Professor Dorn's hints on "how to play" the videogames

This is Professor Dorn, here, writing to those of you who are not "into" playing video games. I am certainly NOT into them, but I have been testing the geovisualizations using low-end Macs and low-end Windows computers. What follows are the problems I encountered and how to solve them. If you do not see your problem below, post it to the canvas discussion board (Troubleshooting Videogame Problems) and solutions will follow quickly.

Opening for the first time a geovisualization video game on Mac: the biggest issue most will face will be for Mac users will be if your computer says the the application is from an unidentified developer. To solve this problem, just "control-click' the app icon.

That means, you hold down the control button on the keyboard, and you double click on the icon. Then, simply choose Open from the shortcut menu.

Then, when you open the game again, you won't have any problems.

Toggling between game and and another program: most students will want to toggle between a game and other applications. There are two ways to do this: before you open the game and while the game is playing.
WHILE THE GAME IS PLAYING: Hold down the (MAC - hold down Apple command button and hit tab; WINDOWS - hold down the Windows Icon Key and hit tab (or, some windows keyboards its Alt Key and Tab), and the game will move to the task bar.

BEFORE YOU OPEN THE GAME IN WINDOWS: hold down the SHIFT KEY when you double click on the application. You will be given access to the Unity presets to make the game windowed. Just pick any lower resolution, and the game will be a window on your desktop.

BEFORE YOU OPEN THE GAME IN MAC: hold down the OPTION KEY when you open the game. You will be given access to the Unity presets to make the game windowed. Just pick any lower resolution, and the game will be a window on your desktop.

Waiting for the geovisualization to build: please be patient. It could take a bit of time for the virtual world to be built after you click the "Start Lab" button. The reason is that lower-end computers need more time to process all the data for you to play. If you try to rush things by clicking buttons, you will probably crash your computer and have to restart everything. Just be patient.

At the start: Hit Space Bar and Up Arrow Key: For lower end computers, you will want to start by hitting the space bar (jump) and up arrow key (move forward) and land on the game topography. At that point, you can then use the various menu options by hitting ESCAPE. The menu is that arrow that points left and (when you are not moving around the game) expands a menu when you hit the arrow.
**Escape on your keyboard:** the escape button on your keyboard is the toggle "on/off" switch between you being able to play the game (move the avatar, change the camera altitude and angle) and not. When you cannot move your avatar, you then have access to the side bar menu and the ability to "Fast Travel" and other aspects of the menu.

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**Menu: explore the options**

After you've hit escape, you should click on the left triangle that gives you access to the menu. The view to the left is the Grand Canyon microclimate game with the menu opened, and then the map menu also opened.

Feel free to experiment with the various choices.

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**Fast Travel:** This menu option will speed up the lab for you. Click on the Paper Airplane fast travel icon.
Fast travel allows you to enter latitude and longitude coordinates (positive latitude.decimal numbers like 36.4110 and negative longitude numbers like -111.7715) you get from the PDF file or from the canvas questions. You can type them in or copy and paste and then hit the 'close' button and you have moved!

You can also (a) click a location on the inset map, (b) click the fast travel button, and (c) click the closed button) and you can move to a different spot on the game board. For example, I clicked on the far northeast (upper right) corner of the inset Grand Canyon geology map and moved to that area. There is a tiny blue dot if you look carefully below.

WARNING: Just clicking on the small map will not make you fast travel to that spot. You have to click on the inset map and then hit the fast travel button.
Moving around and changing camera angles- you already know that the space bar makes the avatar jump. Look at these short cut keys below for movement and camera changes. But if you are frustrated by your mouse pad (to change camera angle), try plugging in a usb mouse or a track ball -- or a game controller if you have a windows computer.

If you are trying to go UPSLOPE, the arrow key will just make the avatar hit the topography and you'll be stuck. You may need a running start by jumping and moving forward to get up hills.

Some slopes are just too steep for the avatar to climb. You'll have to find a route that is gentler and practice your running and jumping skills. You'll get the hang of it.
**Fast Travel via Helicopter:** When you are feeling confident in your gaming skills, the fast travel menu allows you to transport the rabbit via a helicopter flight that would cost you hundreds in the real world (and without the cool science layers beneath you).

![Fast Travel Map and Controls]

When you have programmed your destination by clicking on the fast-travel map and set the speed to go fast and auto close the menu, your avatar will be cabled to a helicopter.

At that point, you can control the camera angle (via your mouse, trackpad, keyboard, or gaming controller... just experiment ... for me, I have a track ball mouse and so I move the ball and rotate the ring). The shots below show different possibilities of stunning views of the geovisualization.

By hitting the space bar, the rabbit lets go of the cable and drops to the ground (safely). Try it.
There is an underlying problem with many **Windows Laptops**. Especially Dell, HP, and Lenovo. THIS MAKES IT HARD TO USE THE TOUCHPAD AND FRUSTRATES STUDENTS. The solution is to plug in a USB Mouse, Trackball, or Game Controller.

Many use **Synaptics Touchpad**.

This comes bundled with a Driver that STOPS touchpad input when a user is Typing. Depending on the Driver version there is an Advanced Settings.

Example Lenovo

**How To – Touchpad Settings in Windows 10, 8, 7 (Non-ThinkPad)**

(https://www.youtube.com/watch?v=Cw0p-U9TT1c)
In some versions the Driver loses the Advanced Settings and cannot be adjusted. There are several workarounds and alternate drivers.

MSI® HOW-TO adjust Synaptics touchpad advanced settings

This would apply to any Windows game. The Easy solution is to plug in a USB Mouse or Game Controller.

MacOS users may have a similar issue, and will need to go into System Preferences > Accessibility > Mouse & Trackpad. Uncheck "ignore accidental trackpad input".

Again simple answer is USB Mouse. Controller support is coming for the MacOS.