

On the creation of two programs displaying abnormal feline behaviour

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We wanted to display a mentally deranged cat. We achieved this by connecting many consecutive movement blocks that, as well as changing the size of the cat a couple of times. Finally we wanted the cat to yell something mildly disturbing at the unsuspecting audience. We achieved a 'jump-scare'-effect by letting the cat vanish for a second and then making it reappear scaled up by a 1000% to make it seem close to the viewer. The code behaved as expected, although we were very dissatisfied that we could not make the cat yell and make a 'miaow' sound at the same time. We believe that this addition would have improved the final result immensely. Refer to figure 1 and <https://scratch.mit.edu/projects/567233301/> for further study.

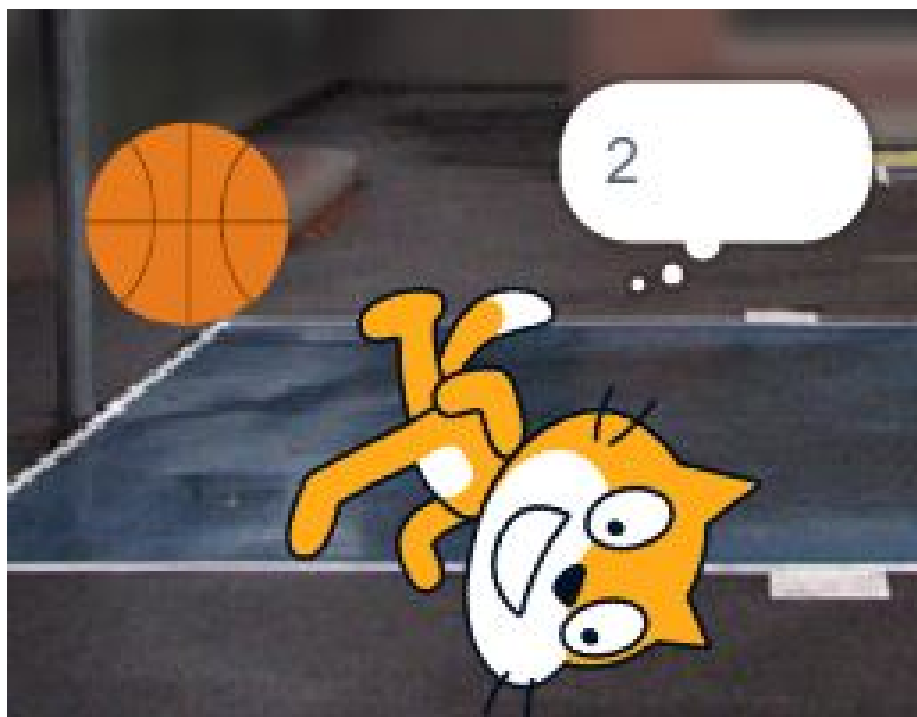
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When setting out on this project, we had no way of knowing where we would end. We blanked on initial ideas, but as soon as we opened Scratch, the cat became our big inspiration. We imagined him dancing and prancing and doing acrobatics for the entertainment of our players. We harnessed this creative energy by giving the cat the ability to do backflips at the mere press of a button. From here the possibilities were endless, so we turned to our knowledge of programming for what to do next. It was obvious! A couple of variables later, the cat could not only "springe badut" as we say in danish, but also count the (in)famous Fibonacci-numbers as it did. Without stopping to think of the philosophical consequences of what we had created, the counting cat needed some gameplay. As all the members of our team have backgrounds in physics, we wanted to harness this unique possibility to create a personalized game. This turned into a physical simulation of the Newtonian motion of a free-falling body using Euler integration of first order. Or in layman-terms: A ball. We used some vector-math to make an approximate recreation of the bouncing of a real-life ball and finished up by adding a loose-condition and a way to restart. We also added the obligatory cat pun when you loose. All of this glory can be observed in the images below and on the following site: <https://scratch.mit.edu/projects/567226177/>¹

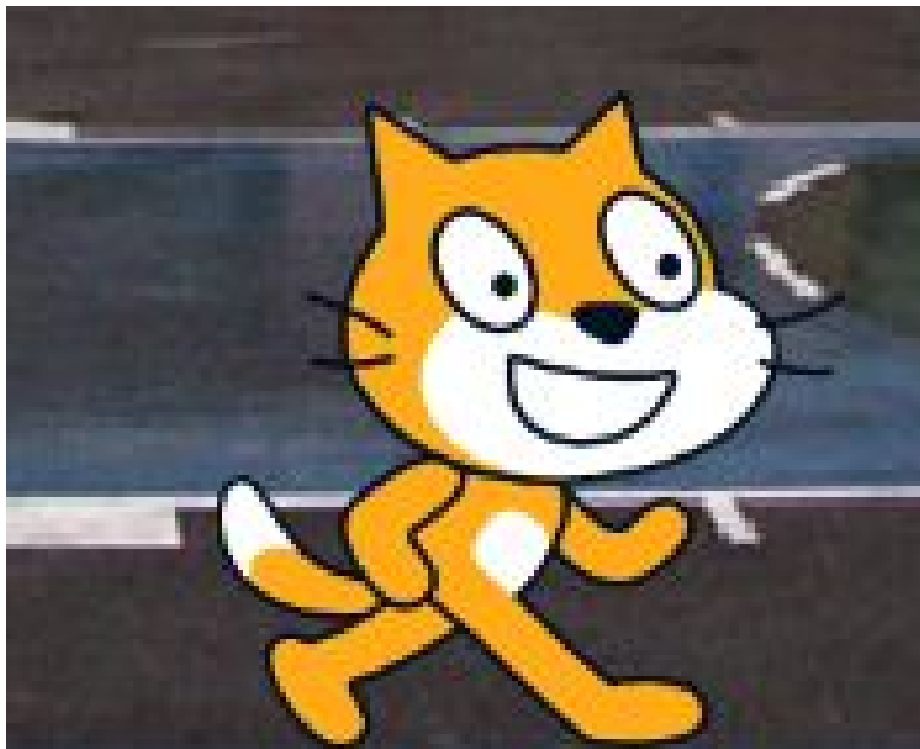
¹We accidently wrote this whole thing in english so here are your letters: æ Æ ø Ø å Å



Figur 1: A screenshot of what seems to be a deranged cat. Don't worry we're just kitten



Figur 2: An image of the cat flipping and kicking the ball while thinking of the fibonacci sequence



Figur 3: An image of the cat running



Figur 4: An image of the cat after it has bounced the ball skyward.



Figur 5: An image of the cat and the ball after the cat has failed to bounce the ball upwards. The ball seems to be mildly insulting.