

Intro to Programming Scratch #16 – Platform

Objective: Complete the platform game we started in class by adding sprites that give points when the *Player* touches them and adding other sprites that send the *Player* back to the beginning of the level if the *Player* touches them. Find a way to end the game.

1. Login to the Scratch website. You should already have a project called *scratch_16_example* that we completed in class.
 - a. Open the *scratch_16_example* project.
 - b. Do *File->Save as a copy*. The name of the project will change to *scratch_16_example copy*.
 - c. Rename the project to *first_last_scratch_16*
 - d. Do *File->Save now*
2. Make the following enhancements:
 - a. Add a *Score* variable for all sprites. Have the *Hitbox* set the *Score* to 0 when the green flag is clicked. The *Score* displays on the screen at all times.
 - b. Add a *Level* variable for all sprites. Have the *Hitbox* set the *Level* to 1 when the green flag is clicked. *Level* will not show when the game is over.
 - c. Delete the 3 costumes for the *Platform* sprite and create a *minimum* of 3 of your own. At least one must have a *dead zone* that resets (sends back to the beginning of the level) the *Player* when the *Player* touches it. At least one must have a pit that causes the *Player* to be reset when the *Player* falls in it and off the screen. Be creative with your platforms.
 - d. Each level needs a way to get points. Add a *minimum* of 3 sprites to **each** level that add to the *Score* when the *Player* touches them. The touched sprite should disappear after the points have been added. Hint: **Don't** have the *Hitbox* or *Player* manage the points. Have the object that the *Player* touches add the points and then hide.
 - e. Each level needs at least 2 sprites that the *Player* must avoid. If the *Player* touches these sprites, the *Player* resets. The sprites that the *Player* must avoid should move back and forth and **do not hide** if the *Player* touches them.
 - f. When the *Player* reaches the end of the last level, the game is over. It should not cycle back to the first level. The easiest way to do this is to create a sprite at the very end of the level that causes the game to be over when the *Player* reaches it. You can add a game over costume to the *Platform* sprite, or add a *Game Over* background to the Stage.
 - g. You must have sounds/music in the game:
 - i. There must be music playing in the background.
 - ii. There must be sound when points are added.
 - iii. There must be a sound when the *Player* resets.
 - iv. There must be a sound when the game is over.
 - h. Make sure that all scripts stop and the sprites hide when the game is over. The *Score* should remain on the screen when the game is over. *Level* should not be on the screen when the game is over.
3. Always do *File->Save now* before you log out of the Scratch website.
4. Now do *File->Save to your computer*.

5. Turn in your *first_last_scratch_16.sb3* file to *missblomeyer.com* in the usual way.

