**A Computer for Alanna**

Alanna is a digital artist for a video game company. She designs and animates backgrounds, scenery and characters that go into some pretty large and exciting video games. She works closely with the colours and textures of digital media, and is always having to generate large animations to see how they appear on screen. Alanna occasionally prints her work in order to create portfolios and project outlines for other members of the video game development team. She also scans hand-drawn images created by artists and designers. Alanna pays close attention to the small details of her work.

|  |  |  |
| --- | --- | --- |
| Computer Component, Software or Peripheral | Specifications and Link | Rationale (why this is relevant/important for the user) |
| Processor | [Intel Core-i7 12700F](https://www.amazon.ca/Intel-i7-12700F-2-1GHz-6xxChipset-BX8071512700F/dp/B09NPJDPVG) | Tasks involving creating animations are hard to parallelize, and therefore need high single-core performance. Rendering animations can be split up between multiple cores, and therefore you would want a high core count. The Intel 12700F has 12 cores at 3.6 GHz for multi-core tasks and can boost to 4.9 GHz for single-core tasks making it perfect for animation. The F just means that it doesn’t have integrated graphics, allowing us to save money. |
| RAM | [G. Skill Aegis 32 GB](https://www.newegg.ca/g-skill-32gb-288-pin-ddr4-sdram/p/N82E16820232624?Item=N82E16820232624&nm_mc=AFC-RAN-CAN&cm_mmc=AFC-RAN-CAN&utm_medium=affiliates&utm_source=afc-PCPartPicker&AFFID=2558510&AFFNAME=PCPartPicker&ACRID=1&ASID=https%3a%2f%2fca.pcpartpicker.com%2f&ranMID=44589&ranEAID=2558510&ranSiteID=8BacdVP0GFs-DBiN2Ssbb39_HuFVc8CGWg) | Having enough RAM is essential for preventing crashes whilst rendering, and ensuring the animation process runs smoothly. Since Alanna is generating large animations, she’ll need a lot of RAM for her programs to run smoothly. I went with 32 GB as it should be plenty for all her digital artistry needs. I chose G. Skill as the brand because they’re a reputable brand and their RAM is affordable. |
| Hard Drive | [Kingston NV2 1 TB](https://www.amazon.ca/Kingston-2280-Internal-SNV2S-1000G/dp/B0BBWH1R8H) | I chose 1 TB of storage because animation files can be quite large. Hopefully this should be plenty of room for all of Alanna’s animation storage needs. The drive is a M.2 SSD, which means that it is super fast, and shouldn’t cause any problems for Alanna. I went with Kingston because their storage devices are reliable yet affordable. |
| Graphics Card (if applicable) | [Nvidia RTX 3050](https://www.amazon.ca/MSI-GeForce-RTX-3050-OC/dp/B09Q9SX3NY) | A decent GPU is essential for animation tasks but will hardly ever be the component that is bottlenecking the system. I went with the RTX 3050 because it comes with all the benefits of the RTX series (real time ray tracing, 10bit colour support) but won’t break the bank. I went with a Nvidia GPU as they are better supported than AMD GPUs. |
| Sound Card (if applicable) | N/A | Alanna should be fine without a sound card, as her job doesn’t directly require it. |
| Monitor/Screen | [LG 1920 x 1080 75 Hz monitor](https://www.amazon.ca/LG-22MK430H-B-21-5-Inch-Monitor-FreeSync/dp/B07JF8DQZJ) | This monitor is a IPS screen which will provide increased colour accuracy and better viewing angles. The monitor is a reasonable size and is affordable which should be perfect for Alanna’s needs. The monitor is also from LG, a reputable brand. |
| Printer and Scanner | [Epson Expression Premium](https://www.amazon.ca/dp/B0BYZ7FVHP?tag=georiot-ca-default-20&th=1&ascsubtag=cbq-ca-9112475591881906000-20&geniuslink=true) | This printer scanner combo is an affordable art printer that is still capable of creating high quality art prints. It comes with a scanner allowing Alanna to save money on buying a separate scanner. |
| Keyboard (if applicable) | [Amazon Basics Wired Keyboard](https://www.amazon.ca/AmazonBasics-KU-0833-Wired-Keyboard/dp/B005EOWBHC/ref=sr_1_1?crid=1ZG7ZVOI969OD&keywords=amazon+basics+keyboard&qid=1684631482&sprefix=amazon+basics+key%2Caps%2C100&sr=8-1) | I went with a full-size keyboard so that Alanna would have room to assign shortcut keys for all her digital artistry needs. This keyboard is nothing fancy, but it has all the necessary features. |
| Mouse (if applicable) | [Logitech MX Master](https://www.logitech.com/en-ca/products/mice/mx-master-3s.910-006556.html) | This mouse may be expensive, but it is full of features like horizontal scrolling, macro buttons and an ergonomic design. This mouse will be an asset to Alanna’s work, and I believe that it is well worth the price. |
| External Storage (if applicable) | N/A | 1 TB internal should be enough, but if Alanna needs more, I work recommend that she investigates cloud storage options like Microsoft OneDrive. This will allow her to safely store more content without worrying about it getting lost. |
| Other Peripherals | [Wacom Intuos Drawing Tablet](https://www.newegg.ca/pistachio-wacom-ctl4100wle0/p/N82E16823100234?Description=drawing%20tablet&cm_re=drawing_tablet-_-23-100-234-_-Product) | A drawing tablet would be very useful for Alanna as she does a lot of digital art. This drawing tablet is made from a reputable manufacturer but isn’t too expensive. |
| Operating System | [Windows 11](https://www.microsoft.com/en-ca/software-download/windows11) | Windows 11 is the best choice for an OS, MacOS won’t run on something that isn’t a Mac, and Linux just isn’t that well supported. |
| Other Software | Depends on Alanna’s preferences. | Often the game company or the individual artist will have their preferences for what type of art software they like to use. I would recommend Blender to get started, then maybe Adobe After Effects. |

The total cost comes to around $1500. This is pretty good for a complete setup, especially with all the capabilities and components Alanna is getting.