

Advanced BottleSUMO Program

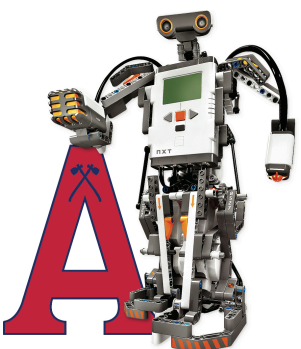
iPad Classroom App

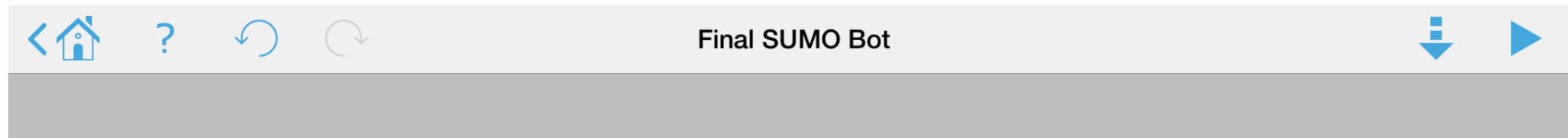
Putting it all together:

Loop tasks inside a larger loop to ensure your robot doesn't stop until it has completed the BottleSumo time trial objective to remove all the bottles from the table.

Robot tasks

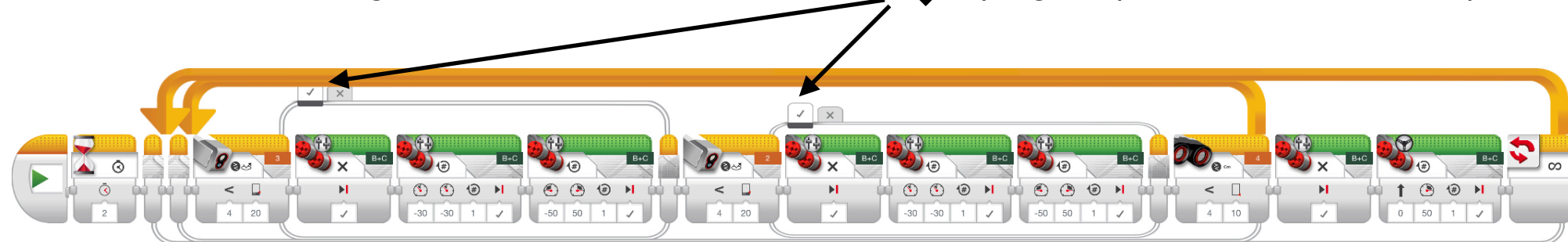
- Stay on the table
- Find the bottle(s)
- Push bottle(s) off the table
- Robot has to stay on the table





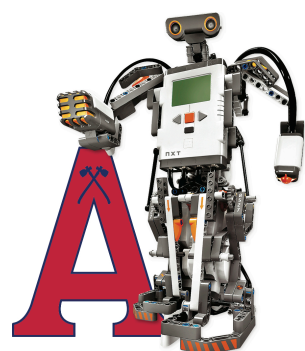
Your loops have a ✓ or ✗

This image shows the robot actions for the ✓ program path for each inside loop.

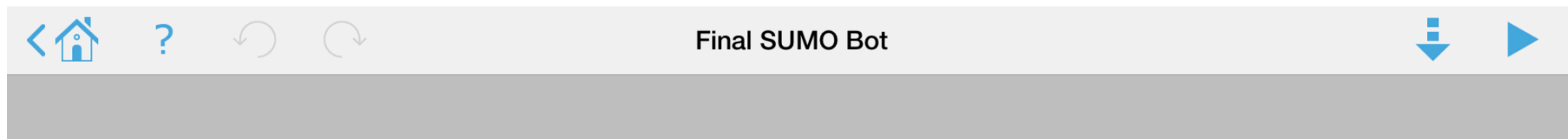


- Program starts with a wait block - once program starts the robot will wait 2 seconds then move onto the next programming block.
- The inside loop is set to end when the ultrasonic sensor detects an object less than 10 cm away. If it detects an object it will exit the loop, stop and then drive forward to push bottle off the table.
- The robot stays on the table because the whole program is in a loop block.

✓ The two loops inside the ultrasonic loop decide what the robot should do if EITHER light sensor sees 'off the table' light reflected measurement.

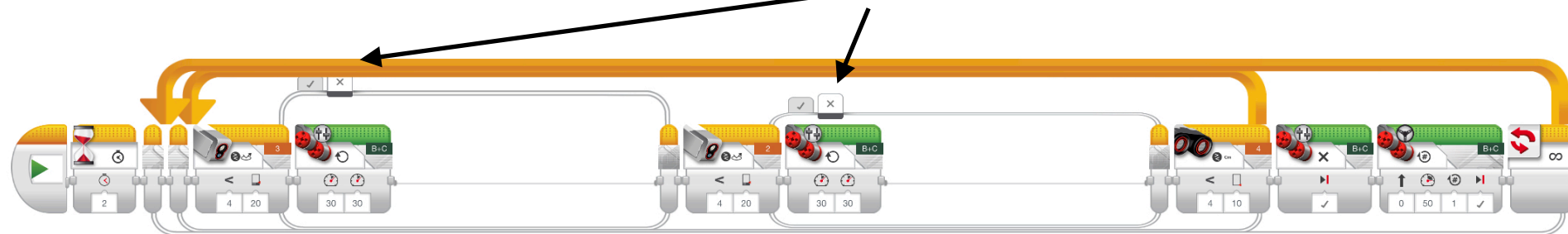


Advanced BottleSUMO Program - iPad Classroom App



Your loops have a ✓ or ✗

This image shows the robot actions for the ✗ program path for each inside loop.



- Program starts with a wait block - once program starts the robot will wait 2 seconds then move onto the next programming block.
- The inside loop is set to end when the ultrasonic sensor detects an object less than 10 cm away. If it detects an object it will exit the loop, stop and then drive forward to push bottle off the table.
- The robot stays on the table because the whole program is in a loop block.



The inside loops decide what the robot should do if EITHER light sensor doesn't see an 'off the table' light reflected measurement.

