Teacher Information: Error detective
Cambridge Computer Science

Topic 451/2.1.7/f

Tools and facilities in an IDE

Learning Objectives:

1. Learn what an IDE is
2. Compare and contrast Scratch and Python default IDEs
3. Know the difference between Syntax, Runtime and Logic errors
4. Practice using some of the IDE's facilities to to identify and fix code with bugs

Lesson flow

1. Students watch video on the I*ntegrated Development Environment course* in the CCS MOOC
2. Students open the Error detective worksheet found on the course page
3. Students download the Erroneous_Code.zip from the course page, unzip it and following the flow in the table below find, identify and fix the buggy code in the Scratch file and the Python 3 files.
4. Students complete the summary quiz on the course page.

Answers

Worksheet answers

File	Solved?	Error type
spin_cat.sb		logic error
greeting.py		syntax error
dice.py		logic error
magic8ball.py		syntax error
calculator.py (no operator buttons)		runtime error
calculator.py (fix number pad)		logic error
calculator.py (fix clear display button)		logic error