

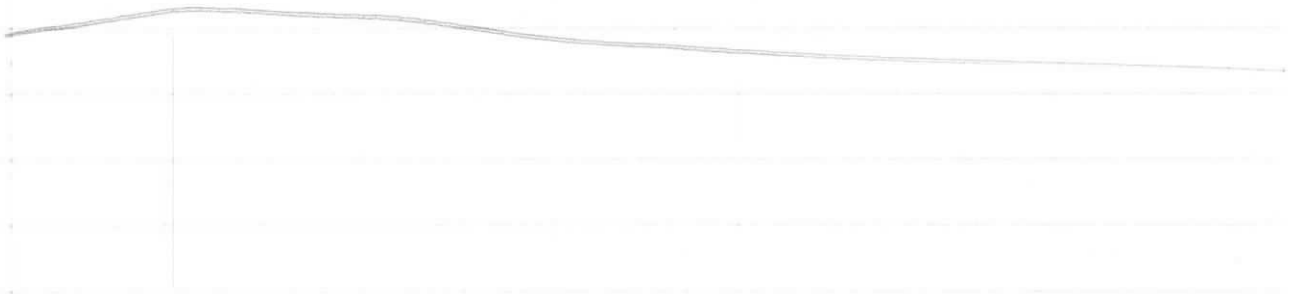
Clare & Brynn

turn more to home (we need to  
make it turn more when goes to  
home.)

What happens:

1. drives down
2. Tries to hit the swing down

What needs to improve:



Arm

11/10/19

JB1

Ava 3, clare

At first we had two totally different arms. Then we took off the end pieces and combined the connectors. Now, all we have to do is, take off the end piece and switch it. It used to take about 45 seconds to switch the arm. Now, it takes about 4-10 seconds. So, it is a big leap for us builders and helpful to the programmers

Distance to Black Circle  $\rightarrow$  50 cm

Distance to Red Circle  $\rightarrow$  75 cm

Distance to Tan Circle  $\rightarrow$  120 cm

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Black\_Pusher steps

1. Move forward to Black Circle
  2. Wait .5 seconds
  3. Move Backwards to home area
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Improve Black\_Pusher

- Get fully in home area

# Swing

11/10/19

- in <sup>the</sup> test since it was not parallel to the black line <sup>road</sup> it messed up <sup>JPT Addy Ruby</sup> (Keep parallel to black line/road)
- tire starts  $29\frac{1}{2}$  cm from the edge of the table
- bumper starts on black line (the one in front of home)

(measure from vertical black line to wheel)

Task	Run	2	3	Final	Time in seconds
1	20	74	39	15	
2	50	42	44	50	
3	61	28	44	52	
4	54	32	27	25	
5	45	31	29	30	
Total					

Angel. Angle



## Order/Steps:

- 0 Set Up (Ruby and Clare)
- 1 Wheel Chair (Ruby and Clare)
- 2 Tan Pusher (Addy and Ella)
- 3 Red Pusher (Clare and Brynn)
- 4 Black Pusher (Ava and Ruby)
- 5 Bridge (Melanie and Ava)

## We Need:

Robot

Arms (2)

Jig (2)

All Blocks (Tan, Red, White, Extra)

## Problems:

## Solution

Tan Pusher → Didn't go far enough → Use right Program

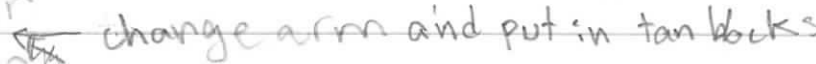
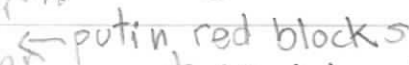

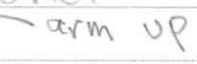
Red Pusher → Went to short on way home →

Swing → Got caught first time → Adjust Arm ✓

Bridge → Took blocks with it → Put red blocks centered more ✓

Black Pusher → Perfect → PERFECT!!!  
yay! 🥳

Order: 

1. Wheelchair
2. Tan pusher 
3. Red pusher 
4. Black pusher 
5. Bridge 

### We need

(2) arms

(2) jigs

(1) robot

(tan, red, black) All blocks

Set up (Clare & Ruby)

Wheelchair (Clare & Ruby)

Bridge (Ava & Melanie)

Tan pusher (Addy & Ella)

Red pusher (Clare & Brynn)

Black pusher (Ava & Ruby)

### How to improve

Bridge: Might not have been lined up right or might have been the red blocks

Pushers: Red blocks got caught on

Robot. Tan pusher did not go far

enough. It could have been an old program

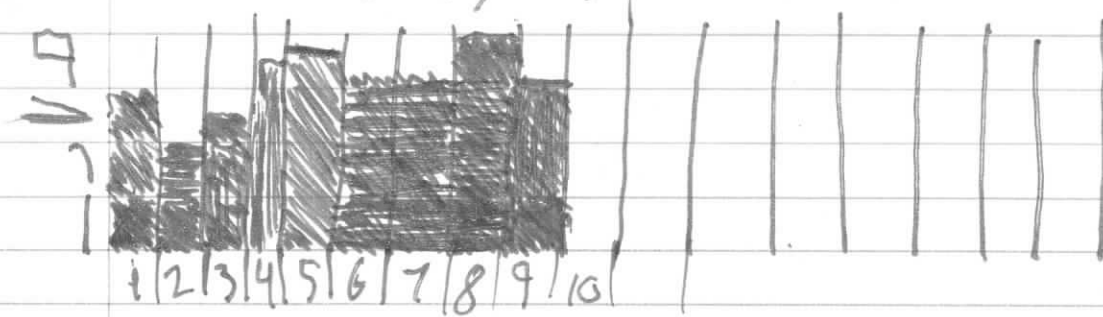
Wheelchair:

got caught on the first try



# \* Tests \*

# Bridge



test 1

~~test~~ fell off right side

test 2

fell off the left side

test 3

same as test 2

test 4

Went to far (turns perfect)

test 5-7

test five got a flag others  
fell off the left side

test 8

Went to far

changes  
we want  
to make:

test 1

turn sharper

test 2

turn less sharp

test 3

turn less sharp

test 4

make it go less far

test 5-7

reduce turn

test 8

less rotation