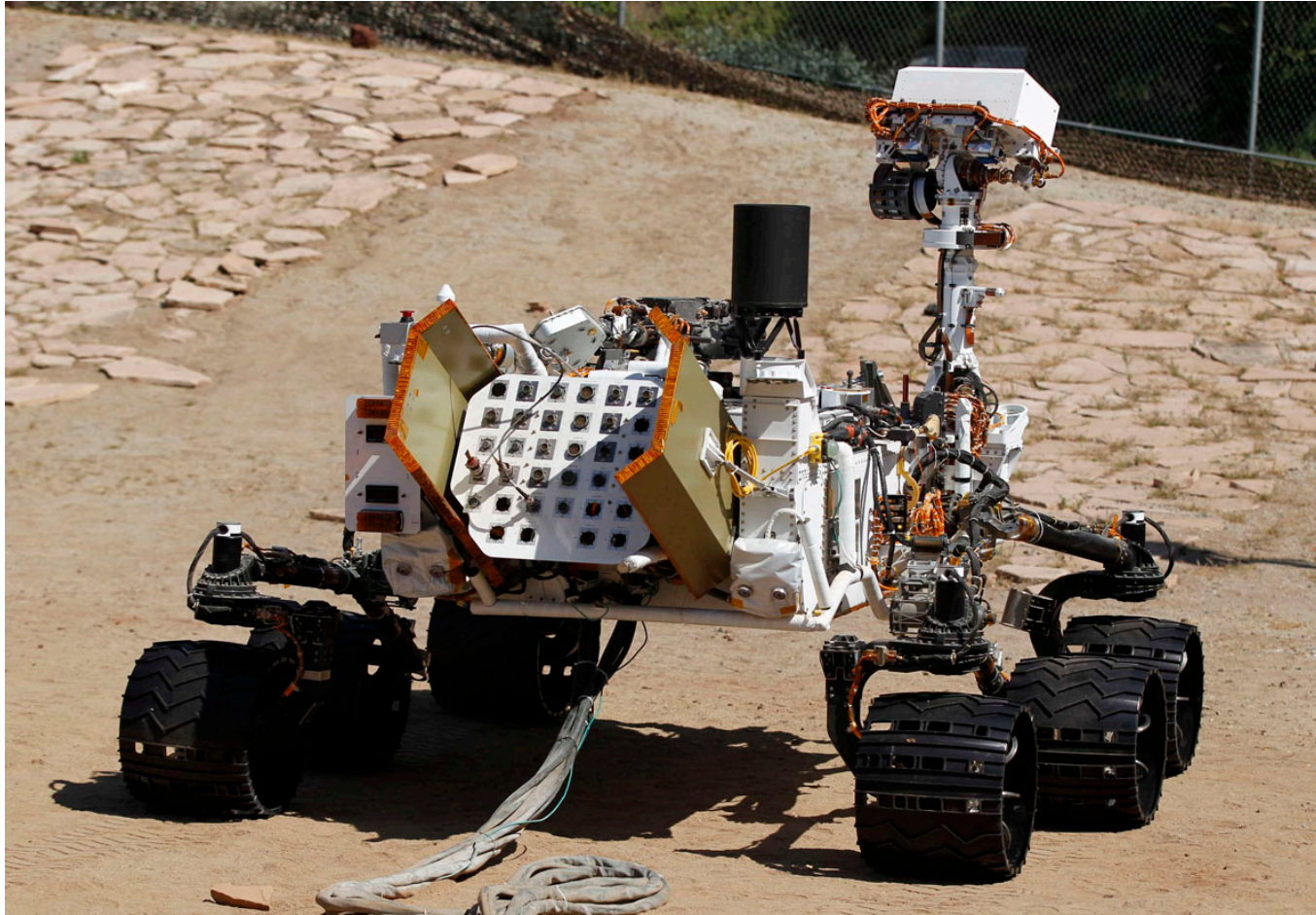


NXT Lego Robot

Curiosity



Honda Asimo



Google Self-Driving Car



K-STATE



Bots High



K-STATE



Questions

- What do you think is the definition of a robot?
- What do you think is the definition of programming?
- What would you define Robotics as?

Questions

- Who has played with Legos?
- Who has played with remote controlled vehicles?
- Who has built a Lego car who can move on it's own?

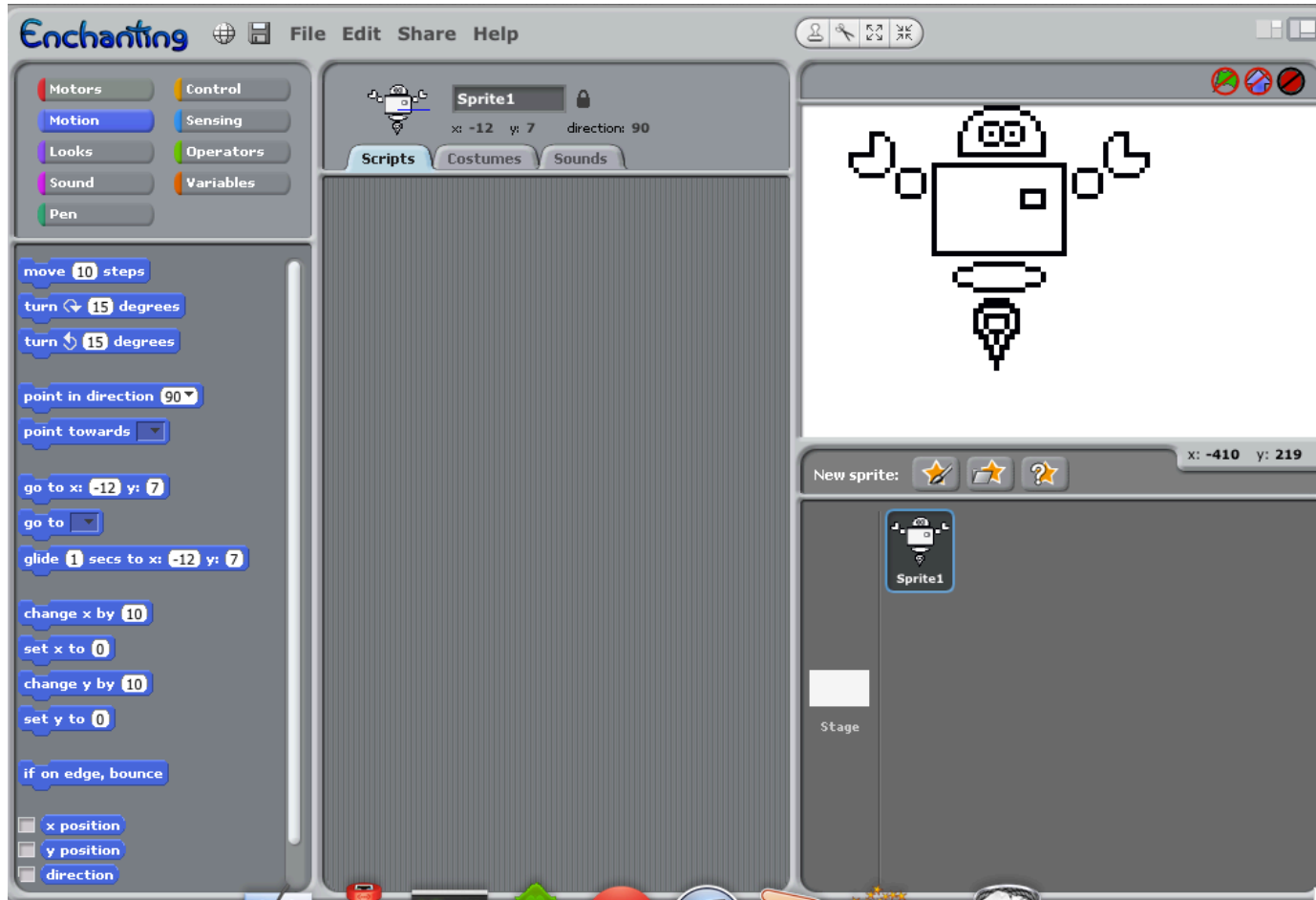
LEGO NXT Robot



Lego NXT Robot

- Programmable robotics kit released by Lego in 2006
- Currently in generation 2
- Comes with NXT-G programming software
- We will be using it with Enchanting, a GUI friendly programming interface

Enchanting



Enchanting

- Enchanting is an great, intuitive, graphical programming tool for LEGO NXT 2.0 Robots
- Based on Scratch, from MIT Media Lab
- Powered by leJOS NXJ (Java for NXT)
- Free and Open Source

Robotics and Programming

- Term “robots” appears in play R.U.R in 1921 by Karel Capek
- A robot is a mechanical device that can perform tasks automatically
- Programming is the process of designing, writing, testing, and debugging source code of computer programs.
- Robotics deals with design, construction, operation and applications of robots.

Robots in Your Future

- Engineers want to make real cars that don't need a driver
- Engineers want to make robots that help people in all walks of life
- Engineers want to create new and interesting competitions with robots
- Engineers make robots for places that are dangerous for humans to work