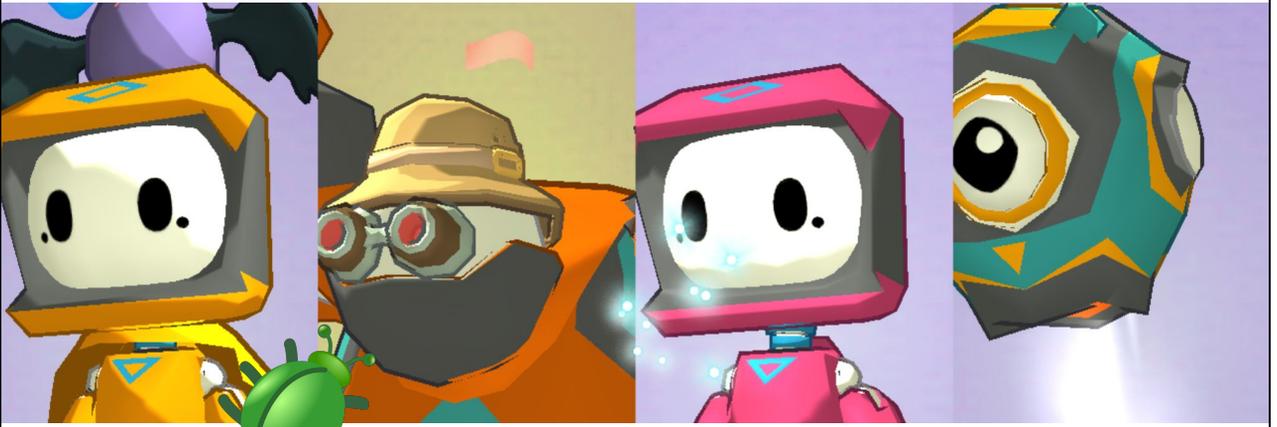
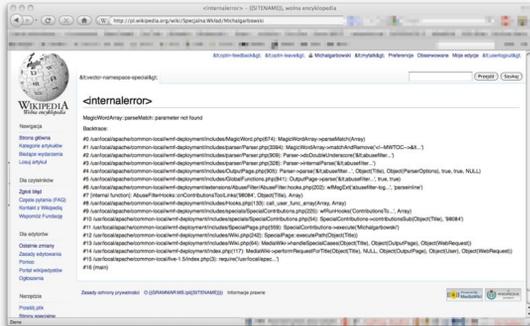


tg



SWITCH & GLITCH: Debugging the Code

Picture: Green Bug Source: [Wikimedia Commons](#)



- “an unexpected defect, fault, flaw, or imperfection”

- Merriam-Webster
Dictionary

Tell the students about program bugs:

*“Written computer programs are not perfect: they have both weaknesses and logical mistakes. The simplest programming mistake (or **bug**) occurs when the programmer writes some command the wrong way, but sometimes the program can arrive in a situation that the programmer did not anticipate.*

A program works best when it is short and succinct.”

Discuss with the students: what kind of programming errors have they run across of?

For example: did they ever see malfunctioning traffic lights or have some game not launch?

Picture: Bug in Wikipedia's contributions list. Source: [Wikipedia Commons](#).



NAVIGATE: SPACE HOPPER



Tell the students: *"Today we're playing Switch & Glitch's Jungle levels starting at level 8."*



LESSON GOAL

Play through the Switch & Glitch single player levels
8-12.

Try to always get 3 stars. Try again if necessary!

The goal of this learning moment is to complete the Jungle planet levels beginning at level 8.

The learning goal is to have each student attain 3 stars in at least one of the Jungle levels. The stars are awarded based on how efficiently you complete the level - less commands, more stars.

The students may wish to pick up Metagel while playing. These extra moves can mean that they can't earn 3 stars in that run, and have to play the level again.

If the player isn't happy with their stars, they can always replay the level.



SHARE & DISCUSS

- Did you try to find Metagel, clean Miglets or reach the goal as quickly as possible?
- Discuss: What is a good program like?
- Did you consistently use six commands or fewer each turn?

Go through the yields of the lesson with the students. How did the students manage? Pay attention: **which things were most difficult** and does **a specific student need extra help?** It is likely that there will be extensive variation among the students, as some may have played similar commercial games, giving them an edge.

If you task the students with taking screenshots of the game, the Creatubbles service works excellently to build this kind of portfolio.



TASKS AFTER PLAYING

Bugged Instructions

Write down a program with ten commands for your friend as a robot. Hide an error to the code. Test the code and let another student solve the error by modifying the code. Can you solve the error by changing only one line?

This optional task is a fun activity that you can try out in the classroom if you have time.