Intro to Programming
Scratch #17h – 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.

1. Login to the Scratch website. You should already have a project called scratch_17_example that we completed in class.

    a. Open the *scratch_17_example* project.

    b. Do *File->Save as a copy*. The name of the project will change *to scratch_17_example copy*.

    c. Rename the project to *first_last_scratch_17*

    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. It must be in large readout mode with a label at all times, including when the game is over.

    b. Add a *Level* variable *for all sprites*. Have the *Hitbox* set the *Level* to 1 when the green flag is clicked. The *Level* displays on the screen in large readout mode with a label when the game is being played. *Level* should **not** show when the game is over.

    c. Do **one** of the following:

        i. Add a minimum of 3 more "platforms" to each of the 3 costumes in the *Platform* sprite.

        ii. Or for Extra Credit: Delete all 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. 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 either hide or delete itself if it is a clone.

    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 or up and down, and **do not hide** if the *Player* touches them.

    f. You must have sounds/music in the game:

        i. There must be music playing in the background.

        ii. There must be a 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.

    g. 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_17.sb3* file to *missblomeyer.com* in the usual way.