Amber 2.0

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Project Name: Amber 2.0

1) **Idea description** - The idea of "Amber 2.0" is to make humans with disabilitise learn basic things like speak and learn how to hold objects. Some humans don't know how to walk, talk or eat. She would help especially the kids who mabey have problems with talking and having a conversation with other humans. Amber 2.0 helps not only kids but adults and elderly people. Humans can injure themselves which means that they could not walk or move a limb, Amber 2.0 helps them to begin the process of rehabilitation. Amber 2.0 not only helps them physically but also mentaly. The way she is programmed is that she is constantly repeating words and sentences so the human can learn how to say a word. The process of rehabilitation is much more complicated. Amber 2.0 would help the human by trying to move if an accident or a person was born like that. The robot would place their hand on the injured limb and force it to carefully move. The robot is able to change languages to adapt with the human it's working with.

2) **Target group** - The target group is Medical/ health care. When a human has a disability, Amber 2.0 helps them by moving, speaking and doing simple things.

3) **Design** - The robot is going to be around 195 cm long (6.3 feet) but if the patient is much shorter, the robot's leg would be able to shrink and get shorter. Amber 2.0 would have sensors on its hands, feet, mouth and eyes.

She could see and sensor what the person she's working with is saying. Amber 2.0 would come in 3 different shades of color, white, black and red. Each color is differently programmed which means that for example red is for a patient who injured themselves. Black is for a patient who has problems speaking and the white is for patients who have problems by picking up an object or doing basic things.

4) **Technical solutions** - Amber 2.0 able to walk. For the robot to walk, it needs a camera to navigate where it's going. It's going to have 3 cameras, one in each eye and one on its neck. This is going to make it easier to navigate and censor where it's walking without crashing into things. The robot also has censors on its feet.

5) **Threats and opportunities** - Robots replacing humans is a very risky thing. Humans have emotions and feelings but robots do not. Humans can be able to tell what is wrong or right but robots can't. When a human makes a mistake it can easily make up for it and can try to get it right but robots will do the mistake over and over again until it gets programmed to stop. Some robots have feelings but still their feelings are "fake" or they don't really mean it. The positive thing about robots taking over the world is that they would be able to live forever.

6) **Flowchart:** https://scratch.mit.edu/projects/453558788/editor

Video attached

7) **Sketches and Logbook**