CR192
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Assignment #1 digital technology object
Due: 24th August, 2018

Coding

Figure 1- Coding for spaceship.
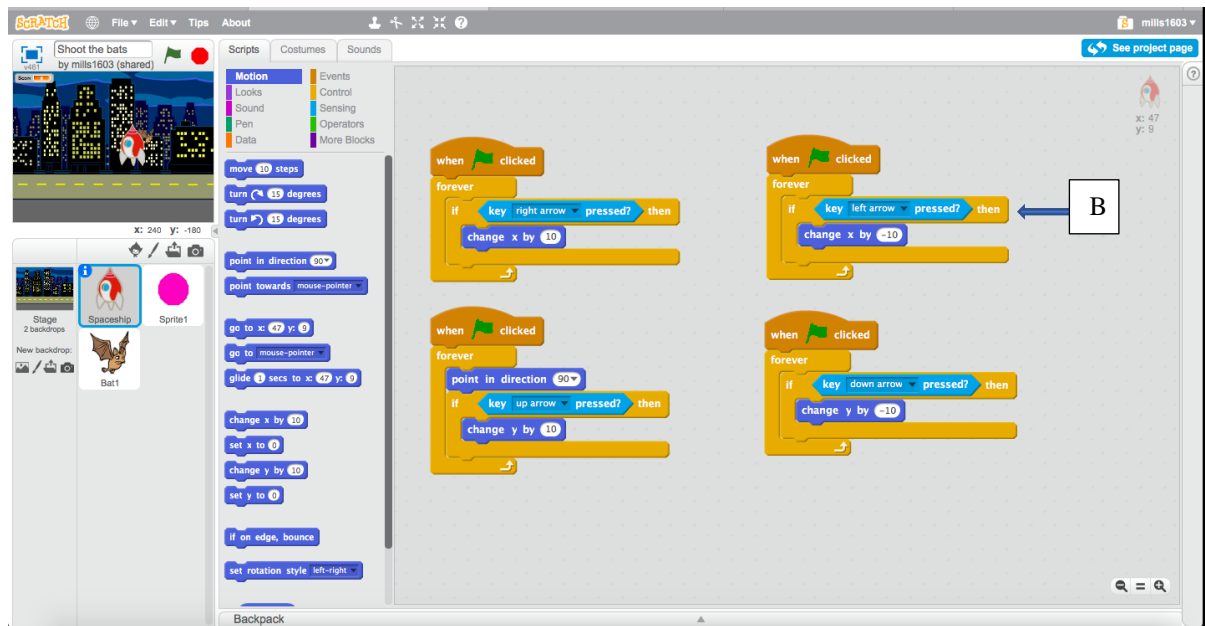

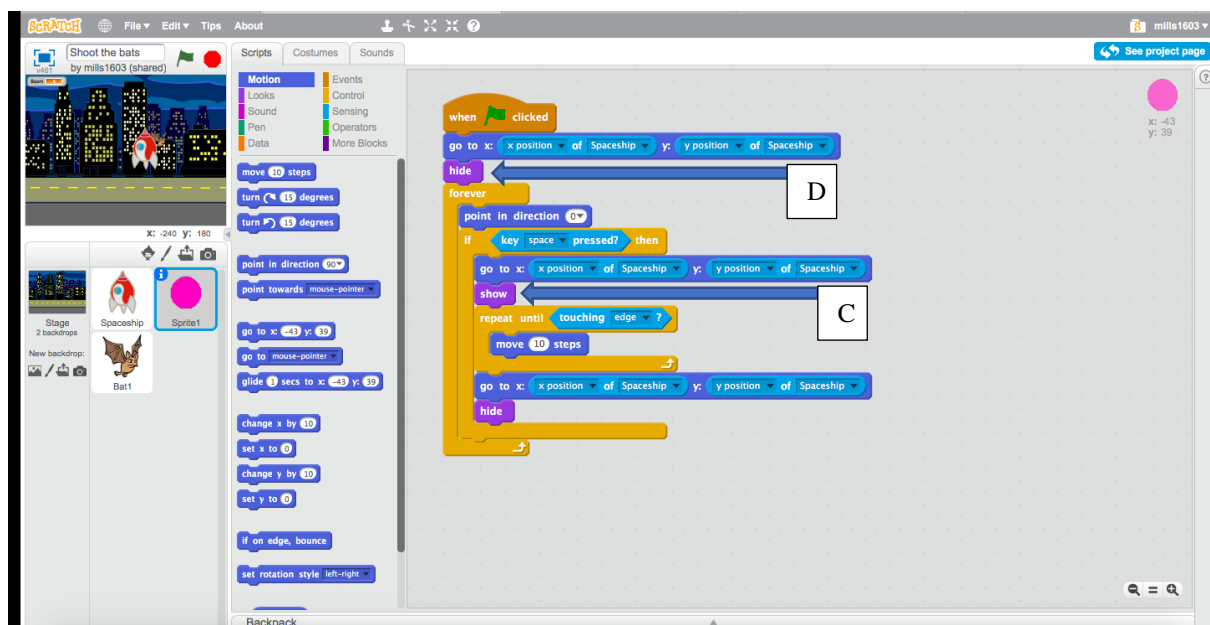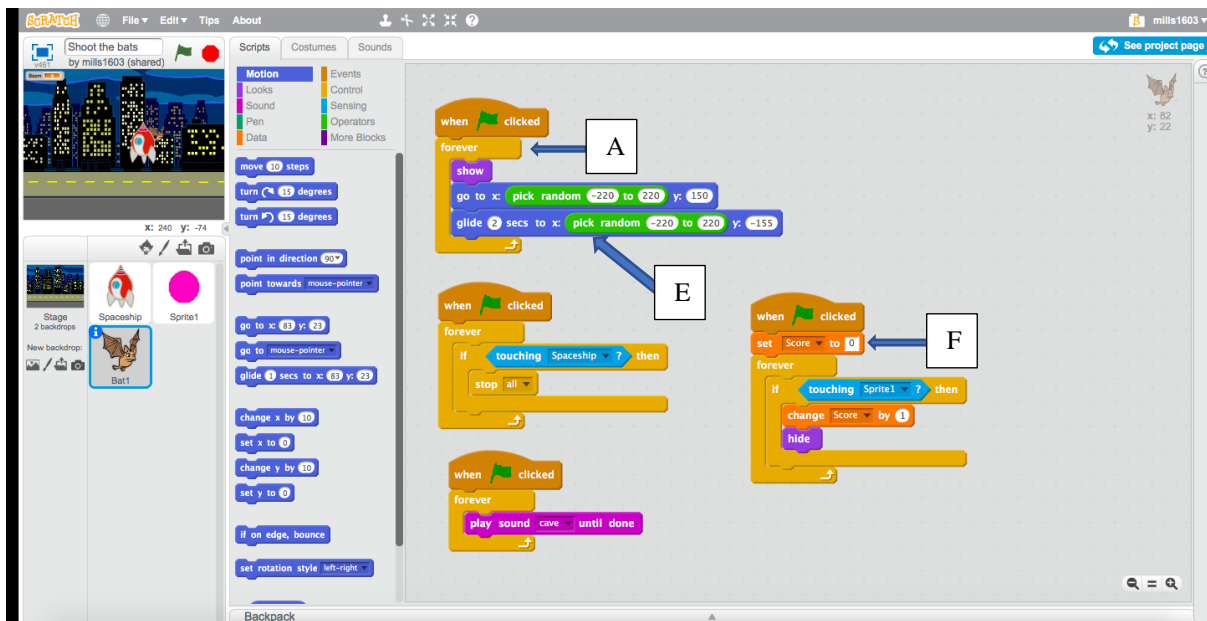Figure 2- Coding for sprite 1 (bullet).

Figure 3- Coding for bat 1.

Design components

Loops

For the animation/game "Shoot the Bats" to be successful, simple coding was utilised. To make each animation move, the 'forever' loop (**A**) was used within every section of coding. By inclu   gged is clicked.   clicked, therefore defeating the flow of the animation.

Conditional statements

Since this is an interactive animation, conditional statements (**B**) were a necessity within the   line of this game. An example of the conditional statement as shown in figure 1. By inclu   d direction of the spac   s on the X axis and vi   racter that includes a   aching the spaceship t   ve lost the game.

Show and hide

In figure 2, the utilisation of the show (**C**) and hide (**D**) scripts are important as this is how the user shod   until the

space bar is pres   ng sprite 1 shooting
bullets all the time, the user has to use precision to aim and shoot when the target is in reach.

Pick random

The coding for the bat, see figure 3, incorporates the 'pick random' (**E**) script. This
script was used so the   xis and glide
down to where the s   In't become
predictable, this adds a layer of complexity for the user.

Score

Also added to the coding in figure 3 was a score (**F**), when the green flagged is clicked
the score is set to 0   statement was
added into this sec   hen the score
changes by 1 and hi   scored a point.
If the bat reaches the spaceship then the score resets to 0.

Extra features

Other design elements incorporated into the coding were the background and music.
The background   e bats nocturnal nature and
projects to the us   uded also fits this image as
it provides a mys   ame in over.

Safety and ethical use of ICT

Introduction

The way students are taught within a school is everchanging. Technology is continually
evolving which can be difficult for some teachers, however, Dewey, 1944 states, "If we teach
today as we taught yesterday, we rob our children of tomorrow" (p. 167). Although technology
is a remarkable advancement, there are some dangers that young students may not know about.
When a student encounters these dangers, it is important they know how to deal with them in
a safe and ethical manor. There are four main issues that teachers would need to inform their
students about; cyberbullying, personal safety, content, and screen time (Safe and Responsible
Use, n.d.). This essay will discuss these issues in depth and also provide solutions for F-6
teachers and parents to prevent students from being harmed by technology and the internet.

Cyberbullying

Issue

Cyberbullying is an extremely big issue in schools as technology and the internet have
become mainstream in majority of households. Cyberbullying is when a child or group of

children target and harass another child by verbal abuse, hateful comments, death threats, etc. (Kam, n.d.). "Willard (2007) argued that cyber-bullying is less predictable than traditional bullying and can   hat they may receive a harassi   e" (Baumer, 2013, p. 15). Sta   lied within a 12-month time   ore than one occasion; however, only 13 percent of students will report their incidents to a teacher, parent or guardian (Robinson, 2012).

Solutions

Within the primary school setting, cyberbullying will most likely be executed by upper primary students,   and help all aged students understar   ts, it is imperative to make sure thei   occurs. It is also important to shov   media and gaming websites (Kam, n   displaying 'zero bullying tolerance   this slogan young students will think before they act, whether it is in the playground or online (Safe and Responsible Use, n.d.).

Personal Safety

Issue

Personal safety is one of the main issues all students, primary and secondary, encounter with technology. However, primary students are more susceptible and are most likely unknowledgeable with   els, Franberg, & Hallgreen, 2011). Givi   r young children and is important for stu   clude; full name, home address, phone r   d passwords and bank details (Protecting personal information, n.d.). Young children generally don't understand the risk of giving their information out until it's too late.

Solutions

Both teachers and parents can have an impact on how their students portray and protect themselves on the internet. One solution the privacy of students can be protected is by ensuring children und   rangers but their friends   ssons where the information is not only coming from the teacher, but from a more knowledgeable other or

an expert, which can help the students engage more (Bayer-Berry, 2015). Parents can also take part in pr_____ _ _ _ h_l_ _ _ _ _ _ _ _ _ _ _ _ sites they view. Kaspersk_ _ _ _ _ _ _ _ _ _ _ _ _ _ y explaining, "If your child_ _ _ _ _ _ _ _ _ _ _ _ rm in reminding them that if Mom and Dad can see it, so can everyone else. Don't snoop but talk to your kids about public boundaries".

Content

Issue

Content is an important risk that young students need to be educated on, so they can make the right decisions when in these situations. The issue on content touches on the subjects of inappropriate content a_ _ _ _ _ _ _ _ _ _ _ _ n.d.). Majority of schools have a safe search _ _ _ _ _ _ _ _ _ _ _ his engine filters websites or ads that may _ _ _ _ _ _ _ _ _ _ _ _ _ , uncomfortable photographs or scams (Safe and Responsible Use, n.d.).

Solutions

Since schools have a safe search engine installed a solution for this content issue would be to install a similar program into the students' computer or the family computer at home. This would he_ _ _ _ _ _ _ _ _ _ see and would also monitor scams _ _ _ _ _ _ _ _ _ s could take a step further by, "Es_ _ _ _ _ _ _ _ _ n alert you, or their parents, to such_ _ _ _ _ _ _ _ _ g this environment, a teacher wou_ _ _ _ _ _ _ _ _ ir fault that these images/website_ _ _ _ _ _ _ _ _ on is to instruct the students to clos_ _ _ _ _ _ _ _ _ t they are concerned with appears on their screen, ensuring the students practice this at home as well (Safe and Responsible Use, n.d.).

Screen Time

Issue

Screen time is a very significant aspect of the safety and ethical use of ICT for young students. Usi_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ herefore teachers and _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ tudents. According to UK Council For Child Internet Safety, 2017, the percentage of child usage of the internet hasn't chang_ _ _ _ _ _ _ ithin the last five years. However, the amount of time spent on the internet l_ _ _ _ _ _ ise,

"survey of 1,   and 684 interviews with
parents and ch   nat, among those who use
the internet, w   ver nine hours in 2007 to
around 15 hou   4-year-olds who go online
doing so for some 8 hours per week (see figure 1)" (Livingstone, Davidson,
Bryce, & Batool, 2017, p. 5).

Figure 1: Estimated weekly hours of internet consumption by age, at home (2007, 2011, 2013) or elsewhere (2015 and 2016)
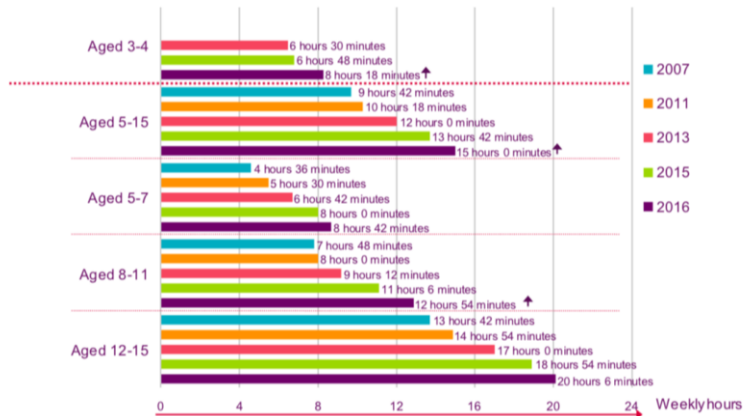
On the Australian Government eSafety webpage, Balancing Online Time, n.d., the signs that
students may be spending too much time online includes the following: "ongoing headaches,
eye strain and sleep disturbance; online activities interfering with their health and wellbeing,
school work; constantly talking about particular online programs; and decline in your academic
performance at school".

Solutions

Solutions for managing students screen time can include integrating the program
#GameOn into the s

"#GameOn i   es of a group
of primary st   m off-guard
and teach th   line. Topics
include cyberbullying, excessive gaming, sharing passwords, free downloads
and online friends" (#GameOn, n.d.).

Parents are the biggest role model for their children so when it comes to screen time, the way
parents use their technology an   child   (Canadian
Paediatric Society, 2017). Pare   eir
children or other young childr   a
family and make routine of 'screen free' times and/or days (Canadian Paediatric Society,
2017).

Conclusion

Primary students definitely need to be educated about the safe and ethical use of ICT. The four main issues, cyberbullying, personal safety, content and screen time, have been thoroughly discussed within this essay to help guide teachers and parents through suggested solutions to these matters. Exploring these issues with students is crucial as technology is such a big part of educating these days and it is strongly advised that all students understand the risks involved with technology and the internet.

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