Create an intermediate game with Kodu

Save your world regularly!

This builds on the activity card for the **Create a basic game with Kodu**. Please refer to that sheet if you need to remember how to do some of the steps from before.

Create a basic world about 4 times the default world size.

Create a Kodu and replicate the 6 lines of code used in the last task to move the Kodu around, interact with the coins, the mines, update your score and stop the game when you have a certain number of points.

Alter the speed and size of your Kodu as necessary.

The last game allowed us to interact with static objects such as mines and coins. It is far more fun and challenging to interact with moving objectives or objectives that do not last forever or **respawn**.

There are several ways to do this but we are going to use a process that enables objectives to become **Creatables**.

Add a coin to you world and right click on it. Click on **Change Settings** and scroll down to make the coin **creatable**.
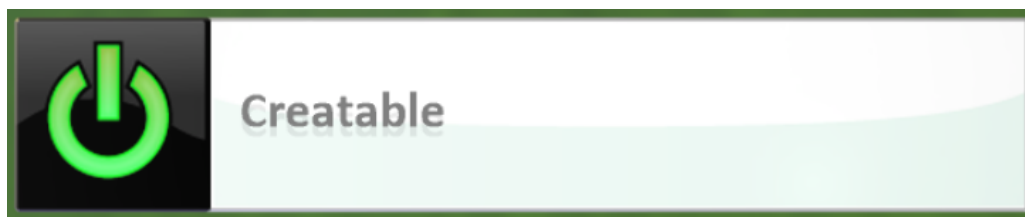
Repeat this process with mines. If you want to you can also limit the number that can be created from the same menu.
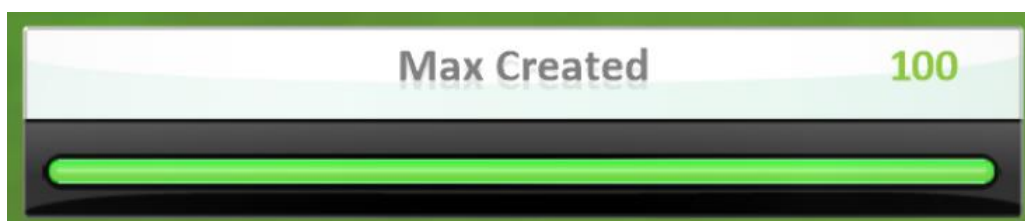
Do not delete the mine and the coin from your world. Put them in a corner out of the way.

We are now going to create a system for dropping these objects around the games randomly. To do this we need to use another object. In this example we are going to use the sputnik.

Add a sputnik object to your world with the following code.

Run the code to see what happens.

The next challenge is to get the sputnik to drop coins around the game.

Add the following line of code. Choose the coin from the **creatable menu** not the **main menu!**

Now run the programme. You will notice the **mine** and the **coin** we used to create the **creatables** in the corner of the world are not there in **game mode**.

The sputnik flies around dropping coins around our world.

We are now going to get the same sputnik to drop mines as well.

Use the 2nd line of code above to make a 3rd line of code but this time the interval for dropping mines should be between 5 and 10 seconds. You can do this quickly by right clicking on the 2nd line of code and then copy and paste. Now just edit this for the mine as described.

The sputnik should now fly around dropping coins and mines.

We want these **creatables** appearing, rather than being dropped by the sputnik, so we need to hide the sputnik.

To do this go on to the menu for the sputnik, **Change Settings** and choose **invisible**.

Play the game again.

This is becoming a little more interesting and difficult but it would be more challenging if the coins disappeared after a while and the mines moved around.
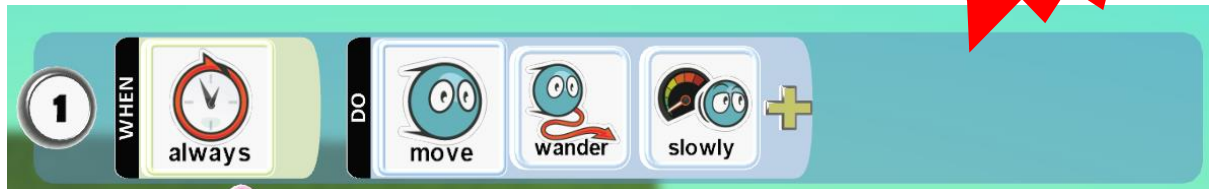
To make the coins disappear after a while go to the **edit** screen and click on the coin (this will be glowing green because you have made it in to a **creatable**).

Add the following code. This blows up the coins after 10 seconds.
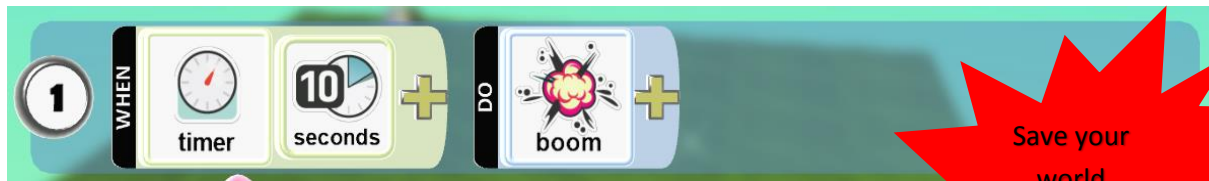
Now click on the menu of the **mine creatable** and add the following code.

Save your world regularly!

You can now add other objects to your game, change the timings and add different coins and hazards that give you more points or slow you down rather than destroy you.

Can you use the health option in your programme so that when you hit an object you lose some health rather than being destroyed instantly? To do this turn on the hit points bar in the **change settings** menu on the Kodu.

Can you add firepower to your Kodu so that you can blast objects in your game?