ATL Game Development Platform

NITI Aayog

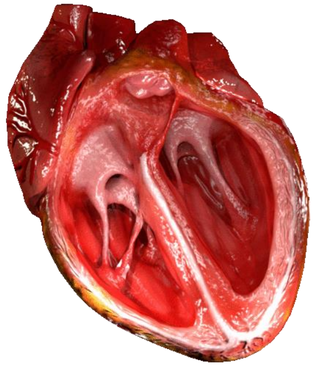
ATAL INNOVATION MISSION

DELL Technologies

LEARNING LINKS FOUNDATION
WHERE EDUCATION MEETS LEARNING

Day 08

Controlling the Sprites



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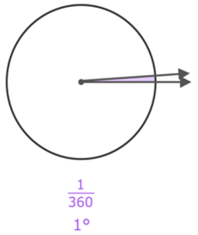
Agenda of the day

01 Reflections of Day - 7



02 Adding images, Editing Images, Controlling the sprite with keyboard,

03 Organizing Event Sheet, > Adding Mouse Control and Adding and destroying the enemy

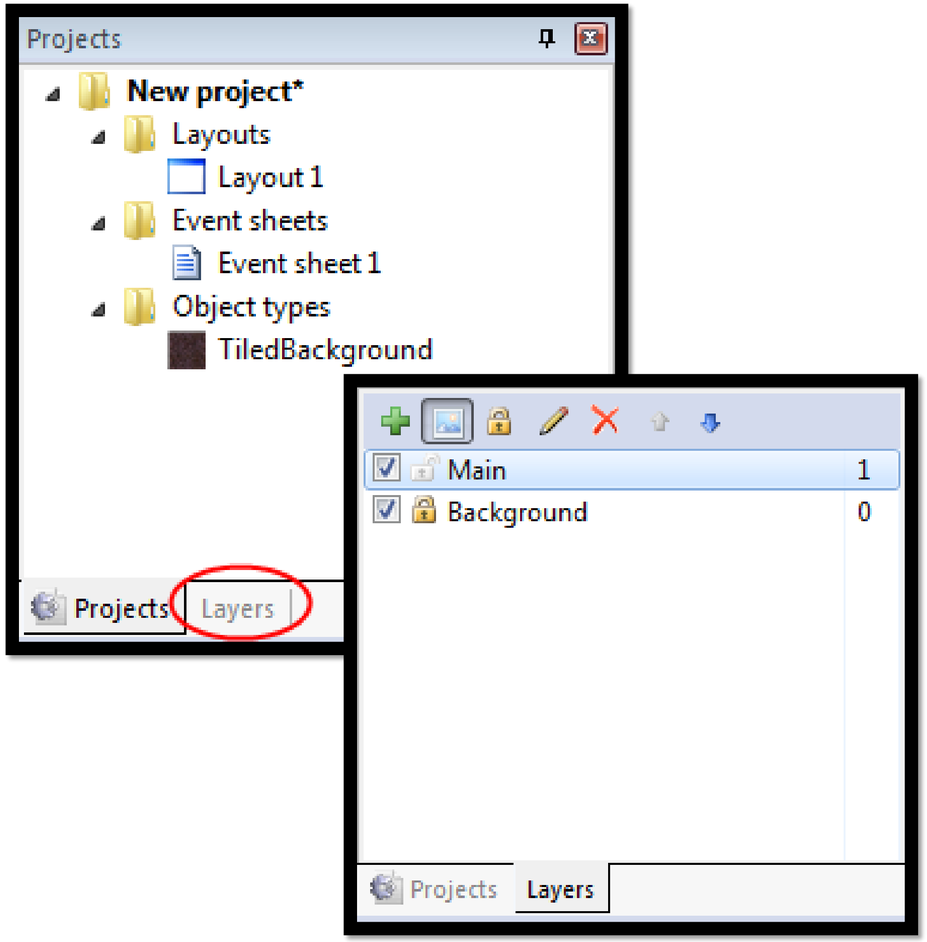
04 Home Assignment, Q&A

Reflections of Day 7

- Creating game players and setting the Game Layout
- Adding Game event and Debug Event
- Adding Sprites, Behaviors & plugins references
- Adding Animations

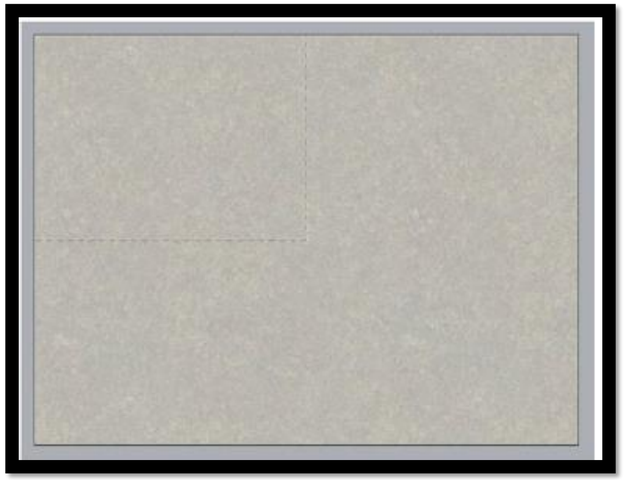
Adding Background Images

- In the layout properties, set the layout Name to Main, and set Size to 1600,1200.
- Go to the Layer section of Project window.
- On Layer 0, background is present, rename Layer 0 as background layer and click on lock to lock the background it.
- Right click on layer menu and click New layer and rename it as Main Layer. Repeat process to create UI layer.
- In the project properties, change the window Size to 800, 600.
- Change the UI layer property Parallax to 0,0.



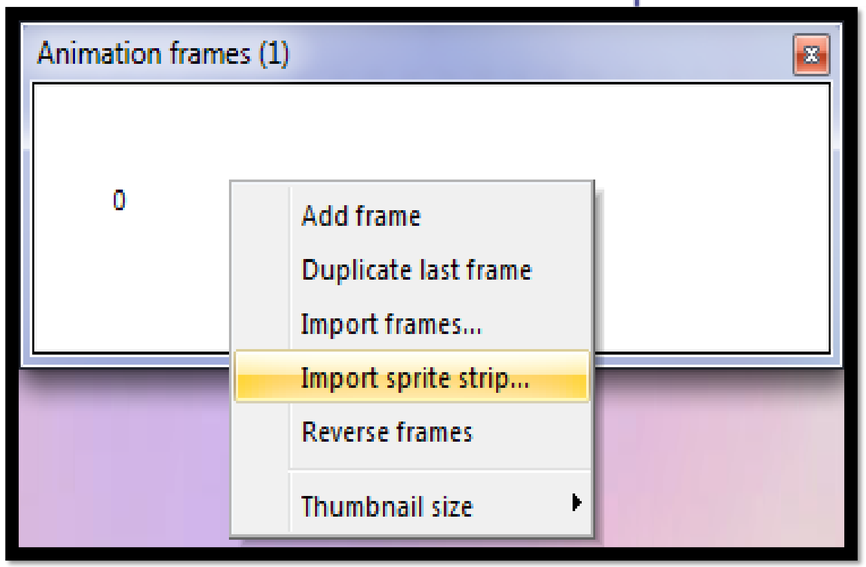
Adding Background Images

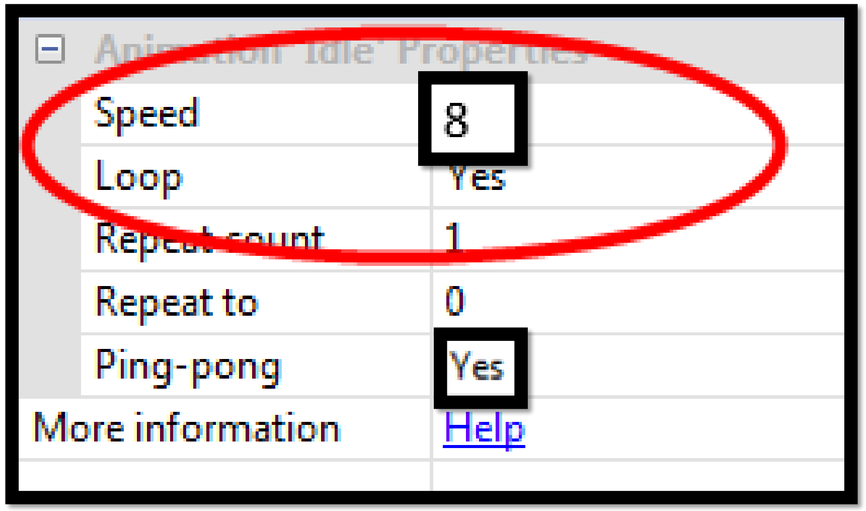
- Double click on screen select Tiledbackground option from new object type window.
- Type name as background and click on Insert button.
- A plus sign will appear, left click on the screen again to open the Image editor.
- Click on Load from your computer option and select home screen image from the downloaded assets.
- Once the image is uploaded close the image editor to see the image on the layout.
- Grab the anchor points and fit it into the grey dotted screen.
- Your layout should appear as shown



Player Setup

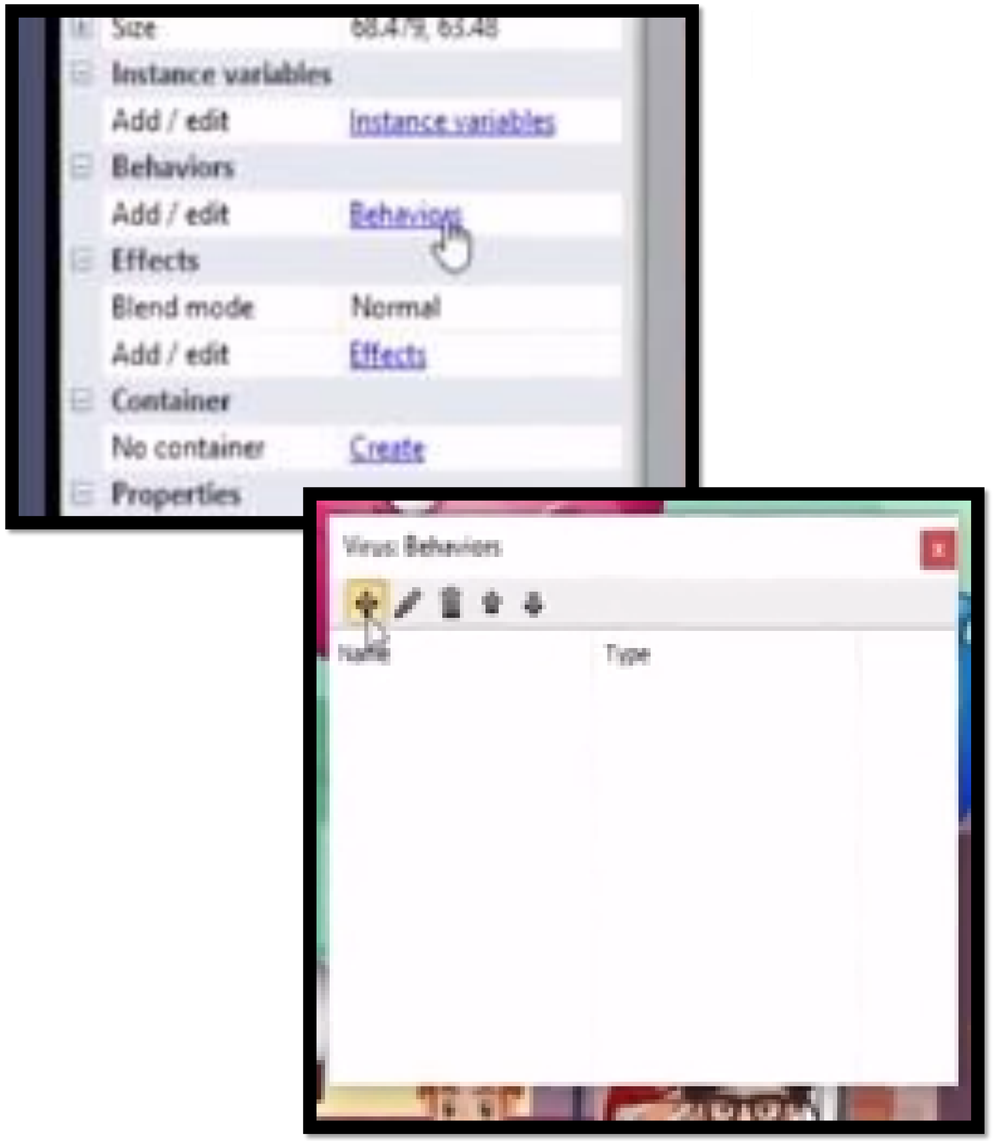
- Double-click a space in the layout to insert a new object, and choose Sprite. When the crosshair comes up, click somewhere above the tiles. The Image Editor will appear.
- Let's import the sprite strip for the player's idle animation. Right click the Animation Frames window and select Import sprite strip.
- Choose the file (in png format).
- Add the image files wizard-1.png, wizard-2.png, and wizard-3.png and delete the default empty frame.
- Change the animation properties: Speed to 8 , Loop to Yes, and Ping-Pong to Yes. When you're finished, close the image editor windows.





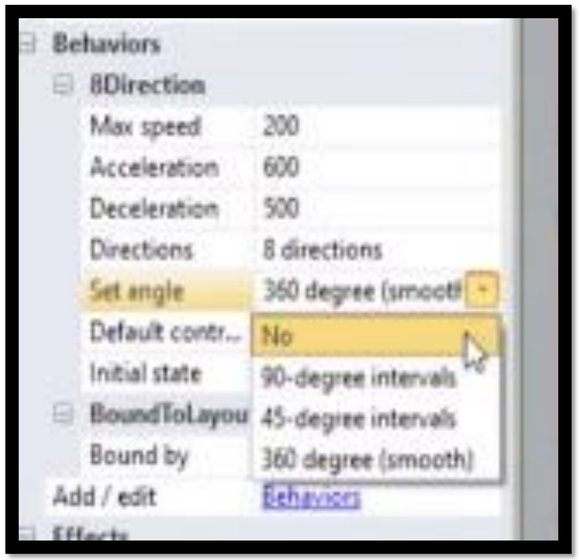
Player Setup

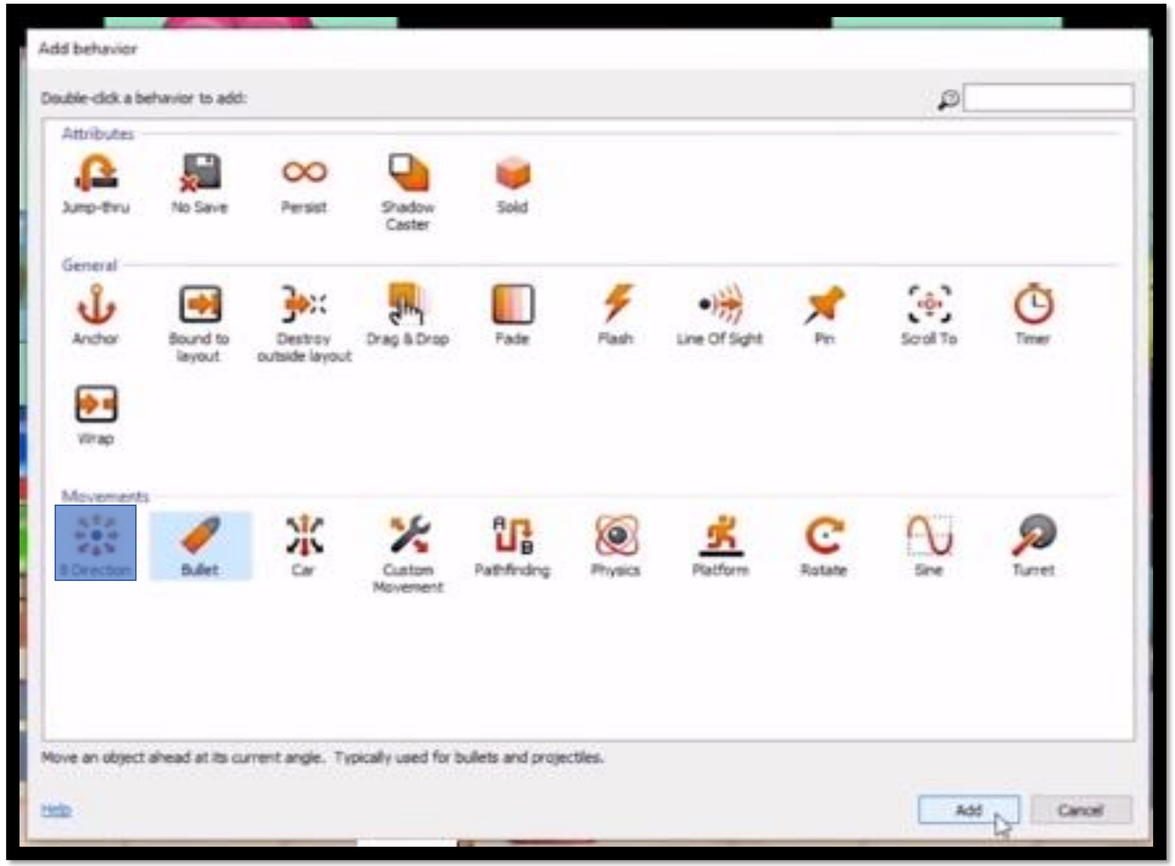
- In the layout area, change the wizard Size to 48,48, and position it in the center of the layout.
- Click on the wizard object and click on the behaviors option in the properties bar.
- A pop window will appear. Click on the plus sign to add new.



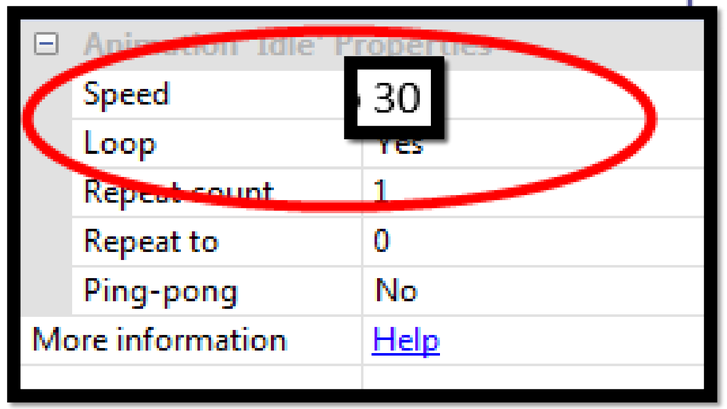
Player Setup

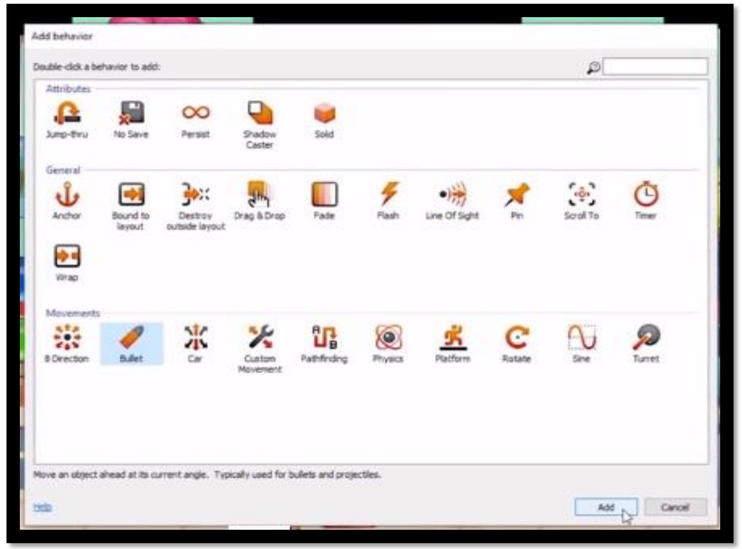
- A pop window will appear again. Select 8 direction behavior from it and click on Add button.
- Close the window to return to layout.
- Change its behavior property: “Set Angle” to No.
- Also add the behaviors Scroll to and Bound to layout.





Player Setup

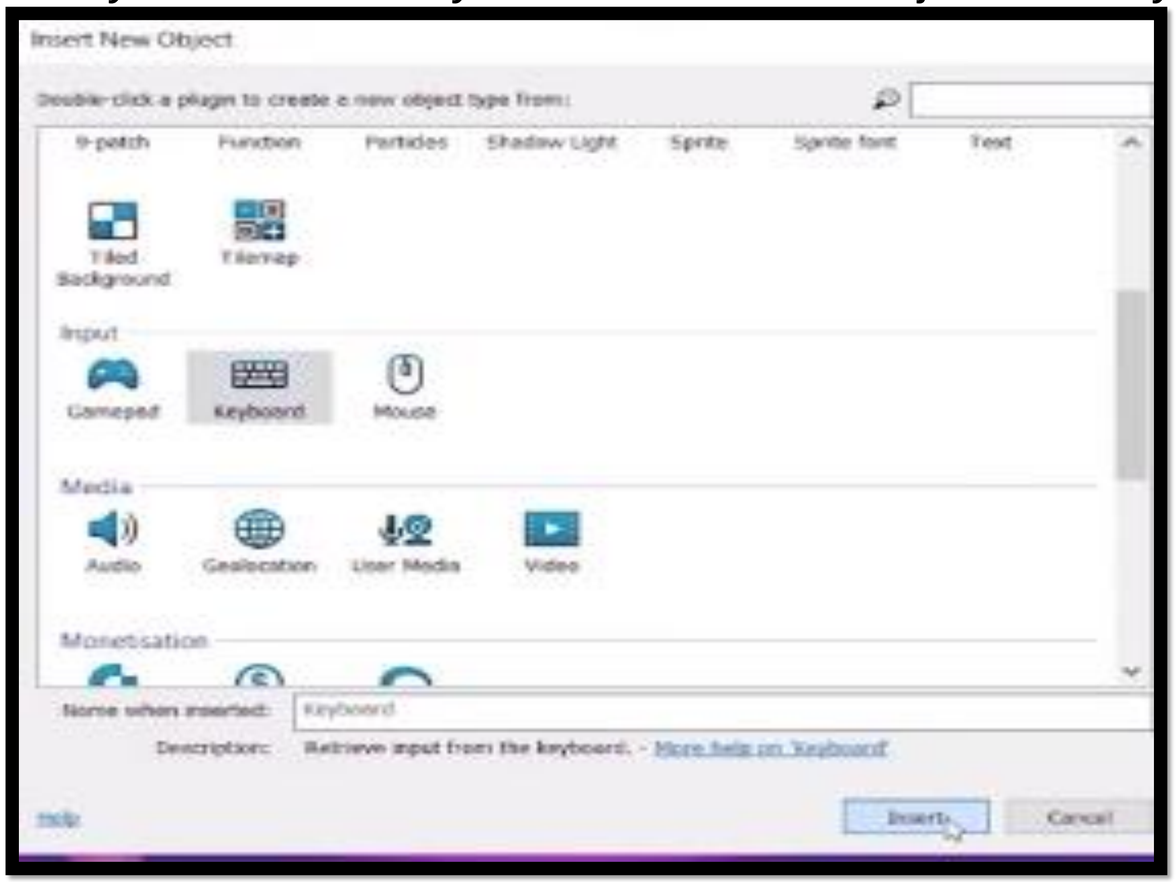




- Add the spell object. Add a new sprite named Spell; in the Animation frames window, import animation frames from the sprite strip named swirling-yellow.png, which consists of four rows and five columns.
- Set the animation, properties Speed to 30 and Loop to Yes.
- Close the image editor, and position the spell in the margins of the layout.
- Add the behavior “Bullet”, and change the bullet property (from properties bar) Speed to 600.
- Also add the behavior “Destroy outside layout”.

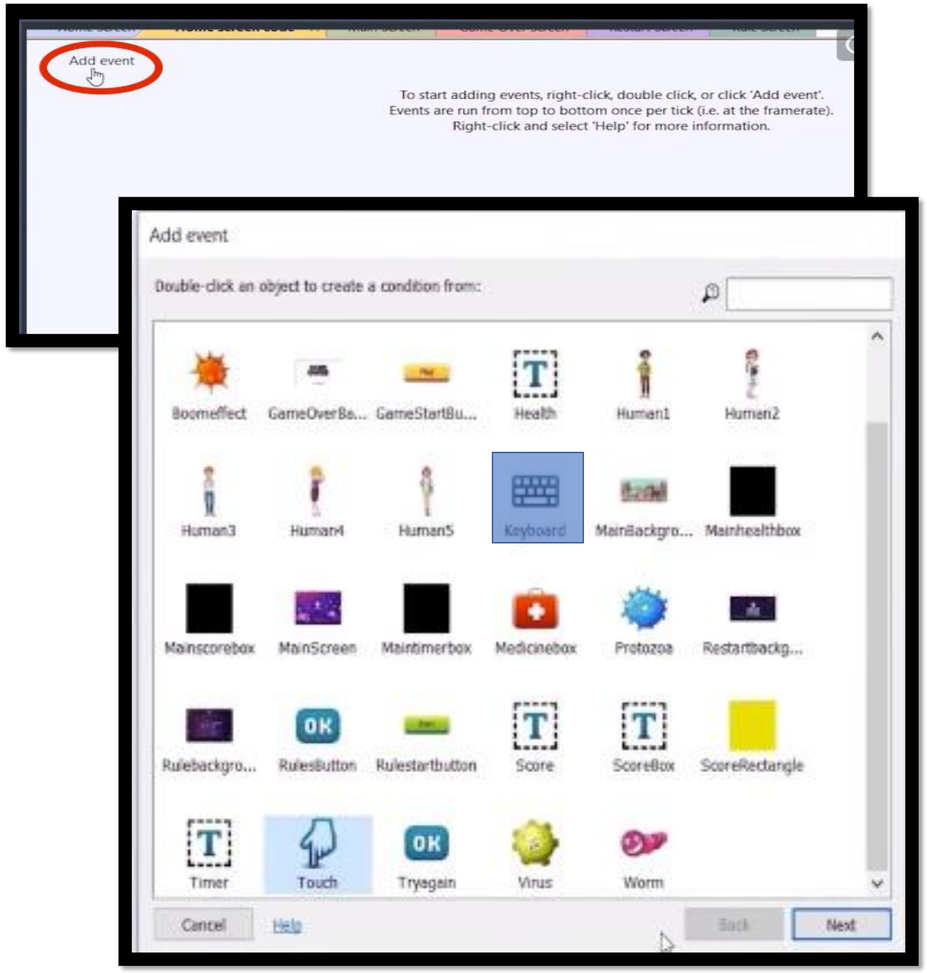
Controlling the Sprite

- Double-click on layout and add keyboard and mouse objects one by one.



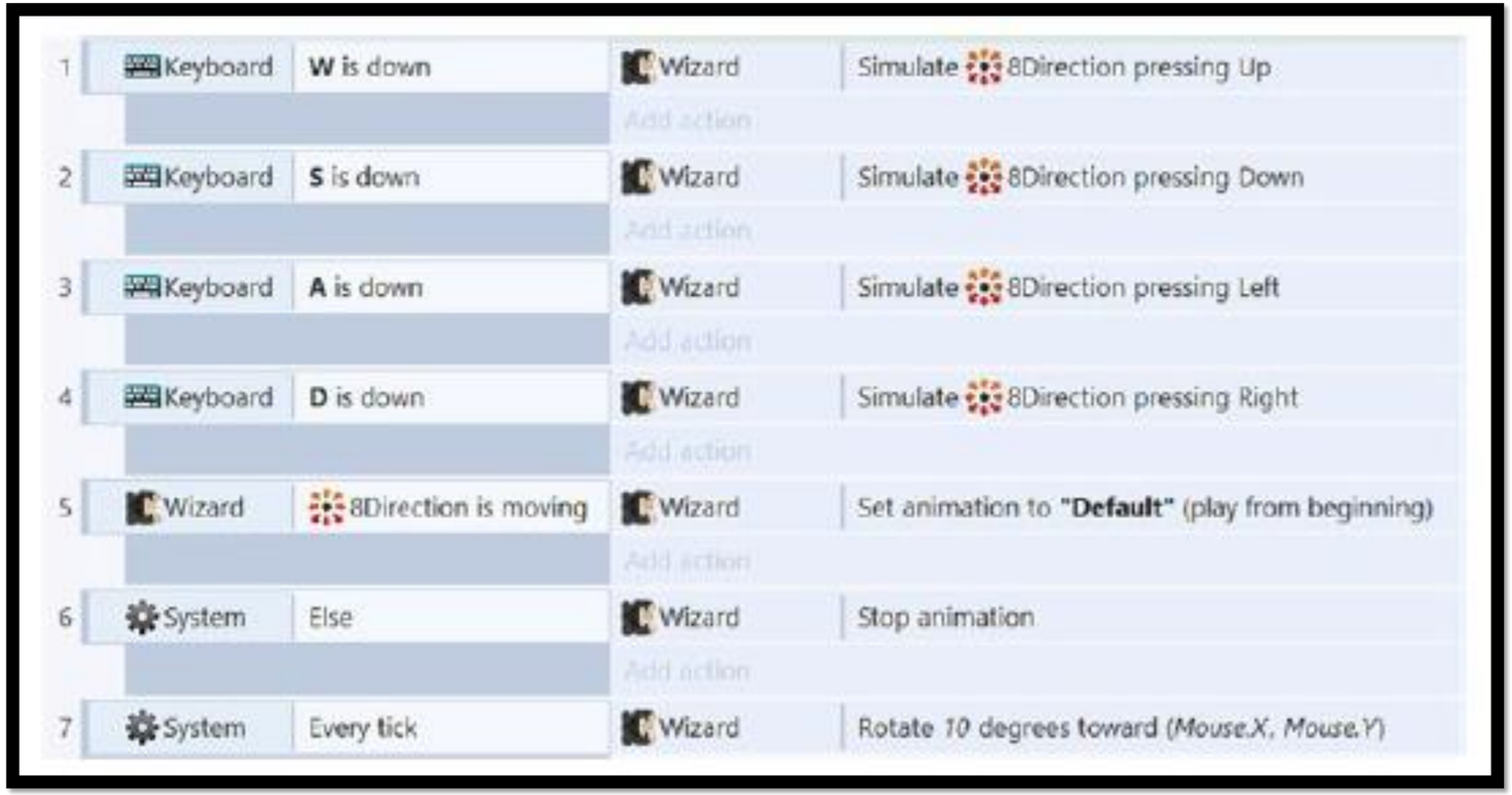
Organizing Event

- In event sheet, left click on add event .
- Select Keyboard and click next.
- Select from Add condition window: “Keyboard – Key is Down” and set Key to W.
- Add the action Wizard - 8-Direction: Simulate Control, and select Up from the list.



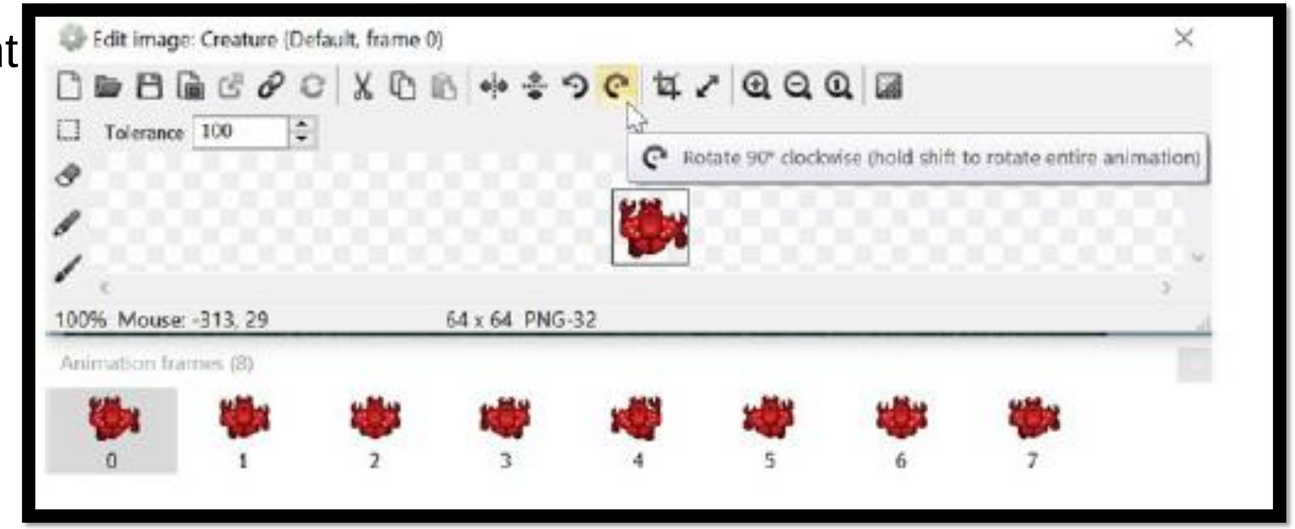
Organizing Event Sheet

- Similarly, create remaining events. Event sheet should look like this:



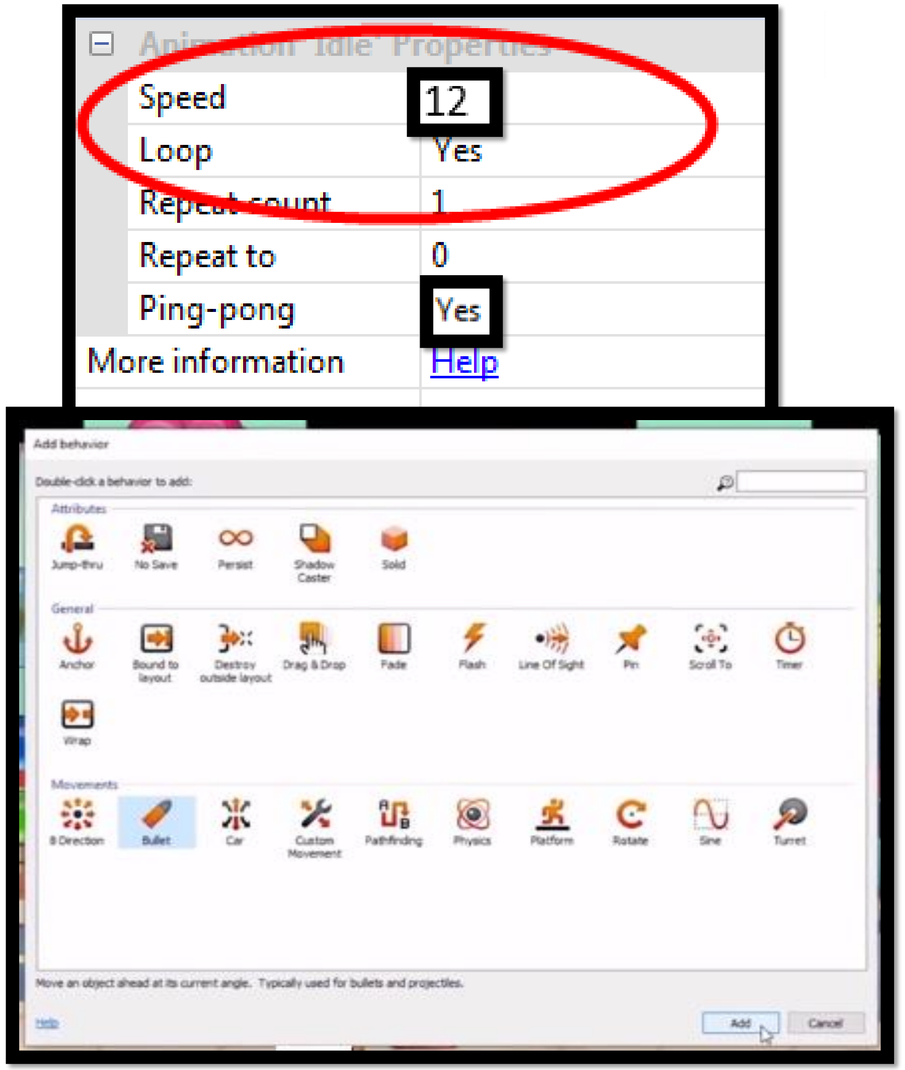
Adding enemies

- In the layout, create a new sprite named Creature.
- In the Animation frames window, import the frames from the sprite strip named monster.png, which has eight horizontal cells and one vertical cell.
- The animation frames need to be facing right to be aligned with the default angle of motion for the Bullet behavior, so the frames must be rotated to the right.
- To rotate all the animation frames by 90 degrees clockwise at once, hold Shift on your keyboard, and click the Rotate 90° clockwise button at the top of the Edit image window.
- Each Creature frame should now be facing right



Adding Enemies

- Set the animation properties Speed to 12, Loop to Yes, and Ping-Pong to Yes.
- When finished, close the image editor.
- Add the Bullet behavior and change Speed to 300.
- Also, add the Fade behavior and set Active at start to No.
- Select the Creature sprite.
- Press CTRL key, press mouse left click and hold the cursor over the sprite. Drag to another place on layout and drop to place the duplicated sprite.
- Do duplicates to make total 5 creatures, spread them all over the layouts.



Adding Spawned and collision

- Add these events to the event sheet.
- A spark like special effect will be added as the creature fades out of existence. Add anew sprite named Spark; in the Animation frames window, add animation frames from the sprite strip named spark.png, which consists of four rows and four columns.
- Set the animation properties Speed to 16 and Loop to Yes. Close the image editor, position the spark in the margins of the layout, and add the behavior Fade
- Add following events to the event sheet.

Let’s Practice - Homework of the day

Complete the shooter game

(Half baked game can be downloaded from https://rb.gy/b7mkf6)

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Thank You!
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