What is a Bug?

Video transcript for 'What is a Bug?'

Welcome to my smoothie making station where I'm going to help you answer the coding question: What is a bug?

I'm going to programme myself to make a banana smoothie using all of these ingredients here. Now, as a man of the world, I know how to make a smoothie. But if I was to act like a robot I'd need exact instructions – also known as algorithms - to know what to do.

When we write code, we're just giving a list of instructions so that a computer or robot knows exactly what to do.

So let's test my code to make a smoothie.

Put 2 peeled bananas into the blender. One two.

Pour the **mil** from the glass into the blender.

Mil?

This is a syntax bug. Because there's a small spelling mistake in the code I've written the robot doesn't know what to do. It can't find **Mil**, so it can't go any further and has now given up and crashed.

If the code says **milk**, with a **k** we can carry on.

Pour the yogurt from the glass into the blender.

Put the lid on the blender.

Turn the blender on for 15 seconds.

Lift the blender from the base. Drink smoothie.

This is a logic bug. In my original algorithm there's something missing from my code that I may not have thought of. Something the robot really needs to know.

I think I need to look back through my work. This code has bugs!