

NAO PLANNING CHALLENGE 2020

TEAM BURTON'S PROJECT BY:

- NAO (0101010)
- FRANCESCO ROMITO (1004705)
- MARCO ASPROMONTE (978241)

THE CHOREOGRAPHY



'CICIRINELLA TENEVA TENEVA'



ABRUZZO'S POPULAR SONG



NAO MOVES SIMULATING POPULAR DANCES ON
CICIRINELLA'S VIBES



WALKING FORWARD AND BACKWARD WITH HANDS ON HIPS



SHAKING HANDS UPWARDS



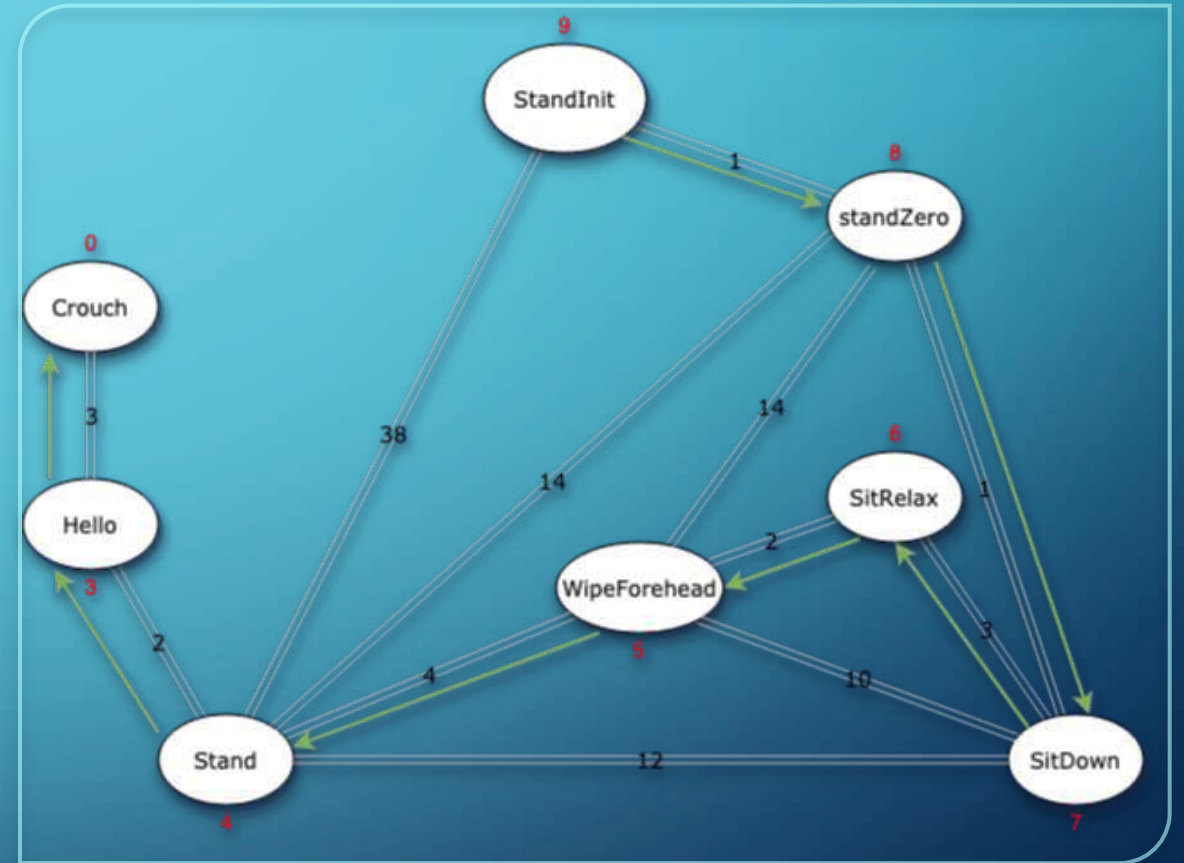
SINGING THE CHORUS MAINFRAME

THE IMPLEMENTATION

- TIMELINES : Create dancing sequences
- DIAGRAMS : Group set of timelines, python code and other boxes due to order issues
- PYTHON BOX CODE : Movements library and A* Graph Algorithm
- SWITCH CASE BOX : Manage the execution of the best path, intended as an Interface between the AI algorithm and the choregraphe enviroment

A*GRAPH ALGORITHM

- Each mandatory position has a set of intermediate ones
- Every mandatory is not compatible with all the others
- The algorithm chooses the best path in according to costs and heuristics
- The best path is an array that is processed by the switch case box



A decorative graphic on the left side of the slide, consisting of a network of light blue lines and small circles, resembling a circuit board or a stylized tree structure.

ENJOY THE DEMO

THANKS FOR THE ATTENTION