrum when it comes to computing power. Most of the time, Visual Studio and Google Chrome will be the only applications running on the machine. While designing and developing in VR, I may be working with Unity 3D game engine and Blender as well as the previous applications. Rendering complex three dimensional assets and virtual reality scenes will require a high-end GPU. Building statistical model for machine learning and other artificial intelligence application will require on Anaconda and a Google browser window. With that said, Git will be running for backing up repositories, at all times.

For the above reasons, I will require both a high-end desktop computer and high-end laptop, which I already own.