

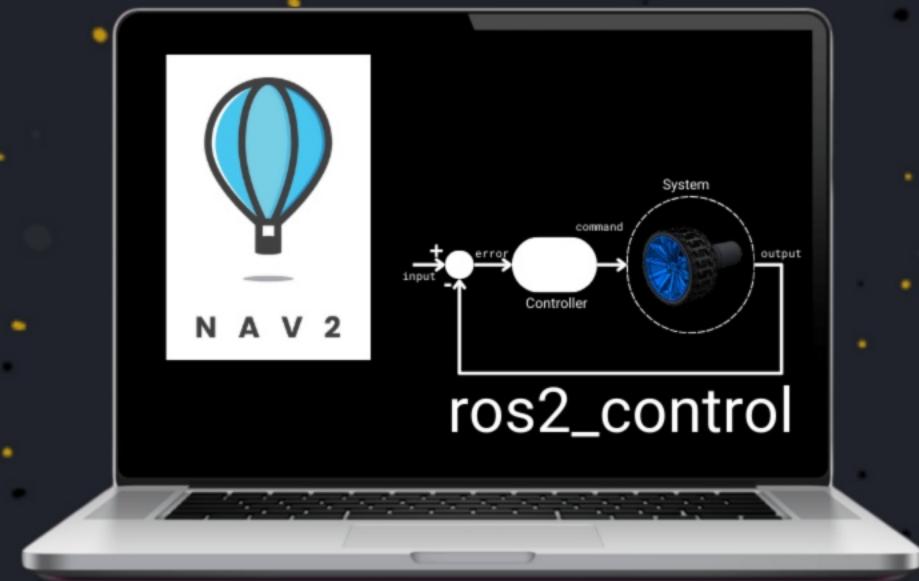
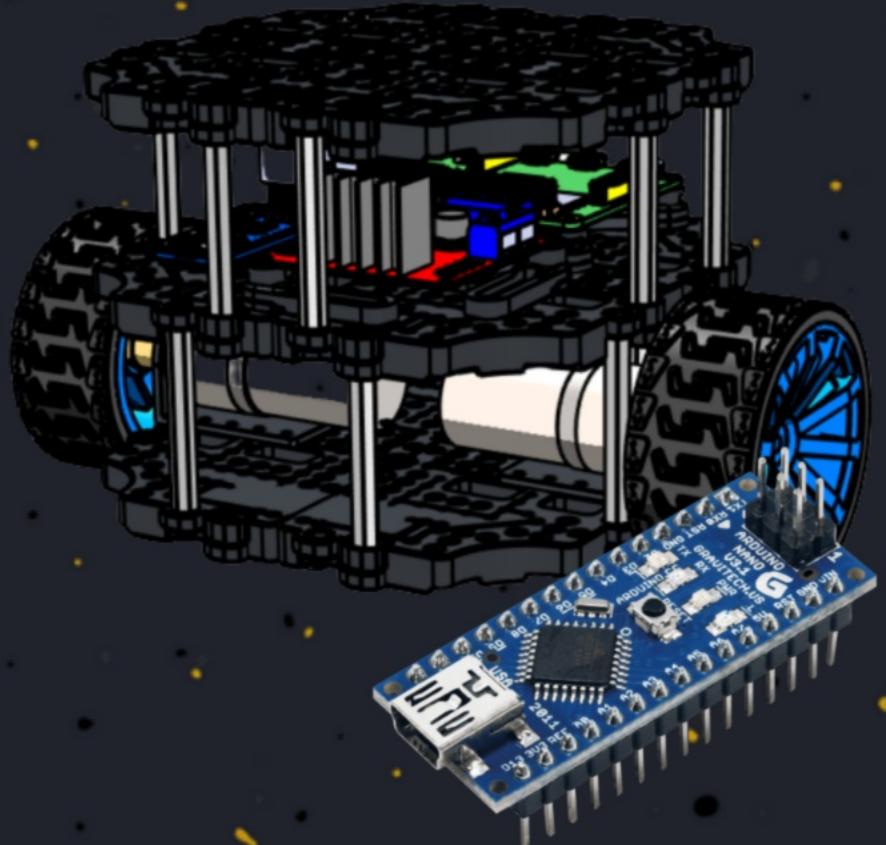
Build the Robot



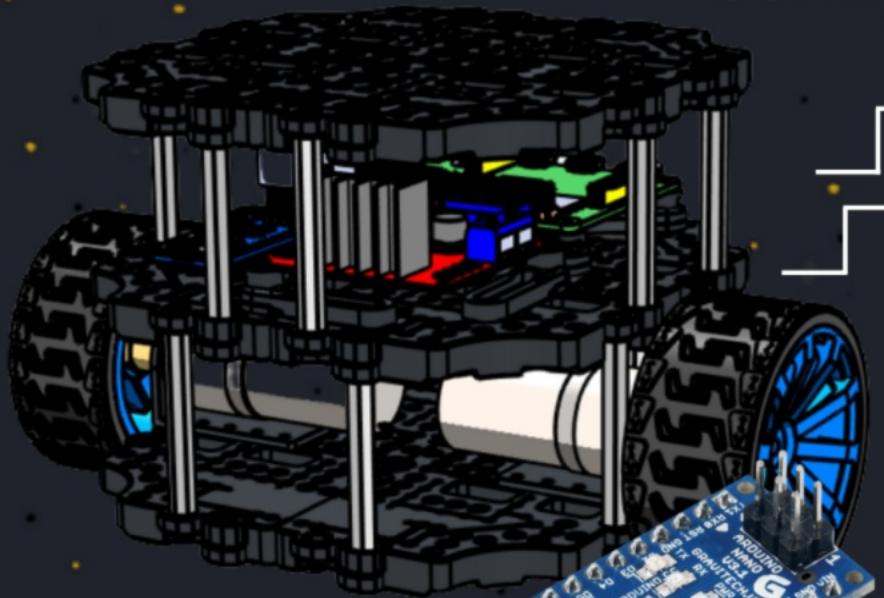
Build the Robot



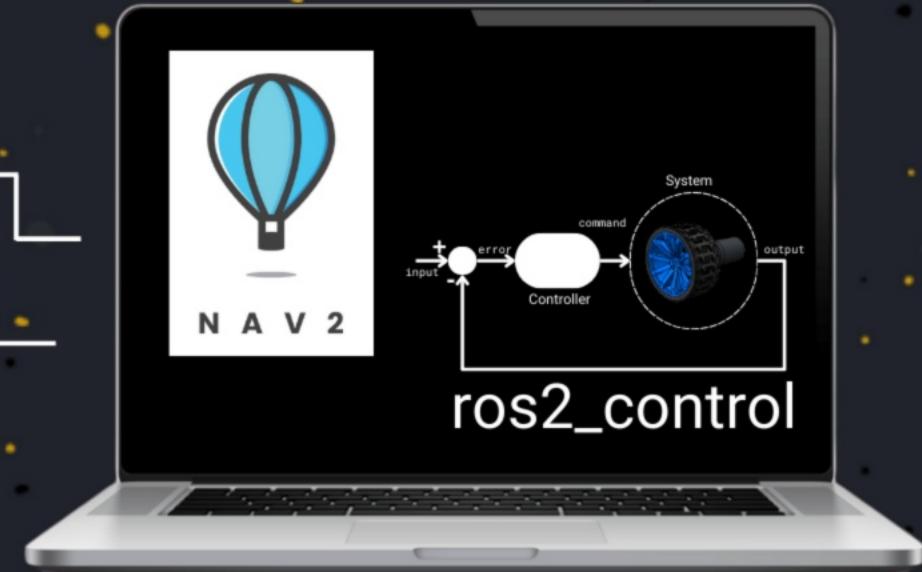
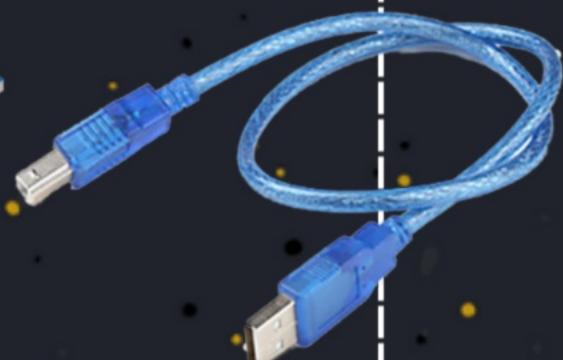
ROS 2



ROS 2



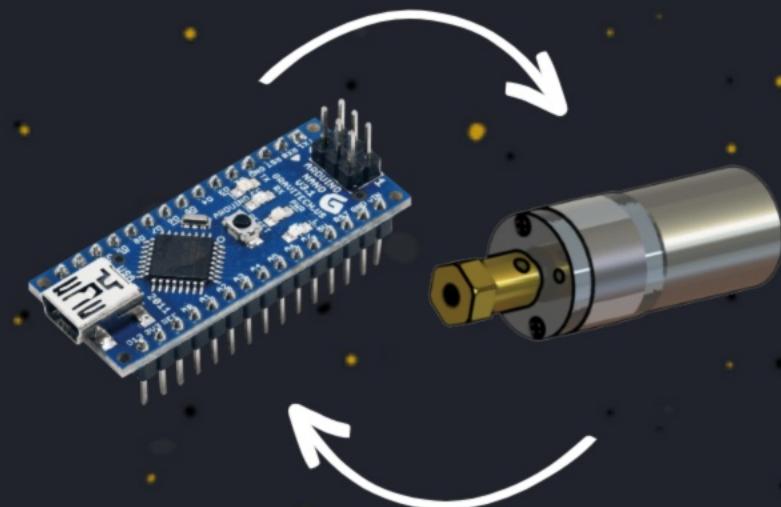
Serial
Communication



Lifecycle Nodes

Navigate to
• Point

Driver



Lifecycle Nodes



Lifecycle Nodes



Lifecycle Nodes



Lifecycle Nodes



Lifecycle Nodes



Lifecycle Nodes



Lifecycle Nodes





Initial State

Unconfigured

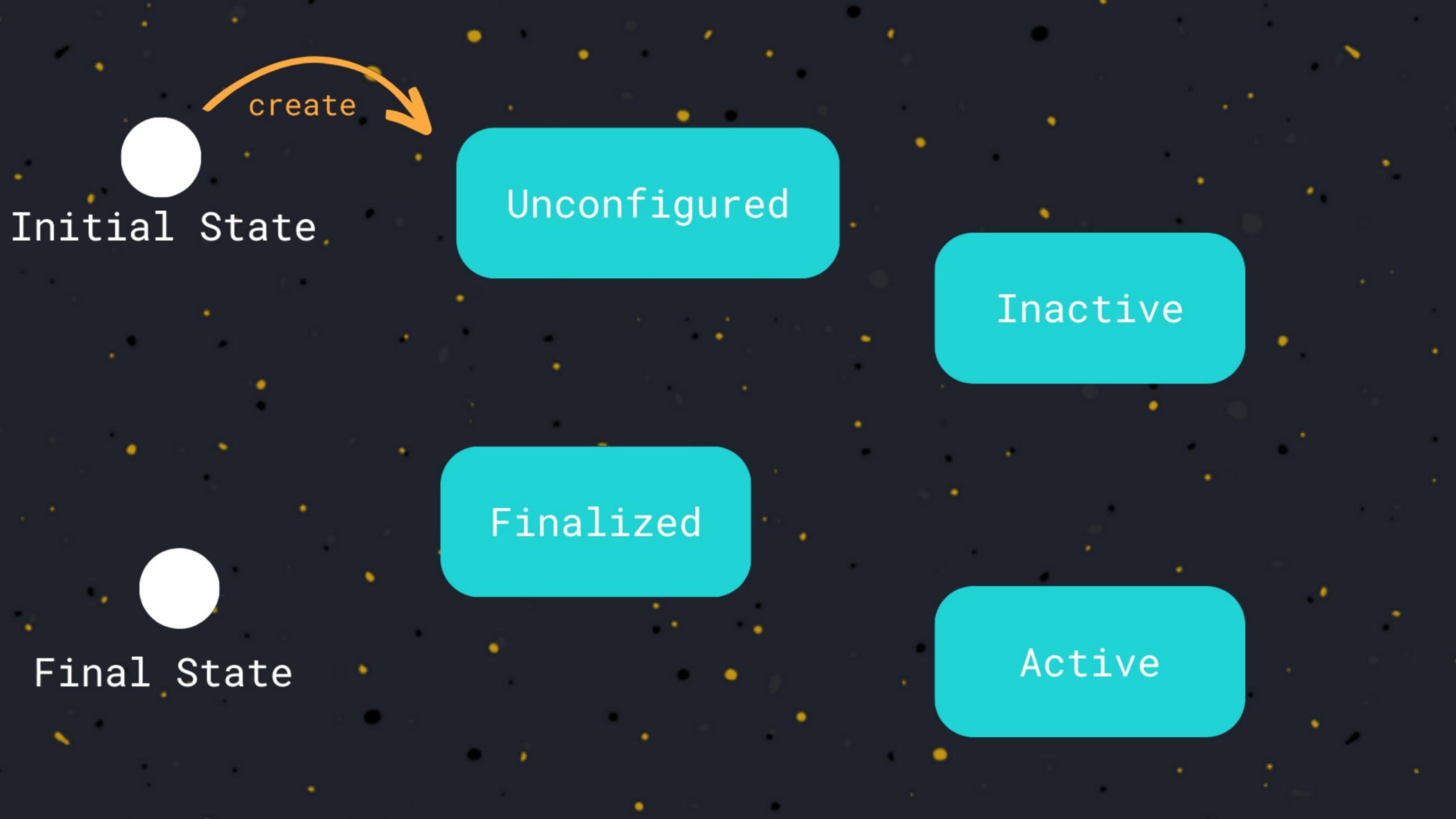


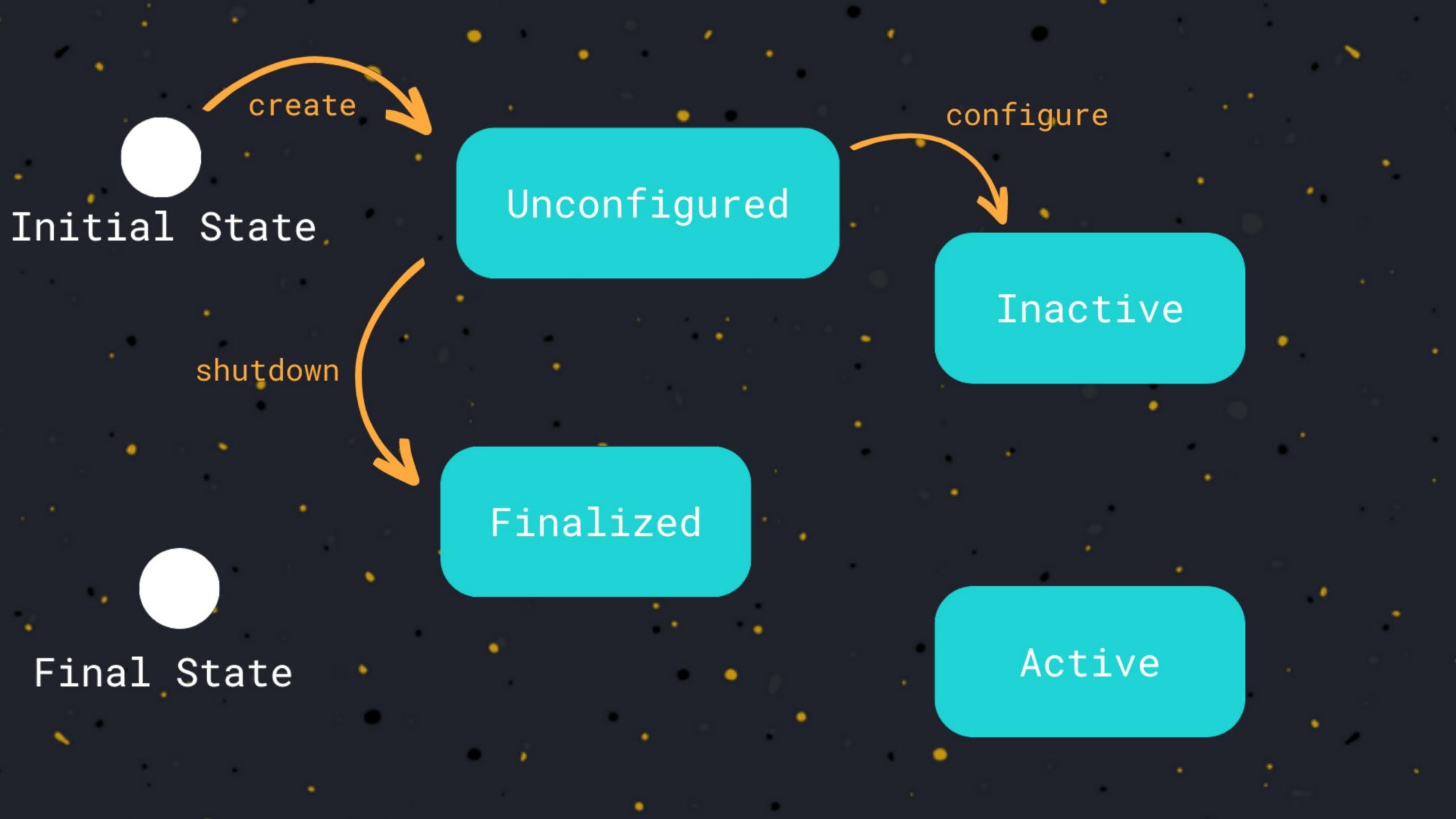
Final State

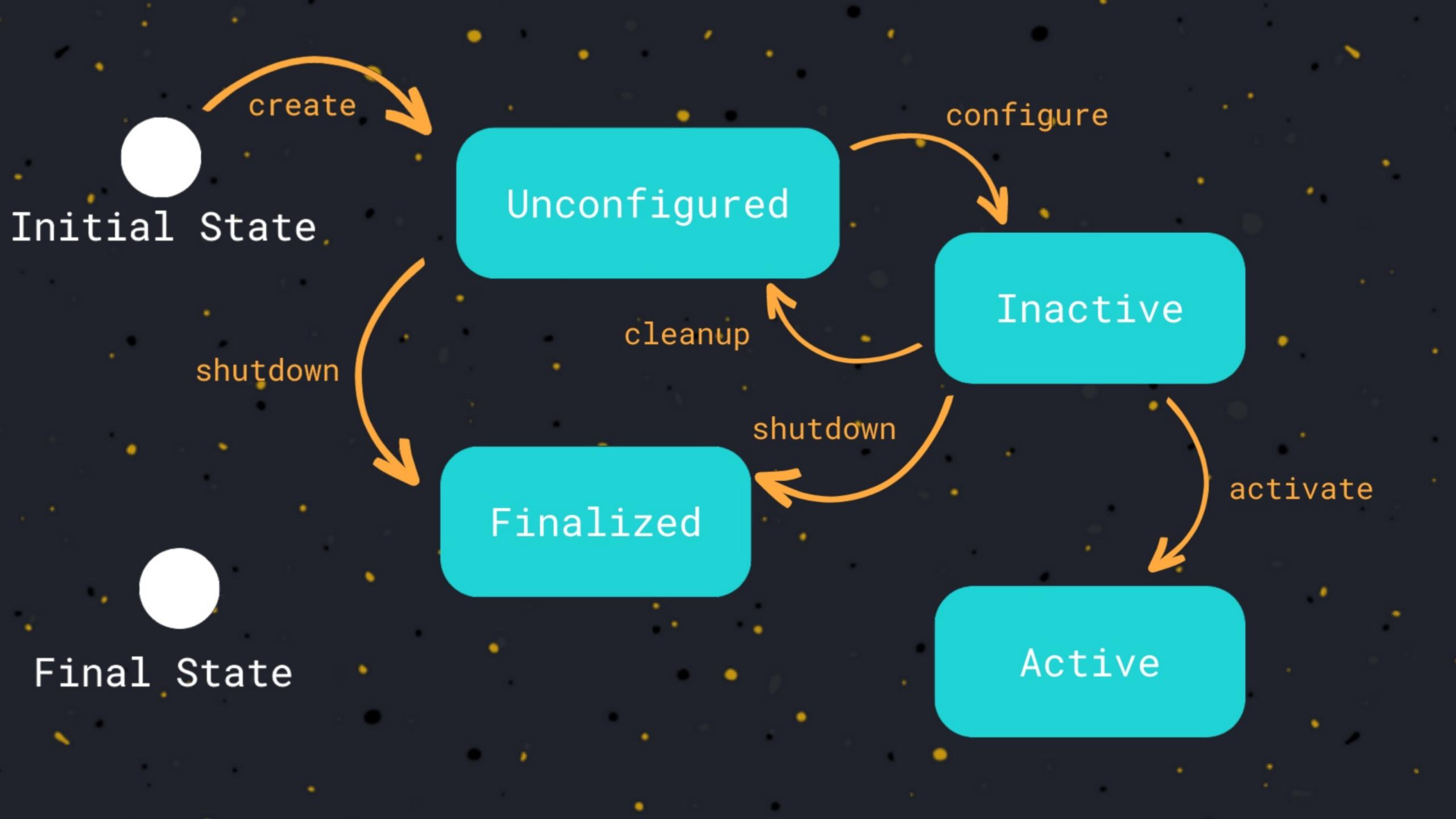
Inactive

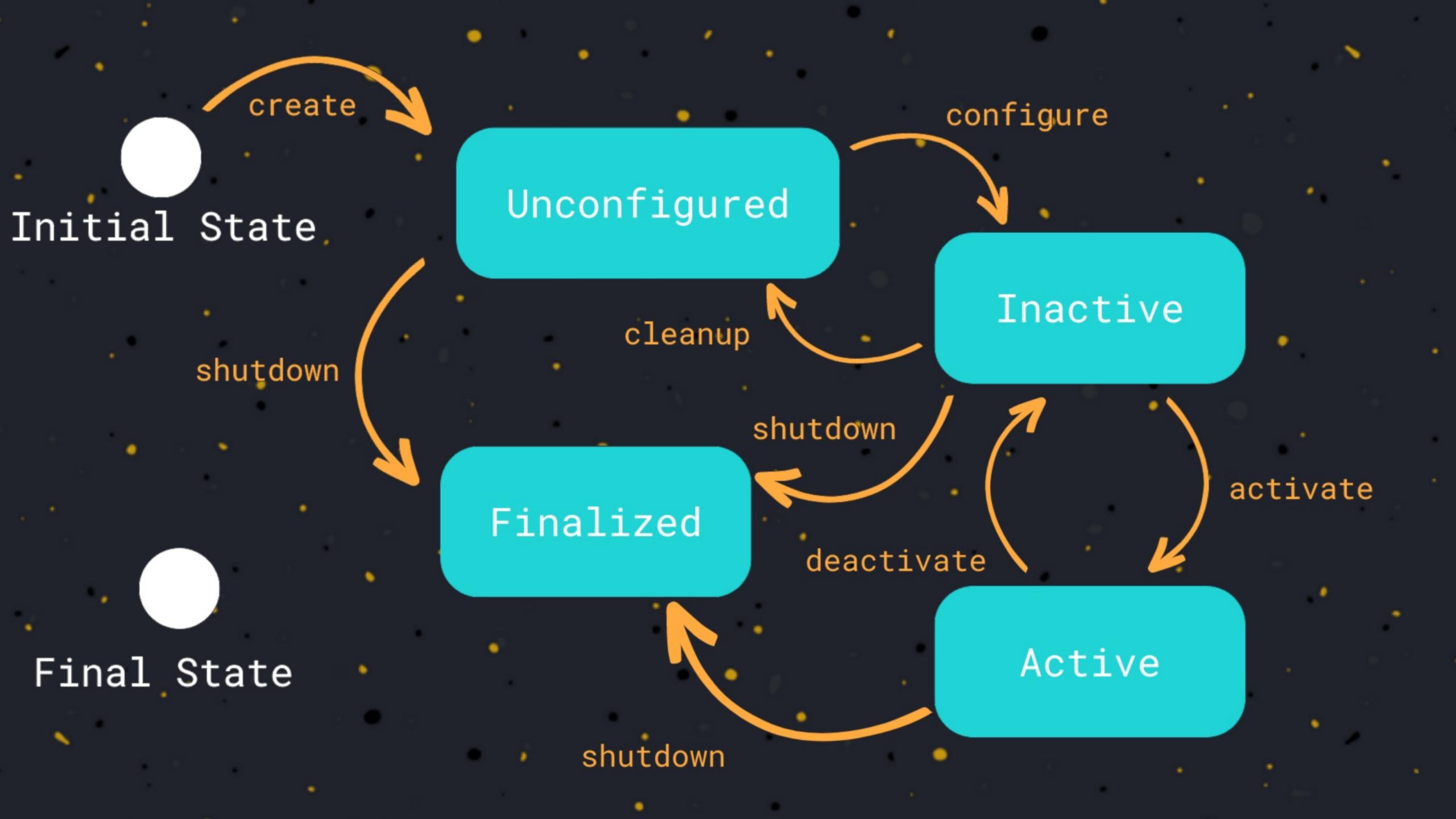
Finalized

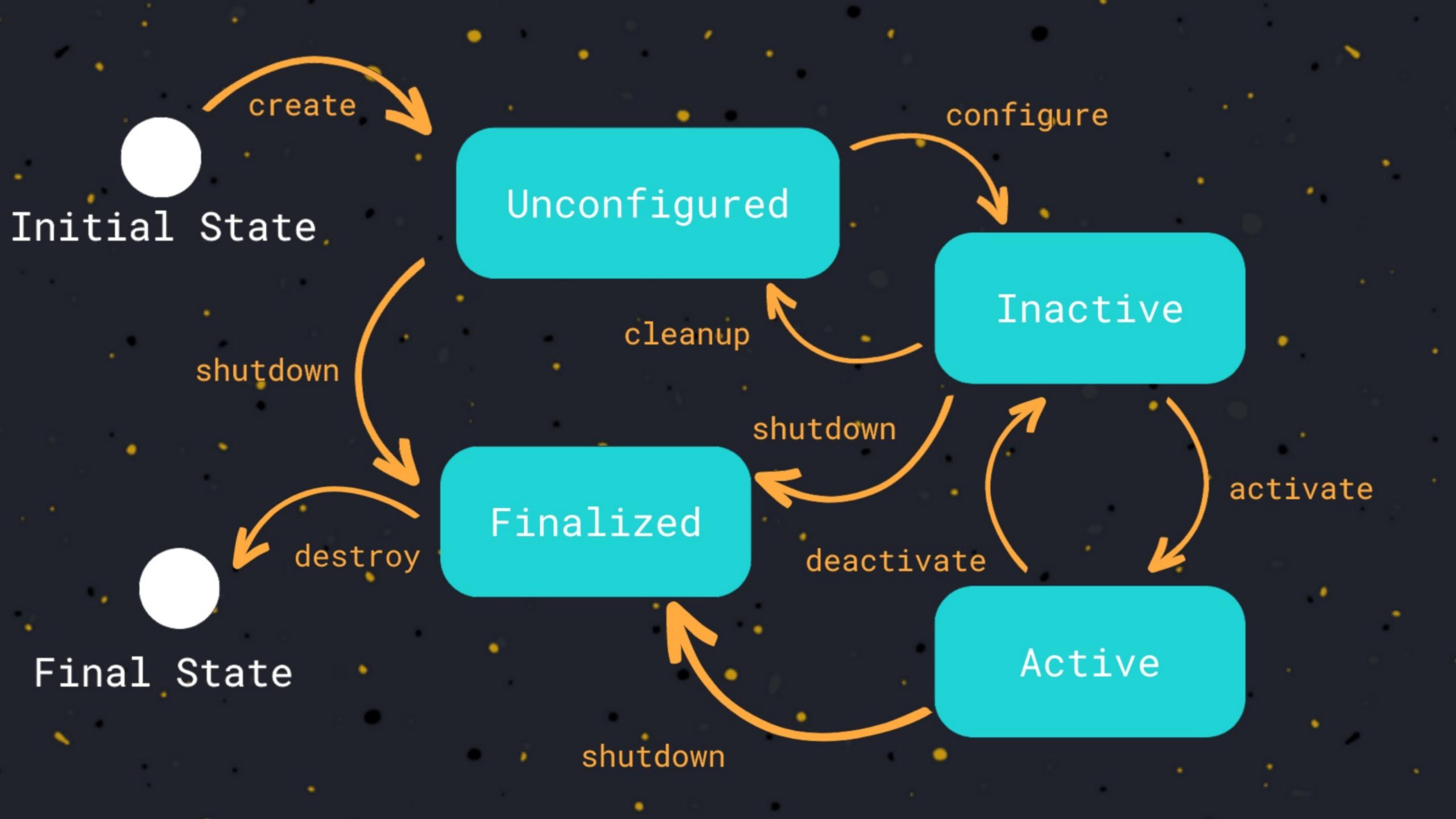
Active







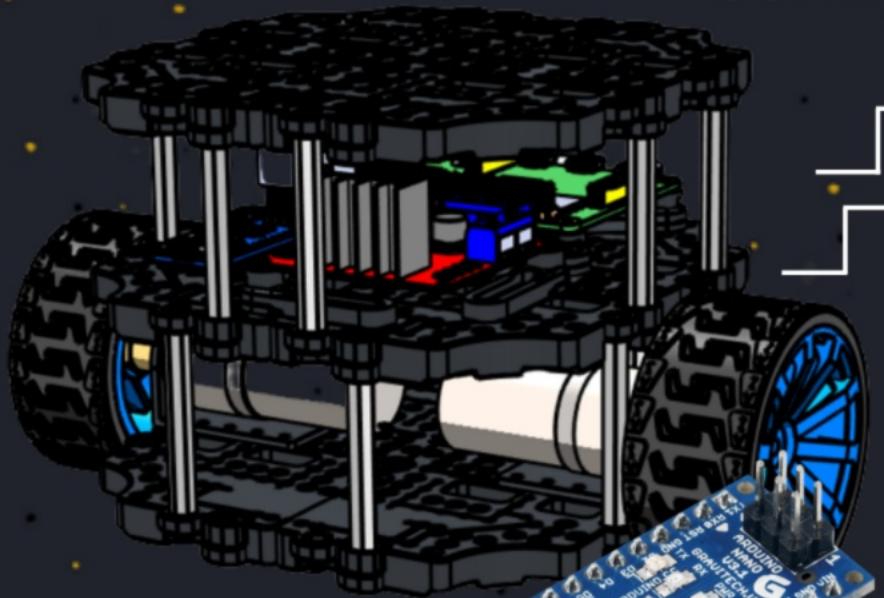




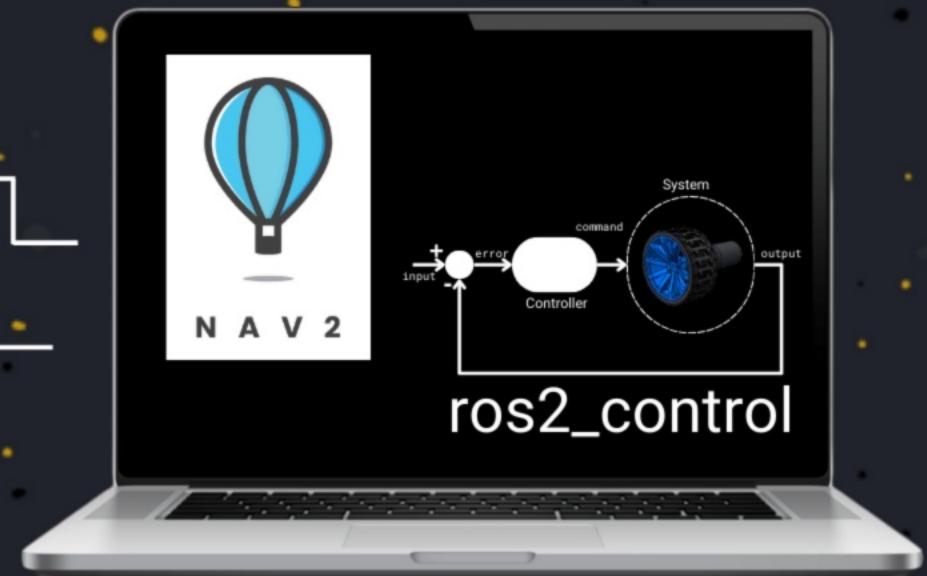
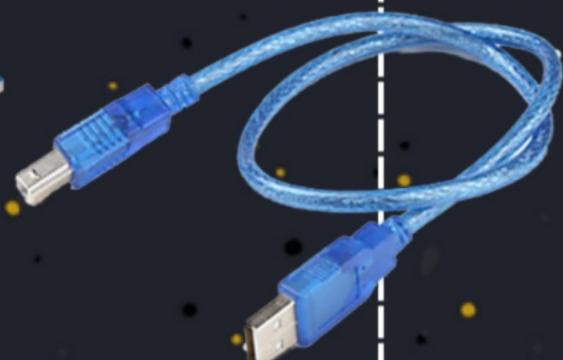
Lifecycle Nodes



ROS 2



Serial
Communication



rp2.57, ln5.71,

rp2.57, ln5.71,

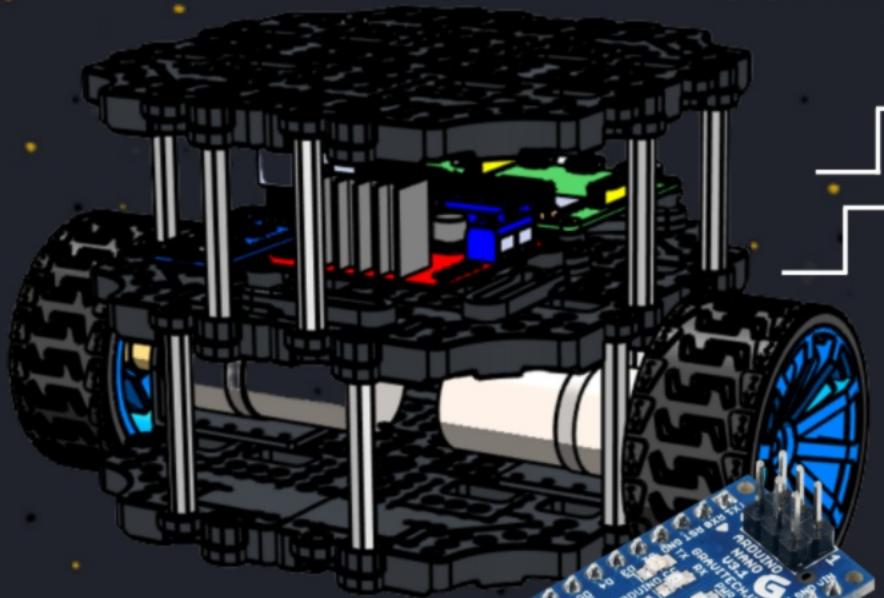
right positive 2.57rad/s

left negative 5.71rad/s

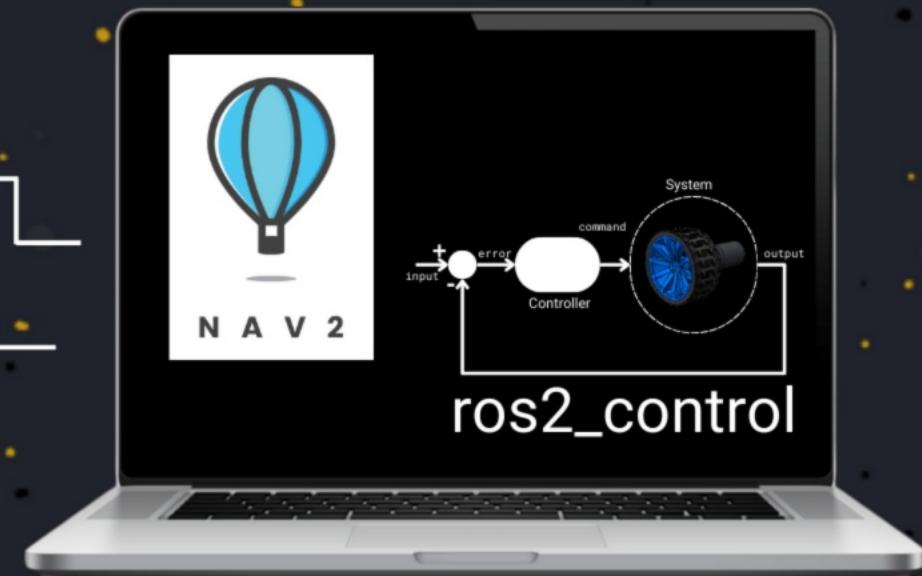
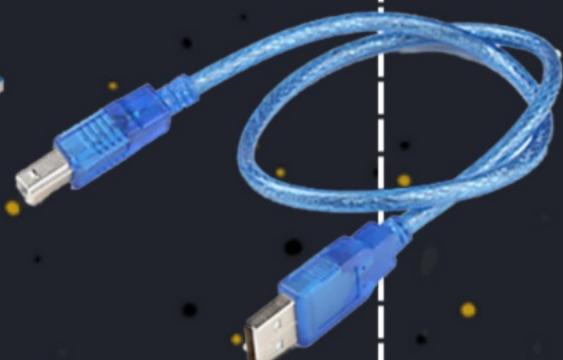
rp2.57, ln5.71,

right positive 2.57rad/s

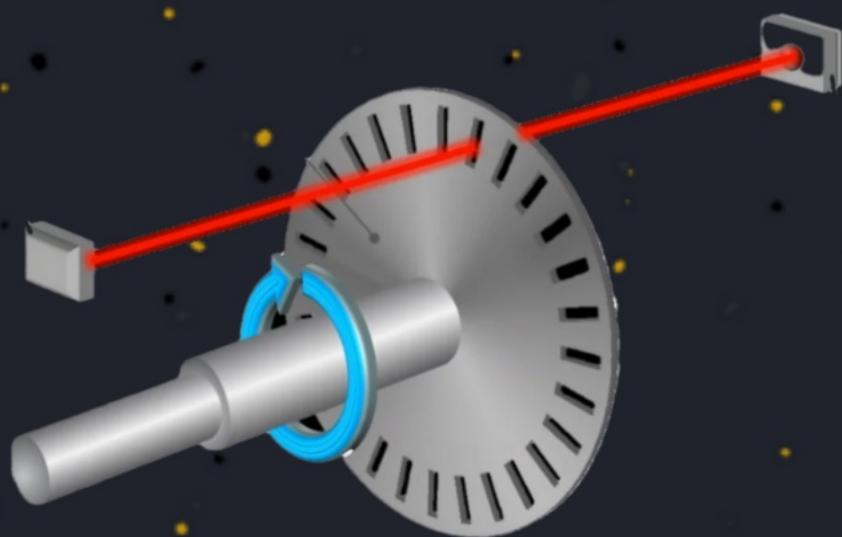
ROS 2



Serial
Communication



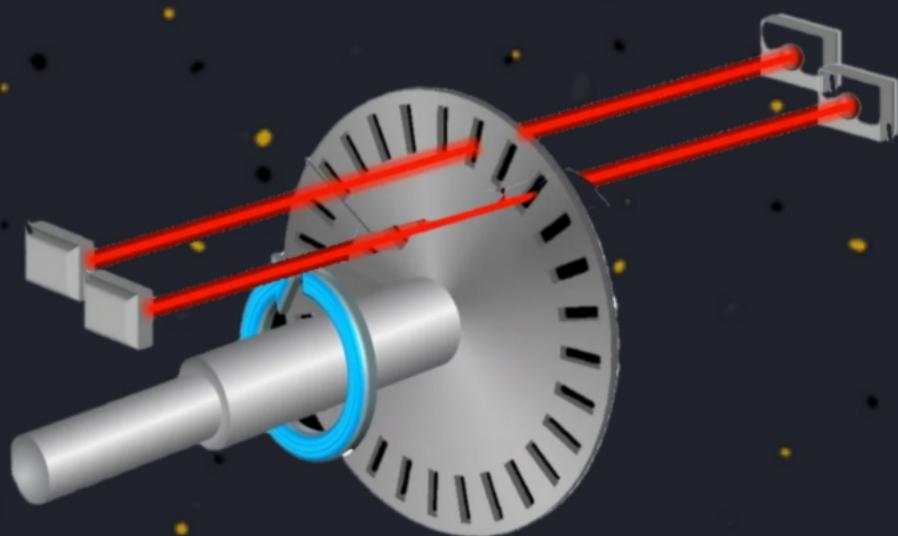
Encoders



Encoders



Encoders

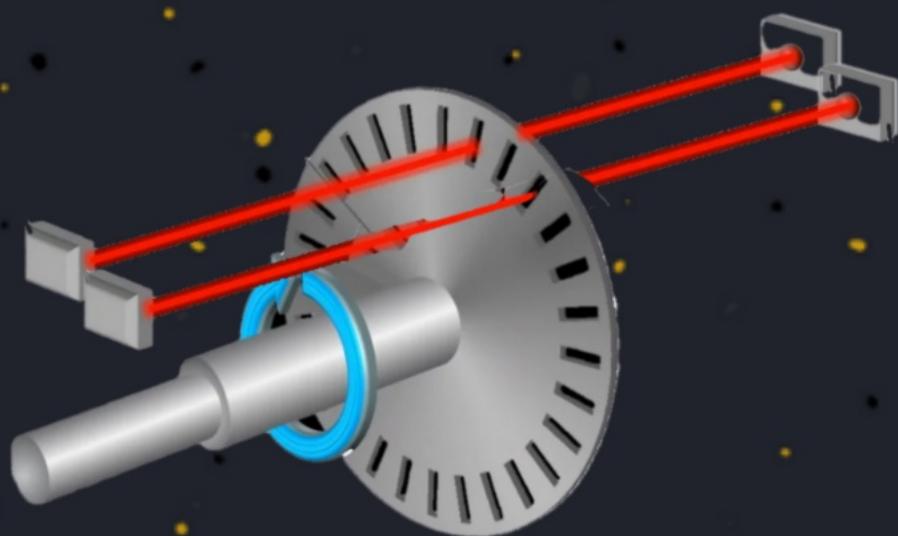


Clockwise

Encoders



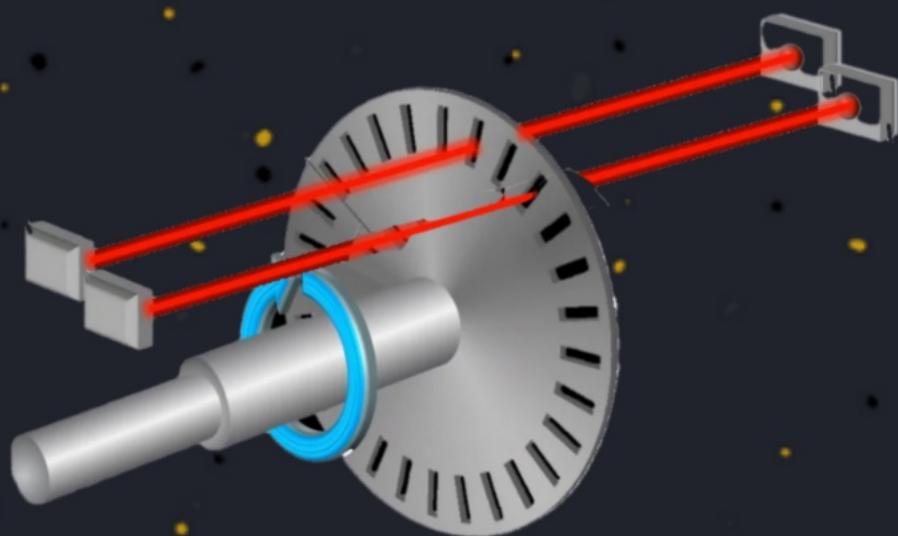
Encoders



Counterclockwise



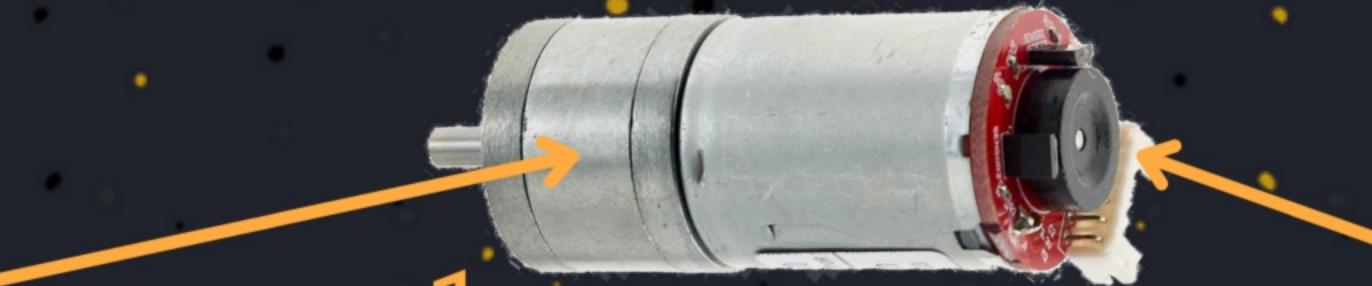
Encoders



Counterclockwise

Gearbox

$\frac{1}{35}$

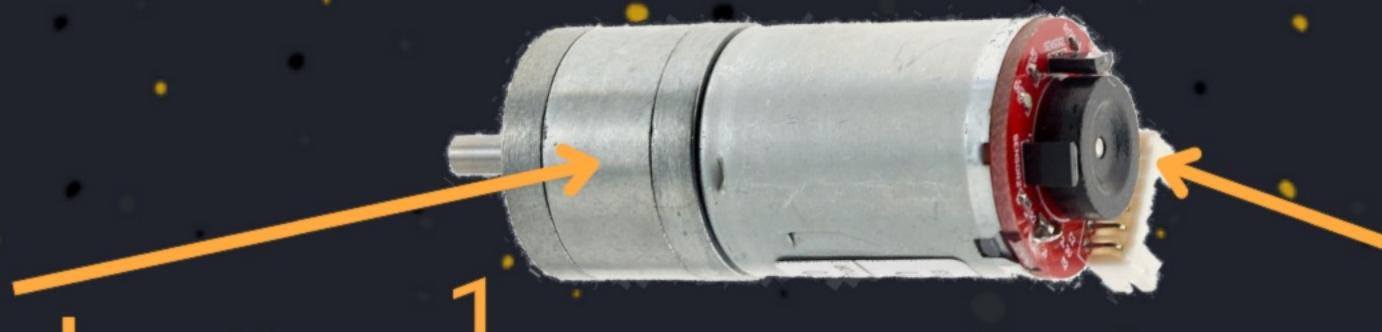


Encoder

11 pulse
revolution



$$vel_{RPM} = \text{encoder_pulse} * \frac{60s}{11*35}$$



Encoder

Ge

Google

rpm to rad/s

X |

Immagini

Video

Notizie

Libri

Finanza

Circa 23.800.000 risultati (0,33 secondi)

Revolution per Minute to Radian per Second Conversion Table

RPM	rad/s
1 RPM	0.10472 rad/s
2 RPM	0.20944 rad/s
3 RPM	0.31416 rad/s
4 RPM	0.41888 rad/s

se ution



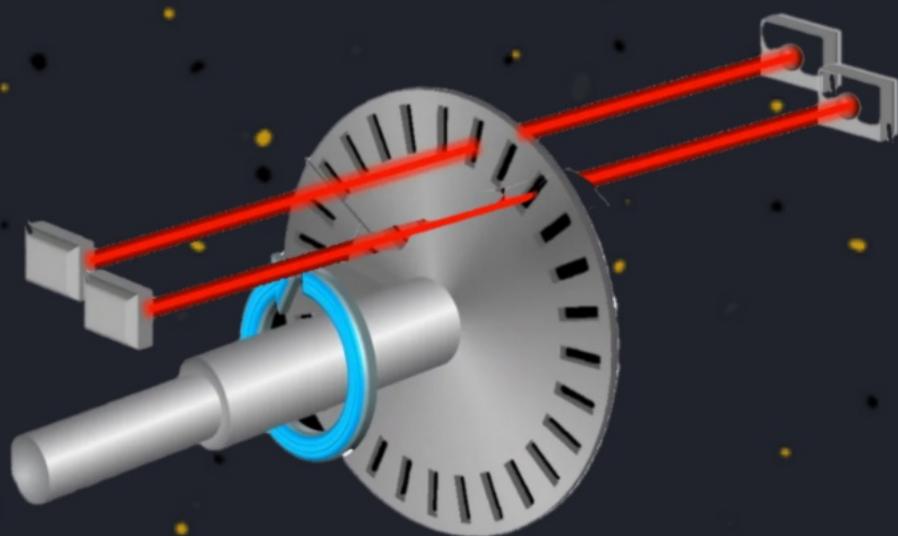
$$vel_{RPM} = \text{encoder_pulse} * \frac{60s}{11*35}$$



$$\text{vel}_{\text{RPM}} = \text{encoder_pulse} * \frac{60\text{s}}{11*35}$$

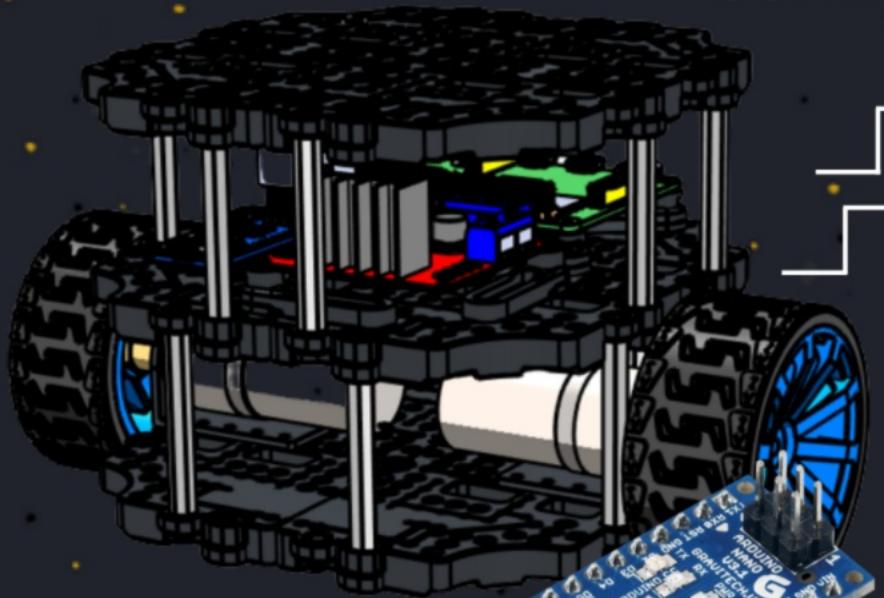
$$\text{vel}_{\text{rad/s}} = \text{encoder_pulse} * \frac{60\text{s}}{11*35} * 0.10472$$

Encoders

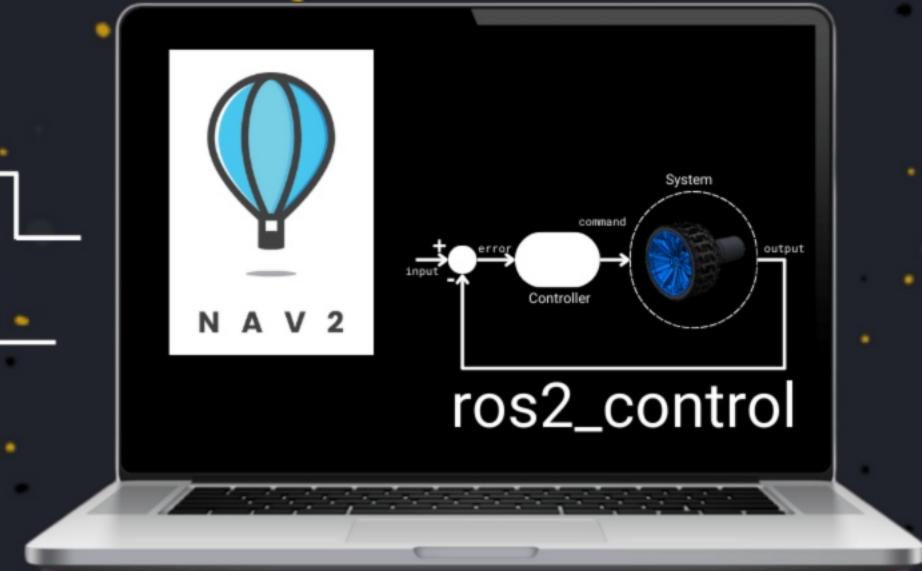
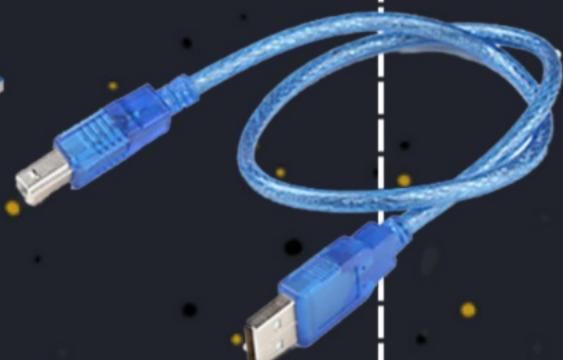


Counterclockwise

ROS 2



Serial
Communication



Build the Robot

