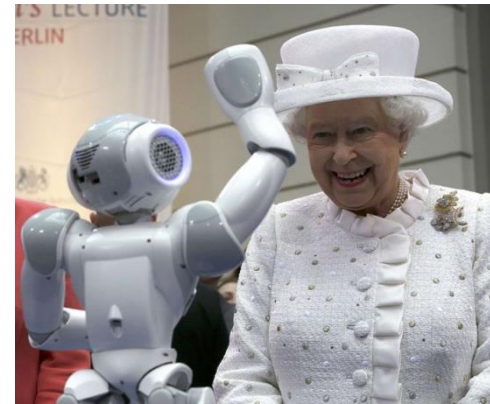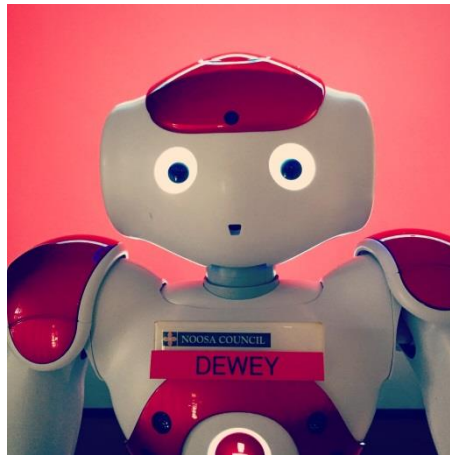# Robots for Everyone

Robots for Everyone

Tracey King
Coordinator of
Collections and
Services

Dewey
NAO Humanoid
Robot and
Star of the show

Gavin Elliott
Digital Services
Librarian

What is Dewey?

Tactile sensors:
Menu to interact non-verbally with NAO

Speakers (x2):
NAO talks, prompts,
shares his story, plays music...

Battery:
NAO is free to navigate without being
connected to a power source.

Prehensile hands with sensors:
To grasp small items and to work on
object exchange and turn-taking

Foot bumpers:
Another way to interact with NAO.
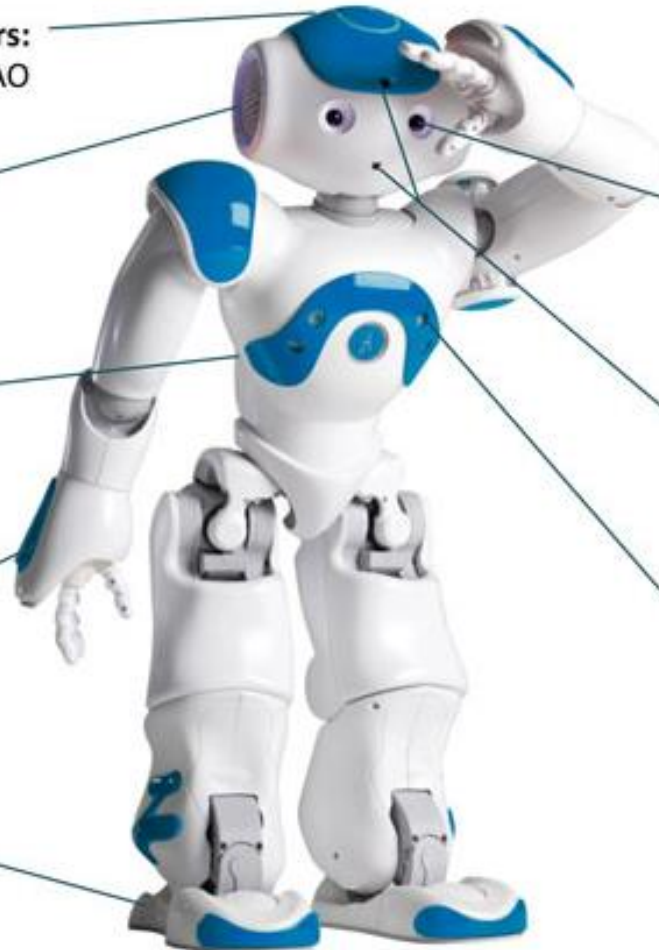
Microphones (x4):
NAO detects the origin of sounds
and understands what you say.

Eyeleds:
NAO uses color code to express
emotions and even play edutaining
color games with your children!

Cameras (x2):
NAO recognizes pre-recorded faces,
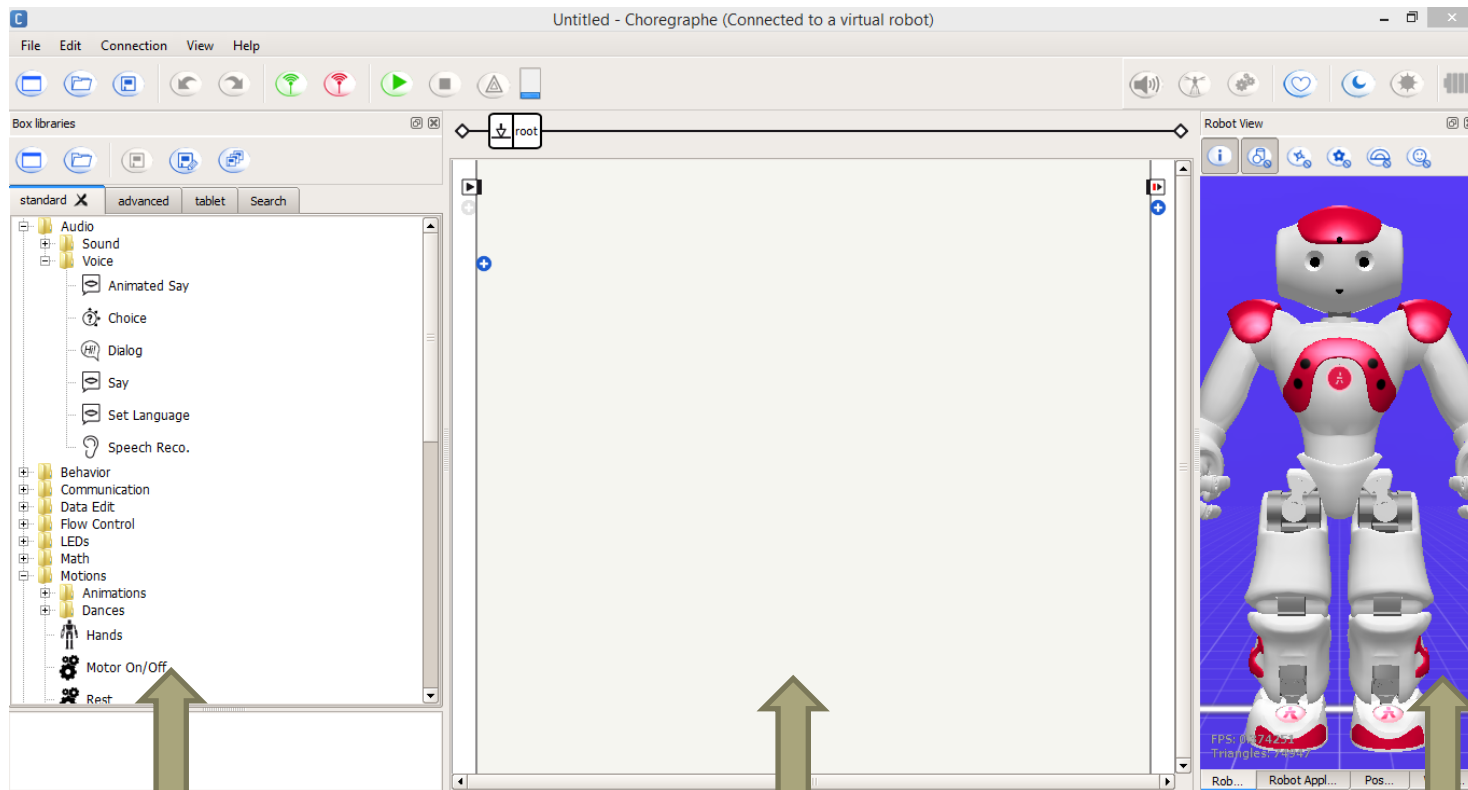pictures, reads books, imitates.

Sonars (x4):
NAO detects whether something
stands closely in front of him.

Wifi Connection:
NAO can use information
from the web

How does Dewey work?

Choregraphe is a multi-platform desktop application.
It allows you to create animations and behaviours, test them on a simulated robot,
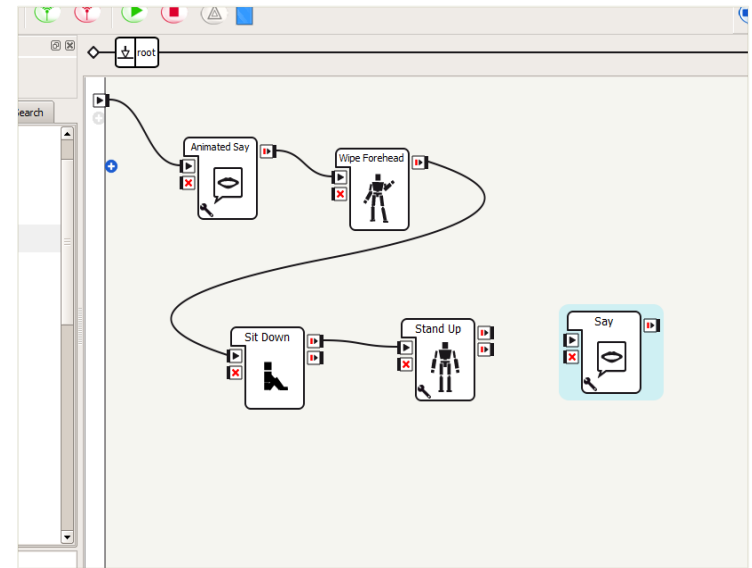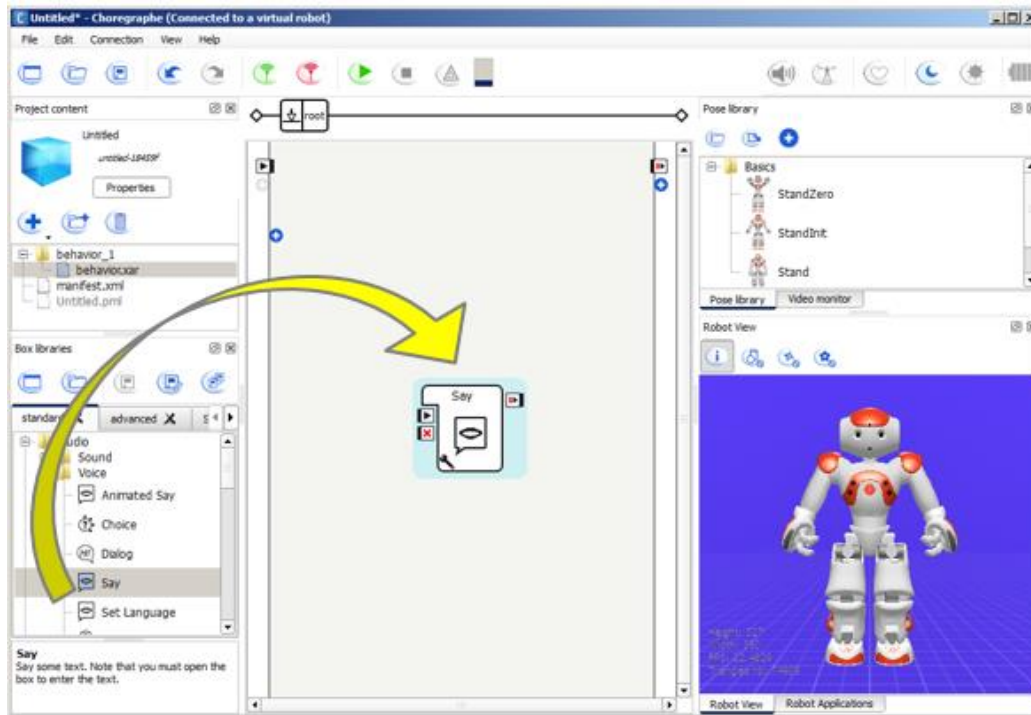or directly on a real one and monitor and control NAO.

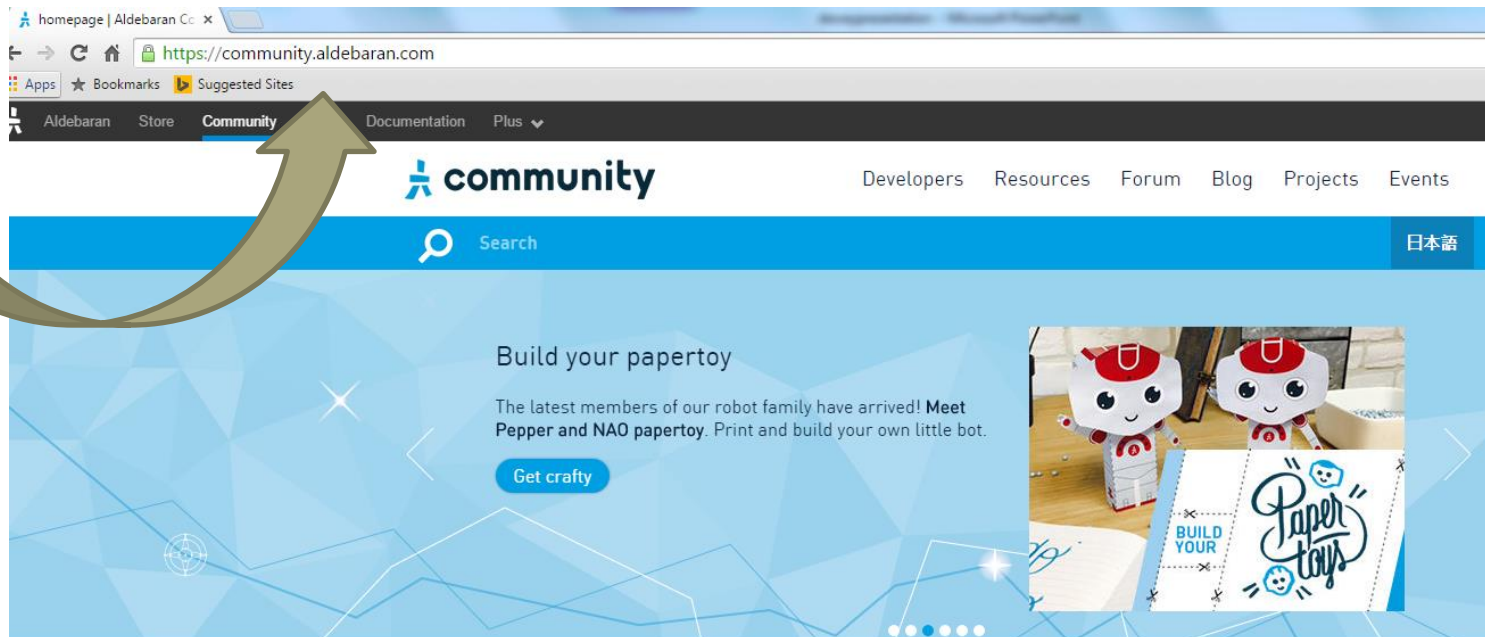Box Library with basic elements of behaviours

Flow Diagram Panel

3D Robot View

Choregraph – operating Dewey

Choregraphe allows you to create very complex behaviours (*e.g.* interaction with people, dance, send e-mails, etc...), without writing a single line of code.

Dewey's online community

What are we using Dewey for?

We will introduce cutting-edge robotics technology to the community through a series of learning and social programs.

There are 3 focal points to our program:
- Introducing Robotics to the community
- Coding and Programming workshops
- Social Outreach Programs

Why are we using Dewey?

People have long pictured a world including robots in everyday life:
we are now on the cusp of this world.

The robot is the ideal platform as it generates an unparalleled interest

75% of the fastest growing occupations now require STEM skills and knowledge, such as coding

'Science literacy', such as coding, is now placed alongside numeracy and language proficiency as a priority to prepare for a skilled and dynamic workforce.

Australian schools are showing a decline in the rates of participation in science subjects to the lowest level in 20 years

Coding has been described as a necessary language for the 21st century

Humanoid robots have been shown to be very effective in bridging communication and learning challenges

Questions?

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