

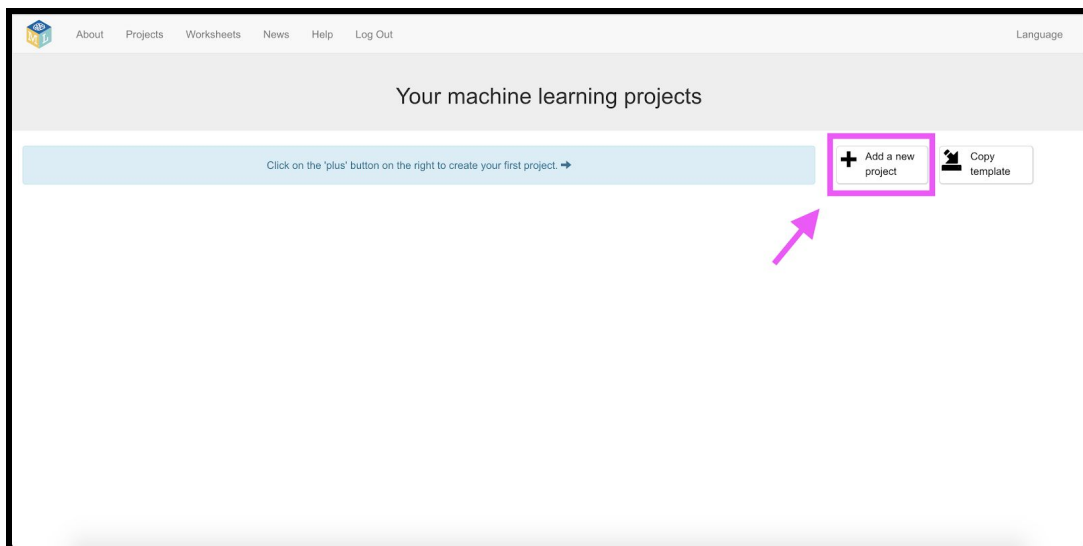
TACKLING CYBERBULLYING WITH MACHINE LEARNING

SOLUTION KEY

ADDING DATA & TRAINING

STEP 1: Creating a New Project

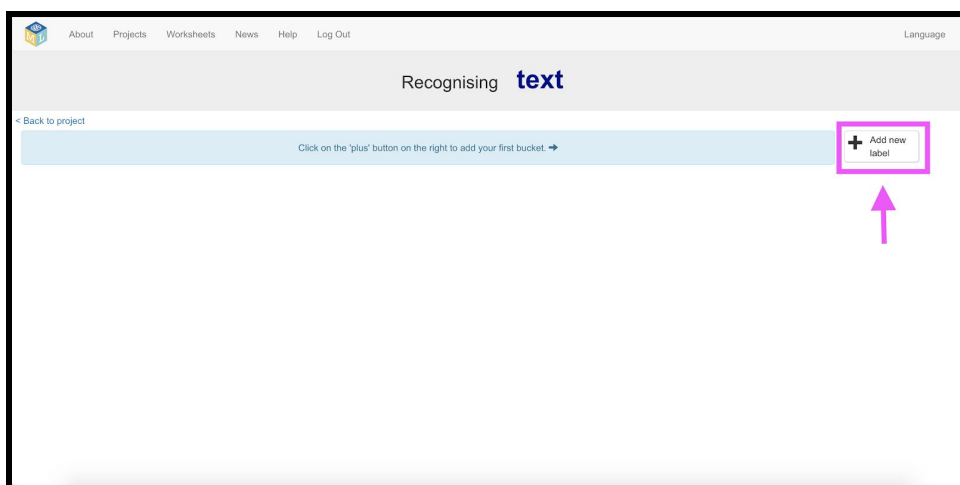
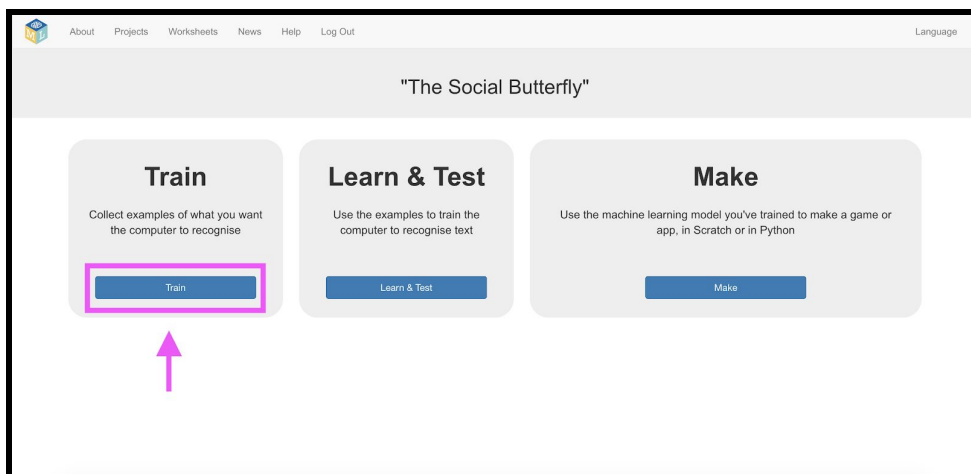
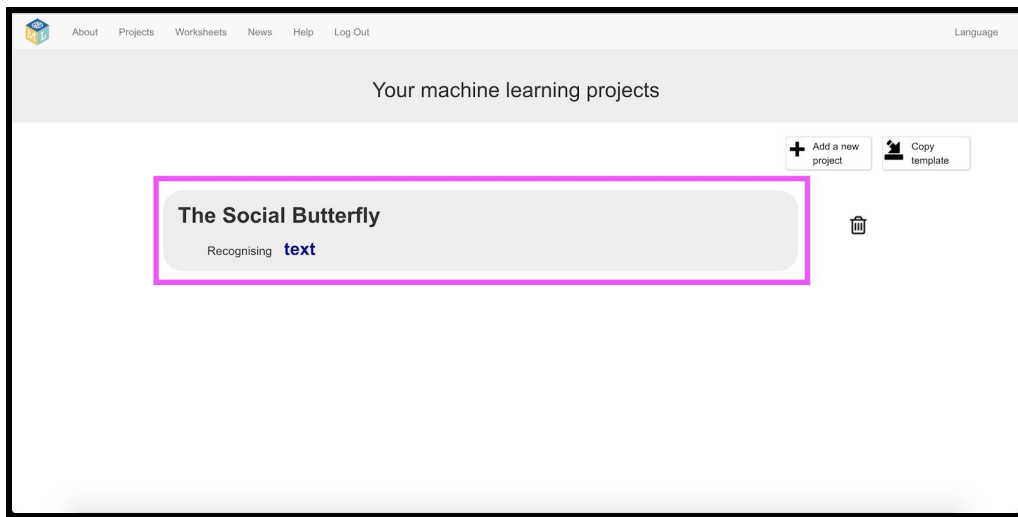
1. Click on the add new project button
2. Ensure the project is named and is recognizing text and either English or French depending on region the workshop is being conducted



This screenshot shows the 'Start a new machine learning project' form. The form has a title 'Start a new machine learning project' at the top. Below the title, there are three main input fields: 'Project Name *', 'Recognising *', and 'Language'. The 'Project Name *' field contains the text 'The Social Butterfly'. The 'Recognising *' field has a dropdown menu with 'text' selected. The 'Language' field has a dropdown menu with 'English' selected. To the right of the 'Recognising *' field, there is a text box with the question 'What type of thing do you want to teach the computer to recognise?' and four options: 'For words, sentences or paragraphs, choose "text"', 'For photos, diagrams and pictures, choose "images"', 'For sets of numbers or multiple choices, choose "numbers"', and 'For voices and sounds, choose "sounds"'. At the bottom right of the form, there are two buttons: 'CREATE' and 'CANCEL'. A pink arrow points to the 'CREATE' button, which is also highlighted with a pink rectangular box.

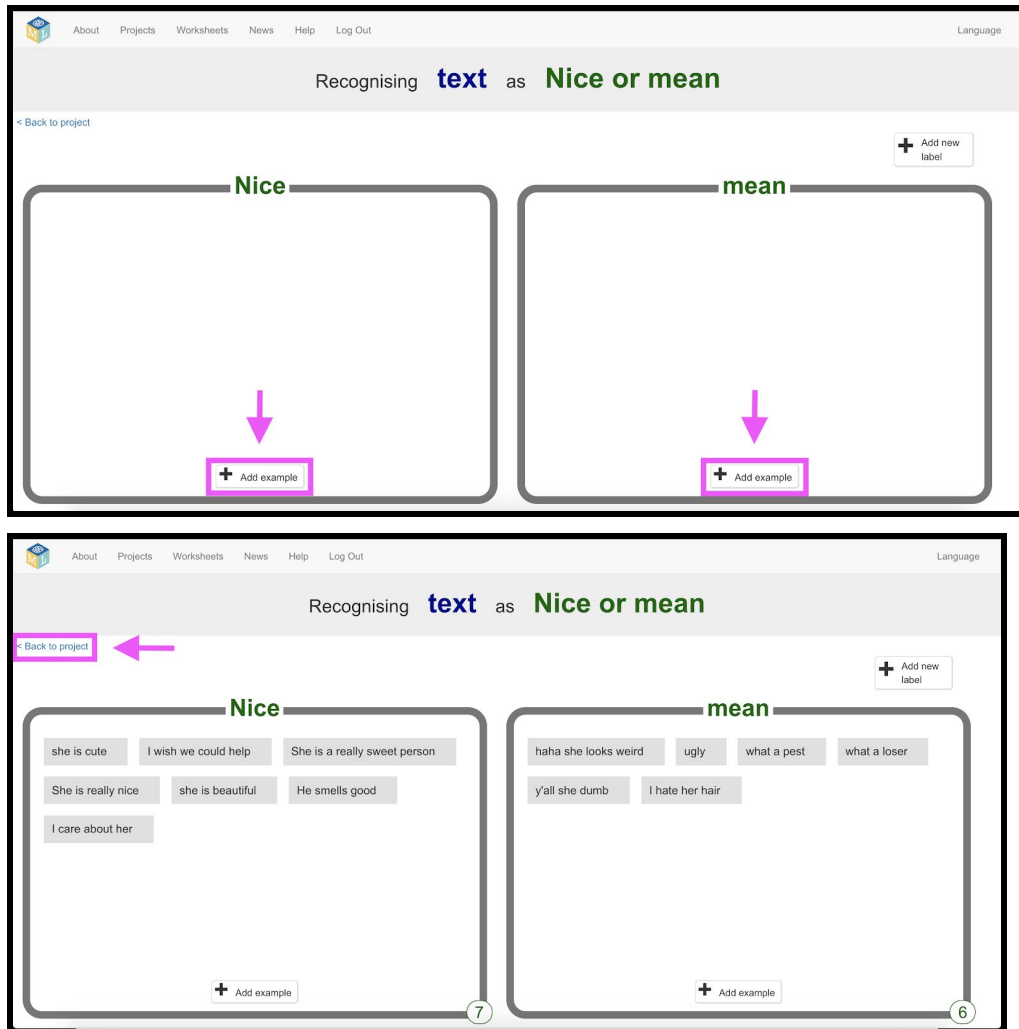
STEP 2: Adding Training Labels

1. Click on the newly created project and then click on the train button
2. Add two labels called 'mean' and 'nice'. This is where we will be adding our comic book data



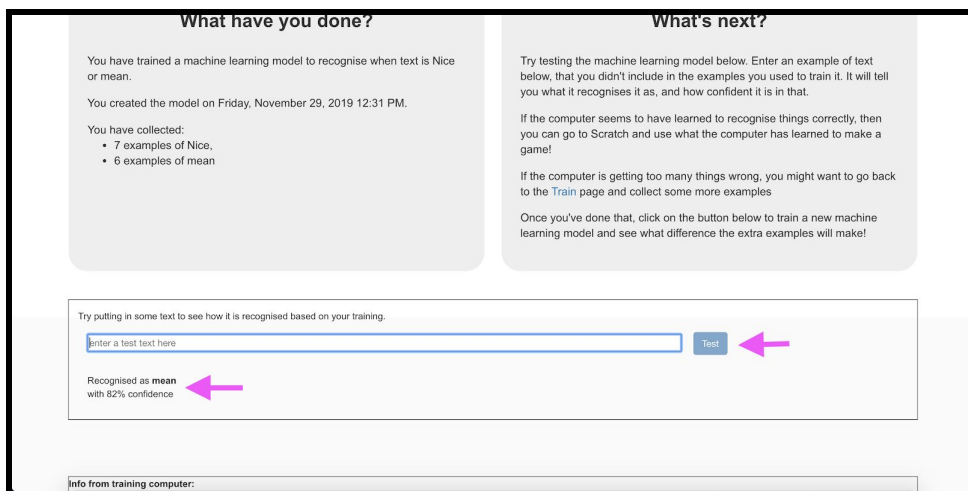
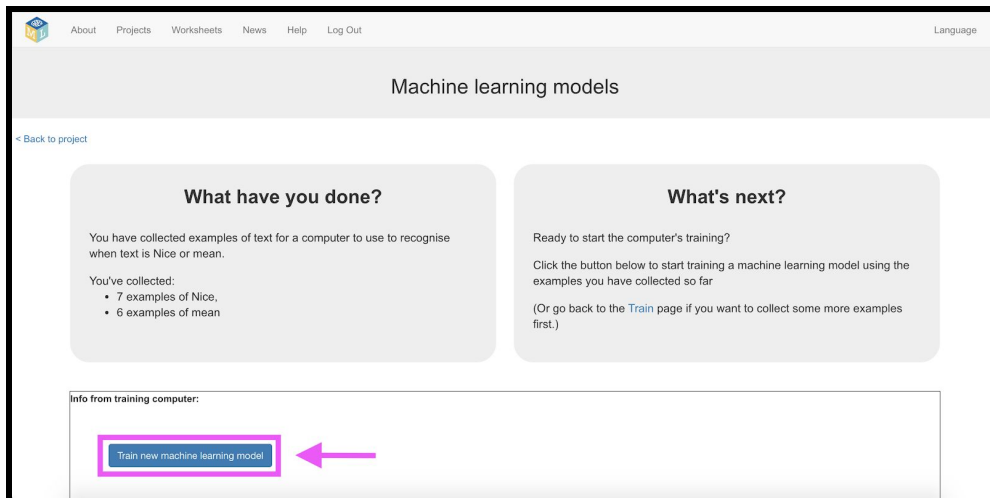
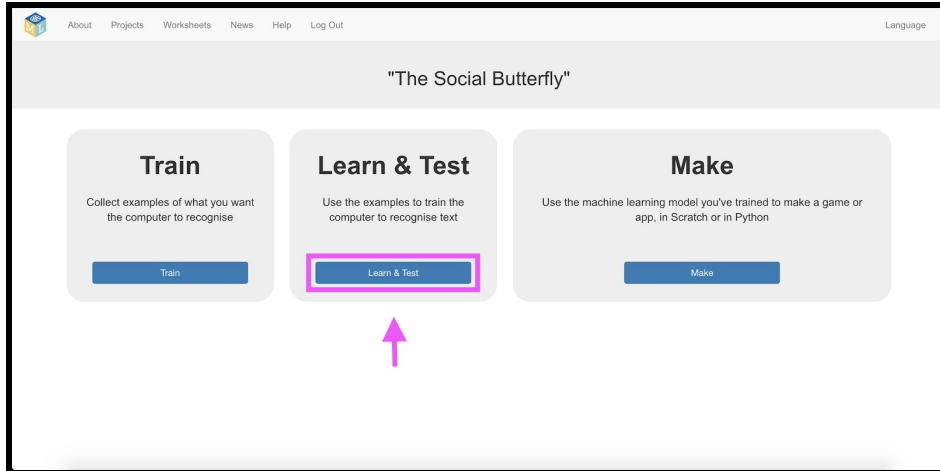
STEP 3: Adding the comic book data

1. Add data from the comic book using the 'Add Example' button
2. Encourage learners to think of their own 'nice' phrases but **to only add mean sentences from the book**
3. Once at least **6** mean and nice examples have been added click on the 'back to project' button



STEP 4: Training & Testing the Machine Learning Model

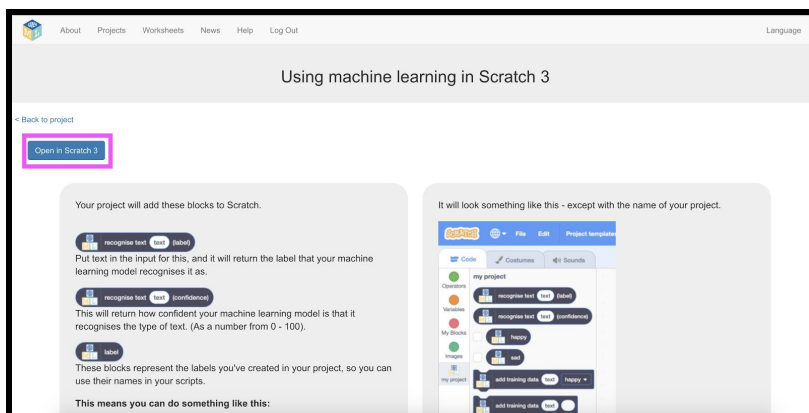
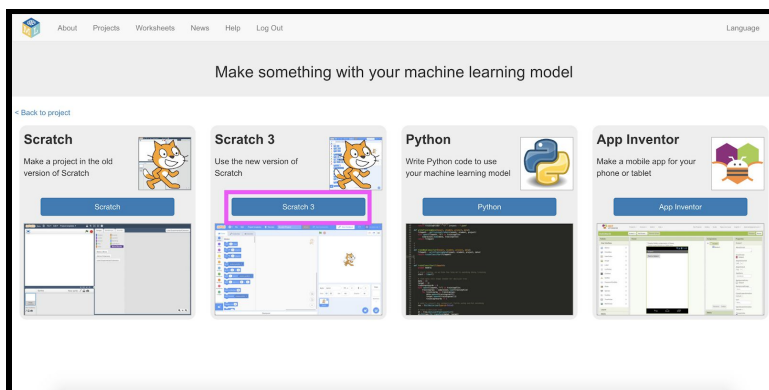
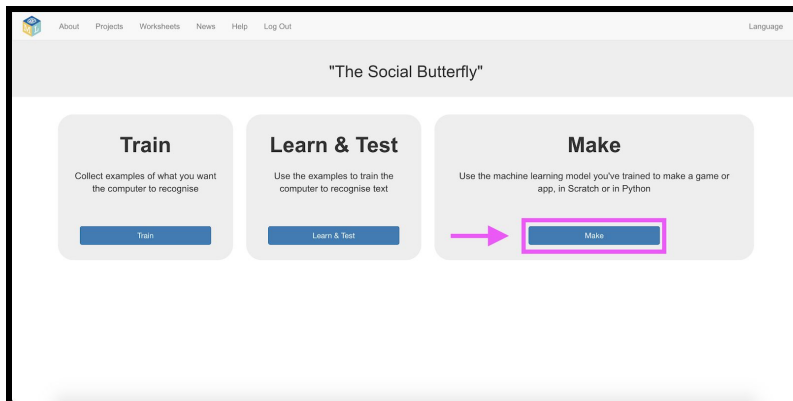
1. Click on the 'Learn & Test' button
2. Select 'train new machine learning model'
3. Keep in mind this may take up to 5 minutes. The more examples added the longer the process will take
4. Once the model has been trained a dialogue box for testing will appear. Learners can try out their model to see if the computer is guessing correctly



CREATING AN ASSISTANT WITH SCRATCH 3.0

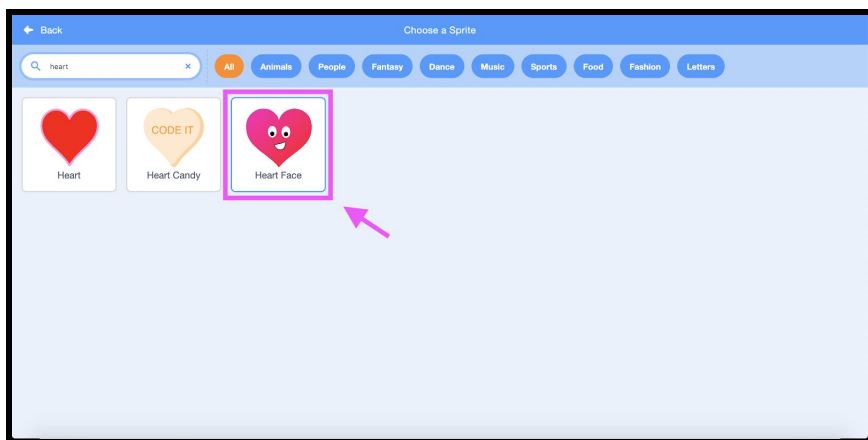
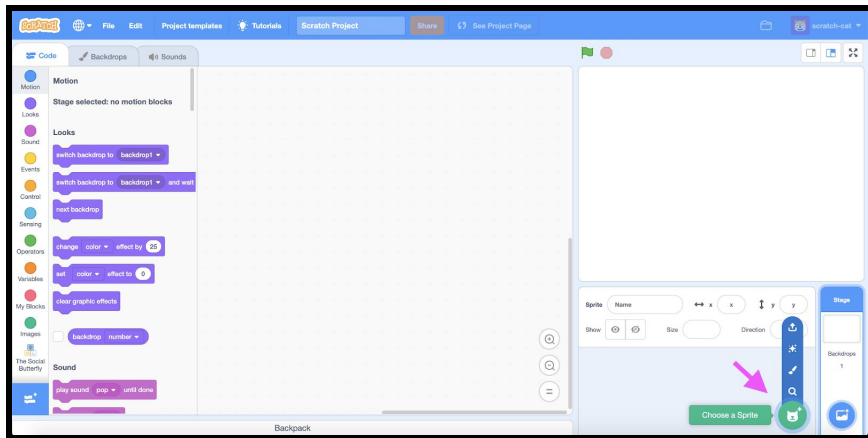
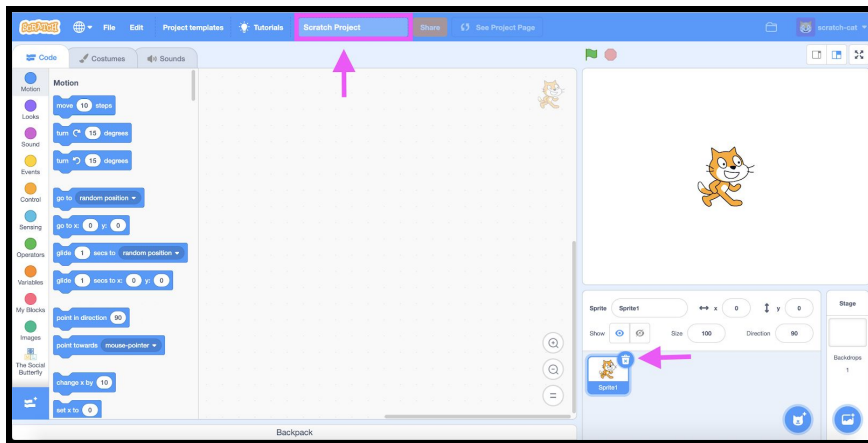
STEP 1: Setting up the project

1. Click on the 'Make' button
2. Select Scratch 3 button



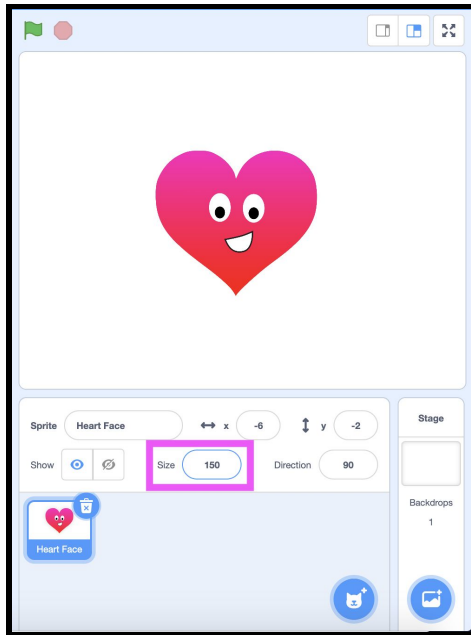
STEP 2: Deleting & Adding a Sprite

1. Rename the project
2. Delete scratch the cat by clicking on the trash can icon
3. Click on the 'choose a sprite' icon and select a new character



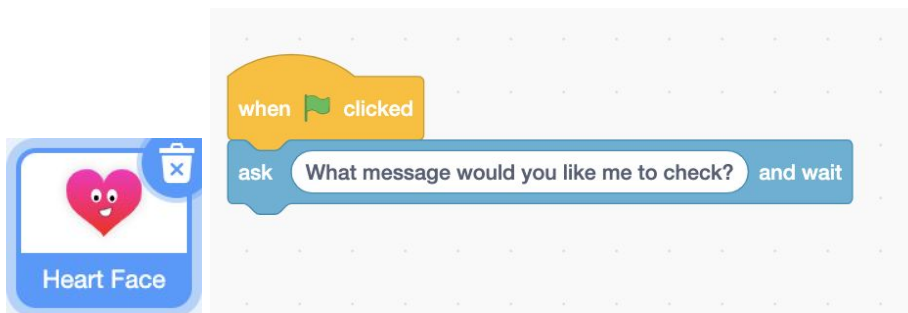
STEP 3: Resizing Characters

1. Click on the 'Size' button under the sprite
2. Type a larger number to increase the sprites size or a smaller number to decrease the size



STEP 3: Asking a Question

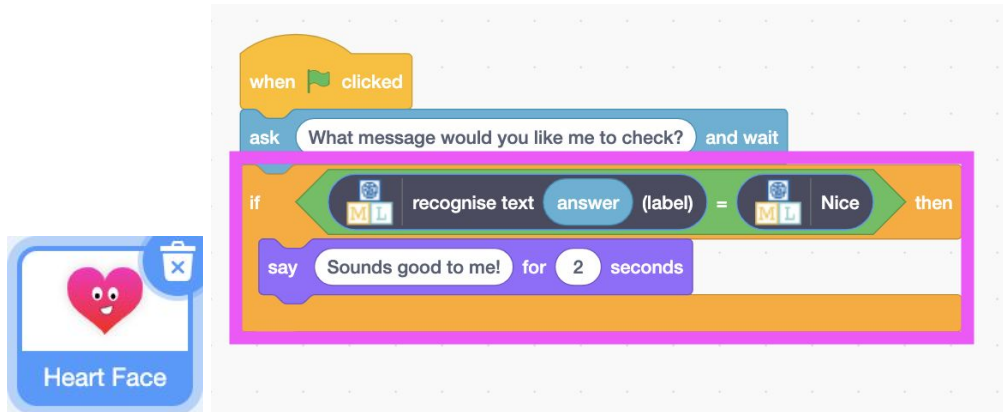
1. Add a 'when green flag clicked' block at the beginning of the program
2. Add a 'ask and wait' block
3. Type in a guiding message such as 'What message would you like me to check?'



STEP 4: Recognizing Nice Phrases:

1. Add an 'if then block'
2. Add 'say' block inside of the 'if then block' which says something positive such as 'Sounds good to me!'
3. Add an equal comparison block inside the diamond of the 'if then block'
4. Go into the 'machine learning menu'

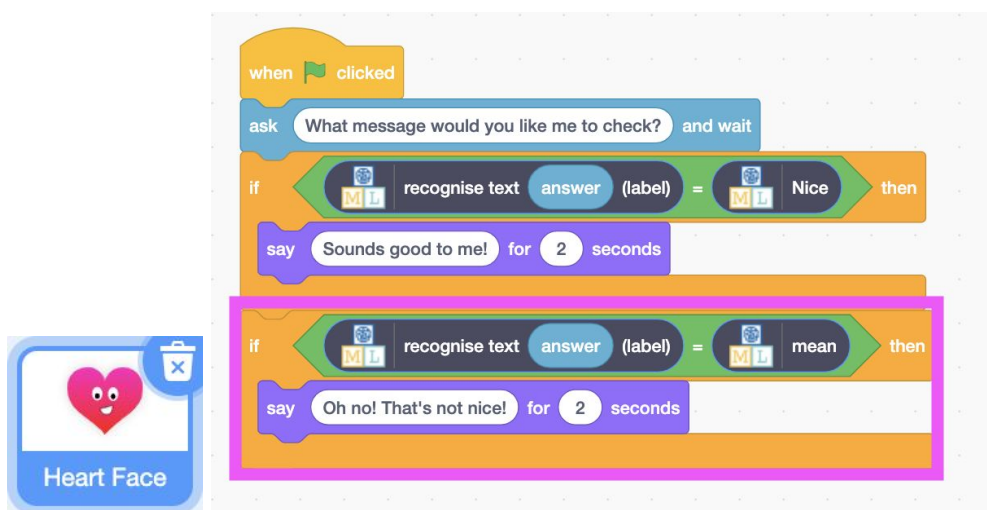
5. Add 'recognize text' and 'Nice' blocks in the equal block
6. Add answer inside the 'recognize text label'



STEP 5: Recognize Mean Phrases

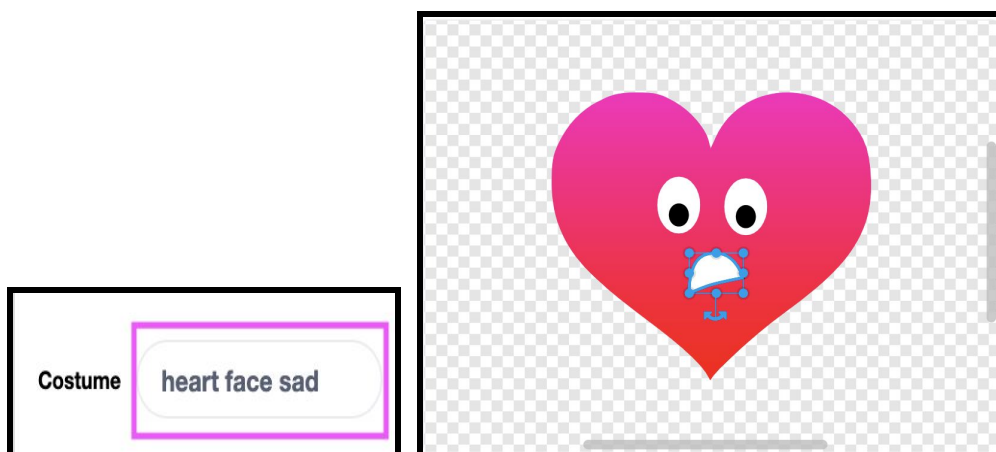
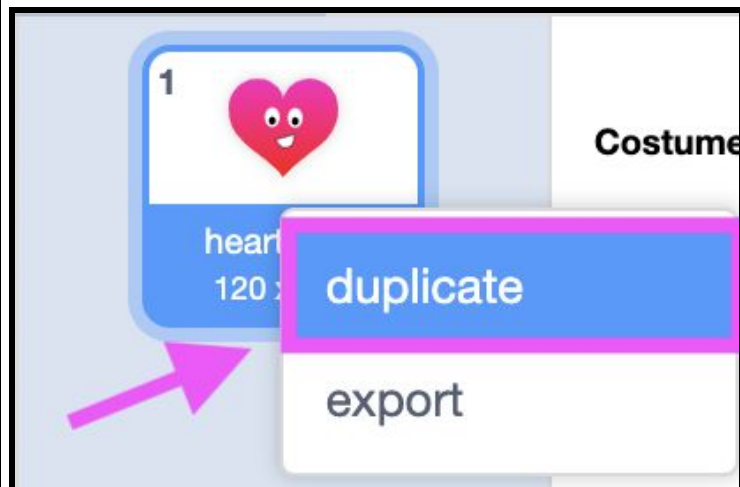
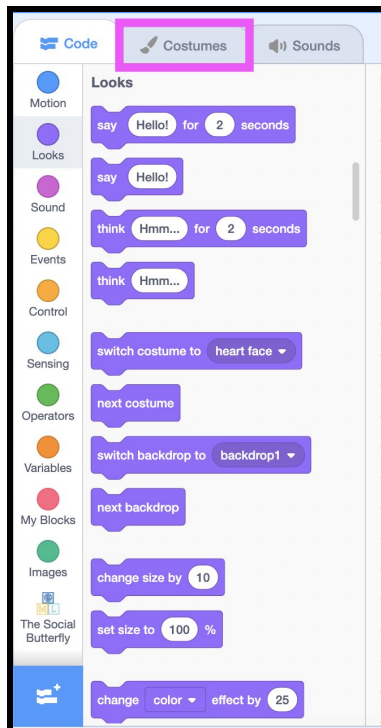
**Recommended to let learners write this code themselves and take it up after 5 minutes

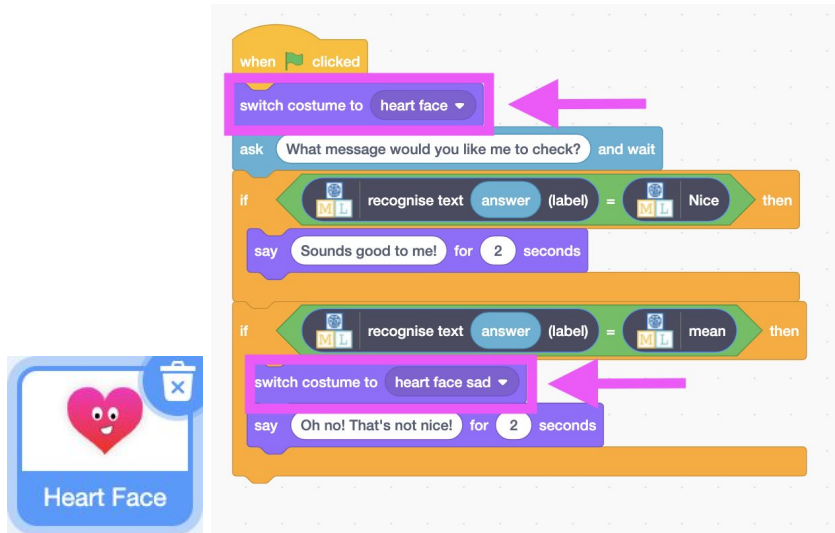
1. Add an 'if then block'
2. Add 'say' block inside of the 'if then block' which says something constructive such as 'Oh no! That is not nice!'
3. Add an equal comparison block inside the diamond of the 'if then block'
4. Go into the 'machine learning menu'
5. Add 'recognize text' and 'mean' blocks in the equal block
6. Add answer inside the 'recognize text label'



STEP 6: Turn that Frown Upside Down

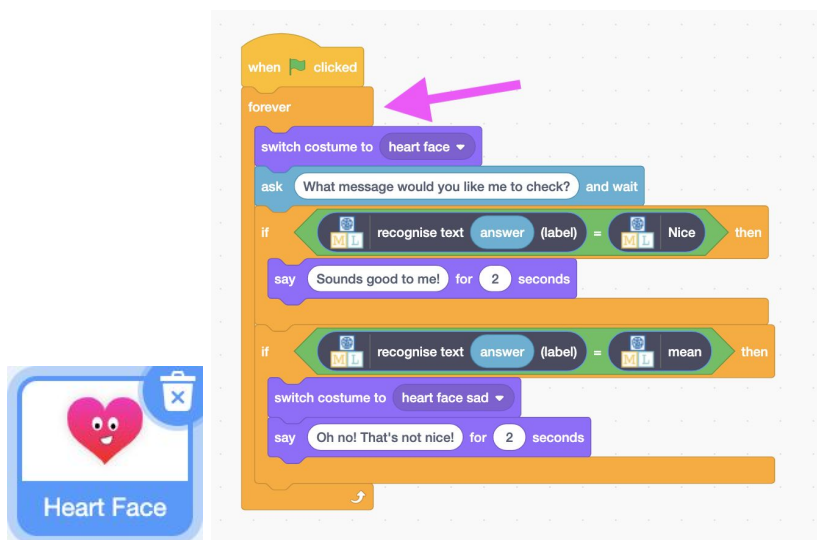
1. Click on the costumes tab
2. Right click the smiling costume and select duplicate
3. Rename the costume
4. Click on the smile and rotate it around
5. Go back to the 'code' menu
6. Add a 'switch costume' to sad in the mean if statement
7. Add a 'switch costume' to happy underneath the when green flag is pressed





STEP 7: Making the Assistant Always Checking

1. Add a forever block around all the blocks to make them repeat



ADD ON: Happy Spin

1. Add a 'repeat' block inside the nice if statement. Set it to repeat 36 times.
2. Add a turn 10 degrees block inside the repeat
3. Add a point in direction 90 at the beginning of the program inside the forever block

