



## Username generator

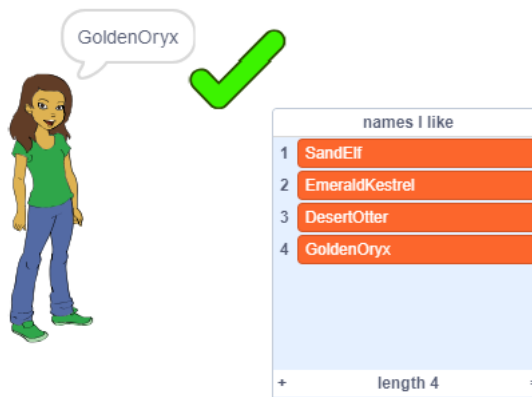
Generate awesome usernames that you can use online



### Step 1 Introduction

It's important not to use your real name or any personal information in your online username. In this project you'll generate fun usernames that you can use on websites like Scratch.

#### What you will make



#### What you will need

##### Hardware

- A computer capable of running Scratch

##### Software

- Scratch 3 (either **online** (<https://rpf.io/scratchon>) or **offline** (<https://rpf.io/scratchoff>))

##### Downloads

The starter project can be found **here** (<https://rpf.io/p/en/username-generator-go>).

#### What you will learn

- Use lists in Scratch
- Use the paint tool to create images
- How to exporting text files and images from Scratch

#### Additional information for educators

You can find the **completed project here** (<https://rpf.io/p/en/username-generator-get>).

## Step 2 Generating usernames

There are lots of websites and apps that use a username to identify you. This username is often visible to others. Usernames can also be called screen names, gamer tags, or handles.

It's important that your username isn't your real name and also doesn't include any personal information, such as your age, year of birth, or where you live. Other people will see your username, so make sure it's polite, and consider what people will think about you when they read it. Remember that you might be using your username for a long time – will you still like it in three years?

As you can see, it's important to choose your username carefully. Let's create a Scratch project to generate 'AdjectiveNoun' usernames like 'DiamondIguana'.

Open the Scratch starter project.



**Online:** open the starter project at [rpf.io/usernameon](https://rpf.io/usernameon) (<https://rpf.io/usernameon>).

If you have a Scratch account you can make a copy by clicking **Remix**.

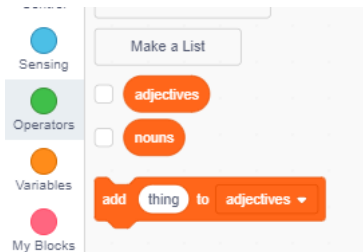
**Offline:** open the **starter project** (<https://rpf.io/p/en/username-generator-go>) in the offline editor.

If you need to download and install the Scratch offline editor, you can find it at [rpf.io/scratchoff](https://rpf.io/scratchoff) (<https://rpf.io/scratchoff>).

You should see two lists on the stage – **adjectives** and **nouns**:



Click on **Variables**, and then click the boxes next to **adjectives** and **nouns** to uncheck them and hide the lists.

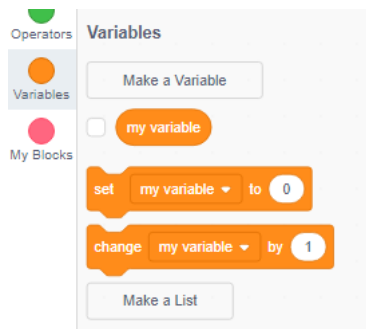


Add a variable called `username` which should be available for all sprites.

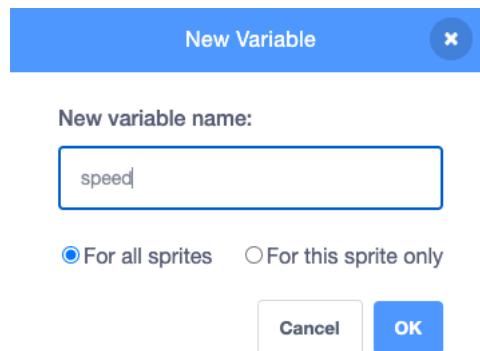


### Add a variable in Scratch

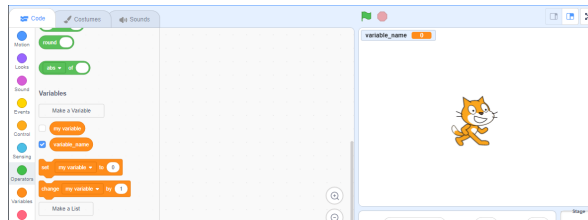
- Click on **Variables** in the Code tab, then click on **Make a Variable**.



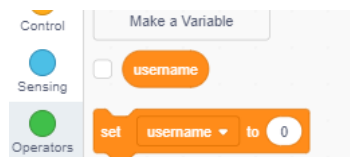
- Type in the name of your variable. You can choose whether you would like your variable to be available to all sprites, or to only this sprite. Press **OK**.



- Once you have created the variable, it will be displayed on the Stage, or you can uncheck the variable in the Scripts tab to hide it.



Click the box next to `username` to uncheck it and hide the variable from the stage.



Add a person sprite – you can choose your favourite one.



Sprite: Abby    x: -12    y: 15  
Show: [on]    Size: 100    Direction: 90  
Costumes: Abby

You can also click on **Costumes** and choose the costume you prefer.

Add this code to your person sprite:



```
when this sprite clicked  
set username to [ ]
```

You need to combine an adjective and a noun, so add a **join** block inside your **set** block.



```
when this sprite clicked  
set username to join apple banana
```

Add an adjective in the first box in the **join** block.



```
when this sprite clicked
  set username to join item 1 of adjectives banana
```

Pick a **random** adjective between 1 and the **length of the adjectives list**



```
when this sprite clicked
  set username to join item pick random 1 to length of adjectives of adjectives banana
```

Add a random noun in the second box.



```
when this sprite clicked
  set username to join item pick random 1 to length of adjectives of adjectives item pick random 1
```

Now add code blocks to get your person to say the username.



```
when this sprite clicked
  set username to join item pick random 1 to length of adjectives of adjectives item pick random 1
  say username
```

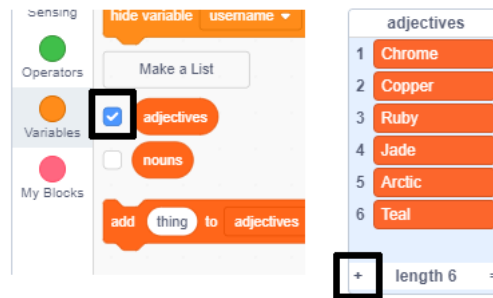
Test your code by clicking on the person sprite. You should get a new random username each time.



 Challenge!
**Challenge: add more variety**

Can you add more items to the lists of adjectives and nouns?

Check the boxes for the lists to show them on the stage. Then click the + icon and type a new word into the list. Don't forget to start each word with a capital letter.



Real and imaginary animals and creatures work well in the **nouns** list. Try to think of unusual ones.

Here are some ideas for the **adjectives** list:

- Metals: Zinc, Copper, Iron, Brass, Silver, Gold
- Colours: Crimson, Aqua, Magenta, Golden, Indigo
- Gemstones: Quartz, Emerald, Sapphire, Diamond
- Habitats: Moon, Desert, Snow, Jungle, Forest, Space

Remember to hide the lists from the stage when testing your project.

### Step 3 Saving your favourite usernames

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You probably want to consider a few different usernames. Let's add usernames that you like to a list.

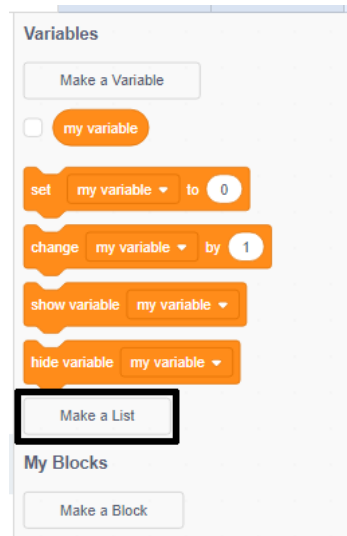


Create a new list called `names` I like:

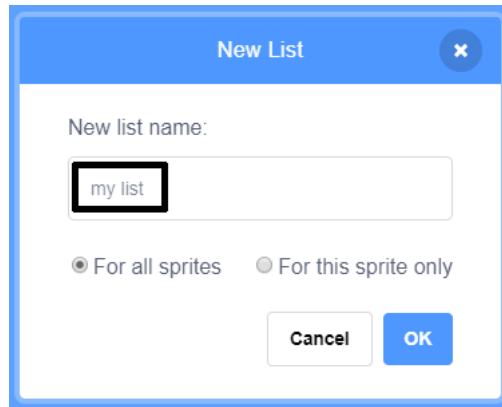


### Make a list

- Click on **Make a List** under **Variables**.



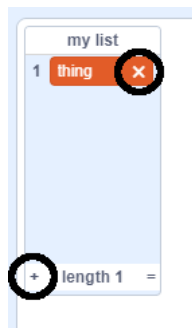
- Type in the name of your list. You can choose whether you would like your list to be available to all sprites, or to only a specific sprite. Click **OK**.




- Once you have created the list, it will be displayed on the stage, or you can untick the list in the Scripts tab to hide it.



- Click the **+** at the bottom of the list to add items, and click the cross next to an item to delete it.



- New blocks will appear and allow you to use your new list in your project.



The image shows the 'Make a List' block palette in Scratch. It includes a 'Make a List' button, a 'my list' variable, and various list manipulation blocks: 'add thing to my list', 'delete 1 of my list', 'delete all of my list', 'insert 1 at 1 of my list', 'replace item 1 of my list with 1', 'item 1 of my list', 'item # of thing in my list', 'length of my list', 'my list contains thing?', 'show list my list', and 'hide list my list'.

The list will appear on the stage. Drag it to the right of your person sprite and make it wider. ✔



The image shows a Scratch stage with a person sprite on the left. A speech bubble above the sprite contains the text 'ArcticOryx'. To the right of the sprite is a list object titled 'names I like' which is currently '(empty)'. The list object has a '+' sign on the left and an '=' sign on the right, with 'length 0' displayed in the center.

Add the **Button4** sprite, which looks like ✓, and drag it across the stage to the right of the speech bubble.



names I like  
(empty)

+ length 0 =

Sprite: Button4 x: -16 y: 85

Show: [on] [off] Size: 100 Direction: 90

Stage

Backdrops: 1

You may need to move the **names I like** list if the **Button4** sprite is underneath it.

Add code to the button sprite so that when it is clicked, the current username is added to **names I like**.



when this sprite clicked

add username to names I like


Test your code by clicking on the person sprite until you find a username you like and then clicking the ✓.

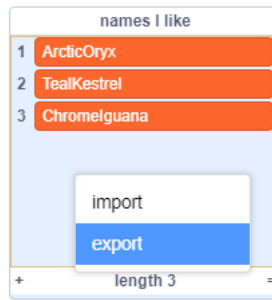


names I like

- ArcticOryx
- TealKestrel
- Chromelguana

+ length 3 =

You can export your list of usernames to a text file to save them. Right-click on the **names I like** list on the stage, click **Export**, and choose a place to save the list as a file. 



You now have a text file containing a list of names that you can open with Notepad or another text editor.

 Challenge!

**Challenge: add a number**

On popular websites and apps, it can be really hard to find a username that someone else isn't already using. Or you might find that the username you use on one site is already taken on other sites. To get around that, you could add a number to the end of your username. **Remember not to use your age, birth date, or birth year.**

Can you use the following blocks to generate usernames with a random number at the end?

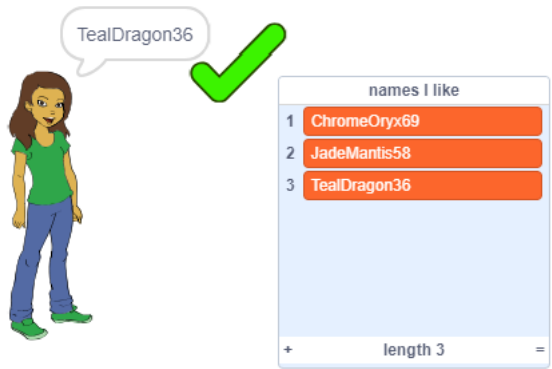
```
set username to 0
```

```
join hello world
```

```
username
```

```
pick random 20 to 99
```

New usernames you generate should now have numbers at the end:



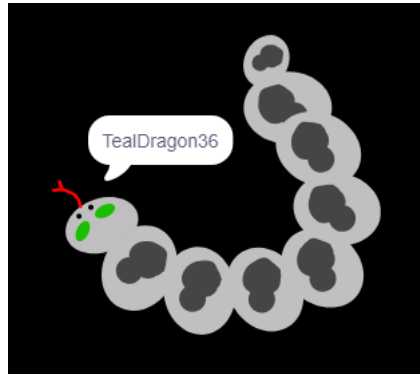
names I like	
1	ChromeOryx69
2	JadeMantis58
3	TealDragon36

+ length 3 =

 Challenge!**Challenge: create your profile picture**

Can you use the paint tool in Scratch to create your own profile picture to go with a username?

Here's an example:



Use a screen capture program to save your picture so that you can use it on websites or apps which show profile pictures

## Step 4 What next?

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Take a look at the **Scratch cat goes skiing** (<https://projects.raspberrypi.org/en/projects/scratch-cat-goes-skiing>) Scratch project.



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View project & license on GitHub (<https://github.com/RaspberryPiLearning/username-generator>)