

Game Design, Lesson 1: *UnderTale*

GRADE LEVEL: 3-8

UTAH CORE STATE STANDARDS:

Grades 3 - 6, Visual Arts

Strand: Create

Standard 3.V.CR.1, Standard 3.V.CR.2, Standard 4.V.CR.2, Standard 5.V.C.1, Standard 5.V.C.2, Standard 6.V.CR.3, Standard 6.V.CR.6

Grades 7 - 8 Fine Arts: Media Arts

Strand: Create, Produce

Standard 7-8.E.CR.1, Standard 7-8.E.CR.2, Standard 7-8.E.CR.5, Standard 7-8.E.CR.7, Standard 7-8.E.CR.8, Standard 7-8.E.P.2, Standard 7-8.E.P.3, Standard 7-8.E.P.4, Standard 7-8.E.P.7.

CLASSROOM TIME REQUIRED: 30 minutes - 1 hour (depending on number of students and skill level)

OBJECTIVES: Students are introduced to basic programming and game design. With clear instructions for how to use the software, students learn to navigate the software and then are able to create their own media using the same tools.

DEFINING SUCCESS: Students complete the UnderTale project and are able to create their own games and develop their own coding.

RESOURCES:

- UnderTale game files, downloaded from spyhop.org/spy-hop-schools
- [Game Maker software](#) (free software for Mac or PC)





CONCEPTS ADDRESSED:

- Game design
- Coding
- Visual storytelling
- Problem solving

SHARE: We would love to see what your students create! Please share your students innovations with us: jana@spyhop.org






UnderTale Instructions

Test play the game


- 1) Select the  to play the game
(*Hint: when testing you are switching software, so select the **title bar** of the game to activate software)
- 2) When you are done testing and want to start building your game click the  (to close the test) and  or  to switch back to Game Maker software

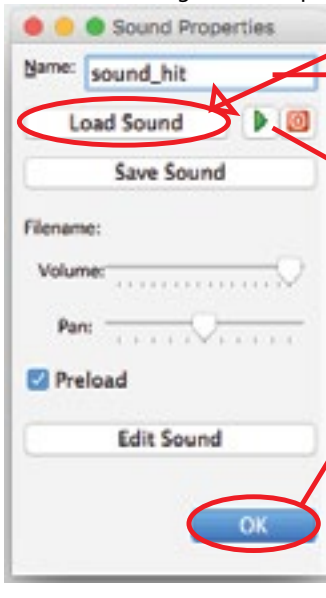



Make a Maze for Papyrus

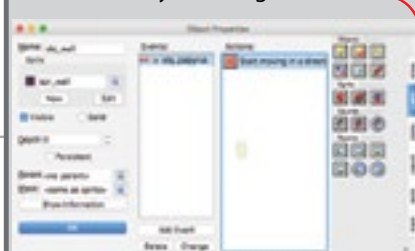
- 1) Select **Room1** 
 - 2) Increase the window size 
 - 3) Select the **obj_wall** from the **object drop down menu** (Hint: the sprite of the object will appear in the **top left corner of the Room Properties window** like this )
 - 4) Build the maze by clicking in the grid area (right click is delete)
 - 5) **Hold shift + click** on grid to "speed paint" the **objects**
 - 6) When you are finished building the maze select the 
 - 7) Then test the game 
- **Remember that you are switching software, select the title bar and icons of the software you want to activate**

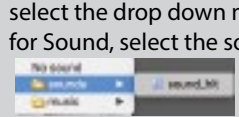
Loading audio/ music into the game

- 1) In the **Sounds Folder**  **Sounds** right click and hold, then release on "Create Sound"
This "Sound Dialog Box" will open
- 2) **Load the sound** by selecting the "Load Sound" button. Navigate to the sound file that you want to use. I selected the Punch.wav file (so I navigated to the Desktop>UnderTale>audio/music folders to select this file)
- 3) **Name the file**
 - a) I like to name my sound effects with the prefix sound_ and my background music with the prefix music_
 - b) once you have the prefix, name the audio or sound file a name that you understand (I named mine "sound_hit")
 - c) you can listen to the sound by selecting the green arrow
 - d) select the ok button



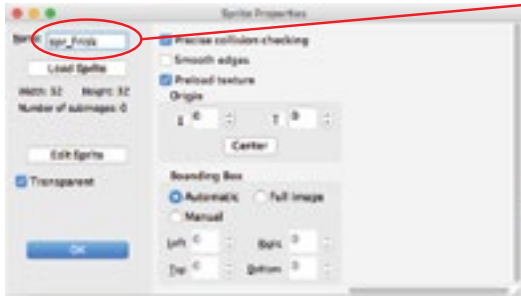
- 4) **Object** for the audio to play it need to be attached to an Object or create an Object for it. In this situation the "hit" sound will be attached to the collision event for the wall
 - a) In the Objects folder select the "obj_wall" 
 - b) In the Collision with Papyrus Event add the audio action by selecting the "Main1" tab



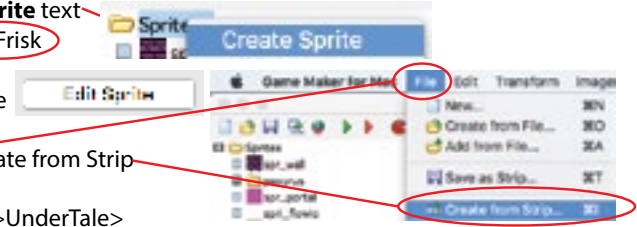
- c) Click and hold the Play Audio icon and drag and drop the icon into the Actions window
- d) The Play Sound Dialog box will open, select the drop down menu for Sound, select the sound_hit 
- e) Select the ok button

Import Sprites

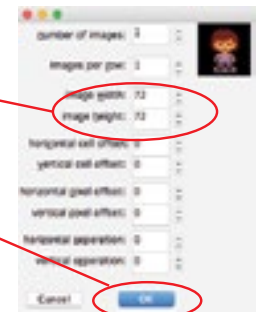
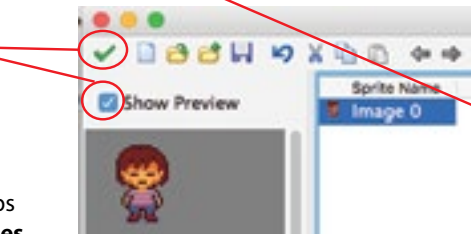
- 1) Right click on **Sprite** text, hold, then release over the **Create Sprite** text
- 2) This will open the **Sprite Properties** dialog box, rename to **spr_Frisk**



- 3) Select the **Edit Sprite** button
- 4) File > Create from Strip
- 5) Desktop > UnderTale > Frisk > FriskStand.png



- 6) **Open**
- 7) Adjust size of image
- 8) **OK**



- 9) Check **Show Preview**
- 10)
- 11) Center the cross-hair on Frisk
- 12) **OK**

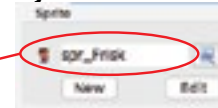


**Great Job!! You imported a sprite,
If you want to import sprite cycles: follow these steps
BUT between step 6-8 change the **number of images**
and **image per row** to fit the sprites that you need**

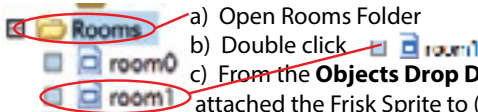
Objects

For us to see or move the **Sprites** they need to be attached to an **Object** or **Create an Object** for it. In this situation we will attach the Frisk Sprite to one of the **Enemy Objects**

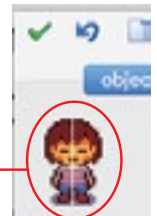
- 1) Double click on one of the enemy objects to open **obj_enemy_V**
- 2) In the Sprite Drop Down menu **obj_enemyV1** Select the FriskStand.png image
- 3) **OK**



- 4) Add the **Object** to the room



- a) Open Rooms Folder
- b) Double click **room1**
- c) From the **Objects Drop Down Menu** **obj_enemy_V** select the **Object** that you attached the Frisk Sprite to (Warning!! There are several Enemy Objects, look for the one with the Frisk Sprite)
- d) Click on the grid to add **Frisk Enemy Objects**
- e)



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