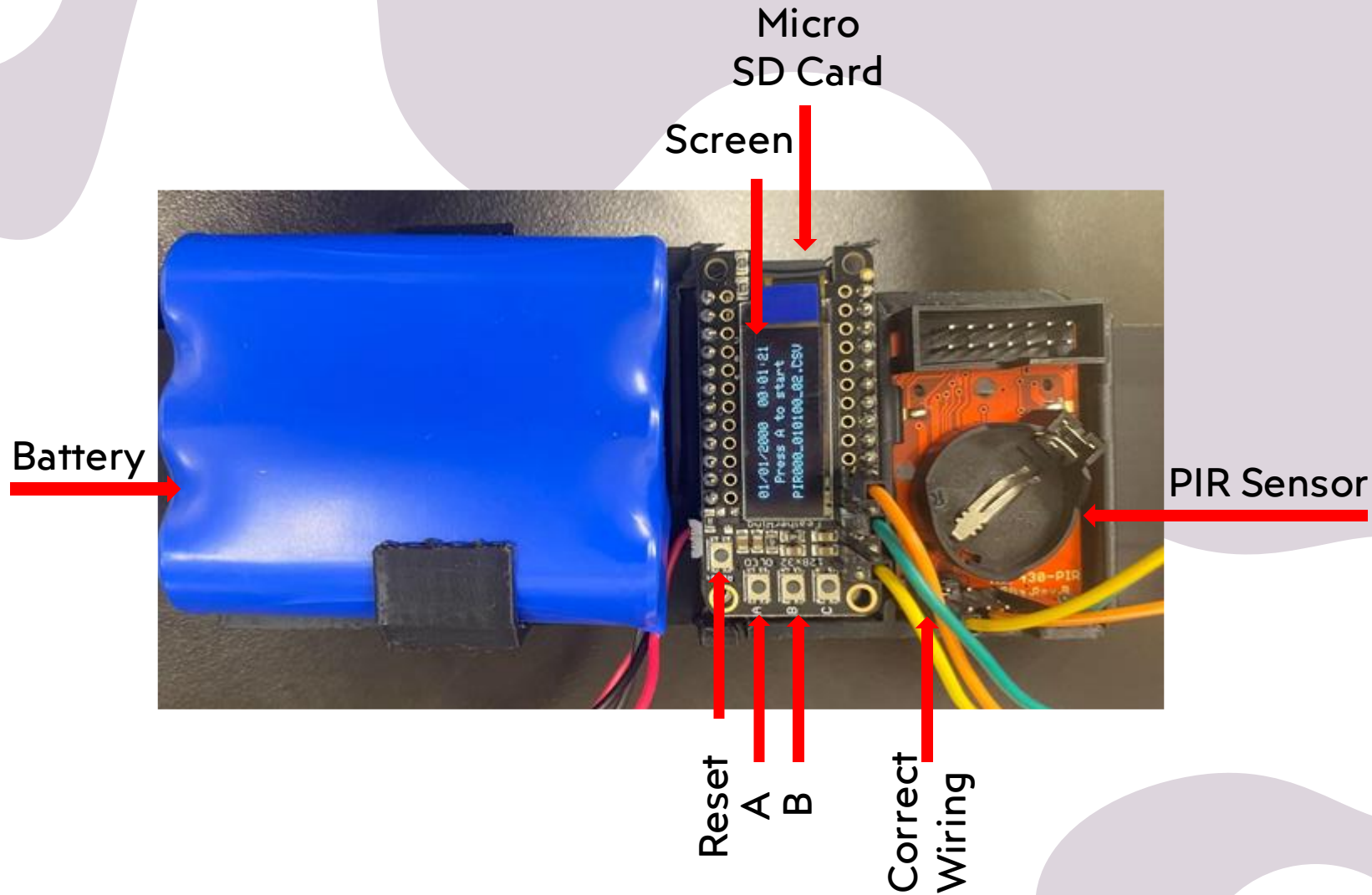


The background features a large, light purple, irregular shape in the center. To the left and bottom, there are clusters of colorful triangles in shades of yellow, orange, red, and blue. To the right, there are three light purple circles of varying sizes. The title 'RAD RAT RACE' is centered within the purple shape in a bold, dark purple font.

RAD RAT RACE

By Makeda Paderewski

Rodent Activity Detector (RAD) Components



Setting Up Software

- I use Arduino IDE to upload all required software from the computer to the RAD to make it functional.
- First, I upload a time clock, which syncs the RAD to the current date and time (down to the second!), which is very important for data collection.
- Then, I upload a PIR counter, giving each RAD a unique ID number

Link with all RADs details and instructions:

<https://hackaday.io/project/160742/instructions>

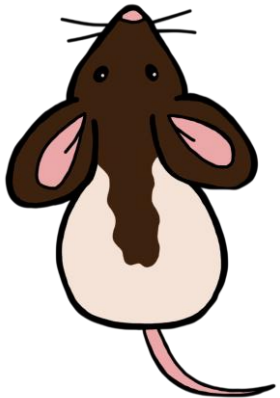
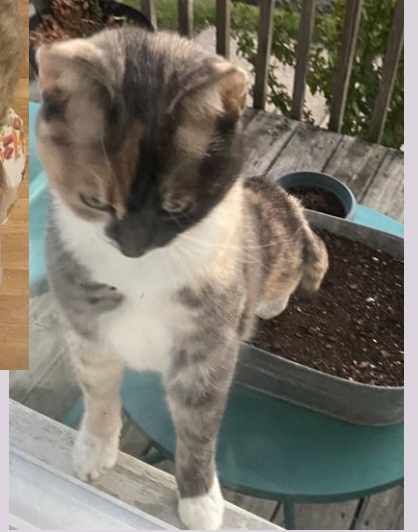
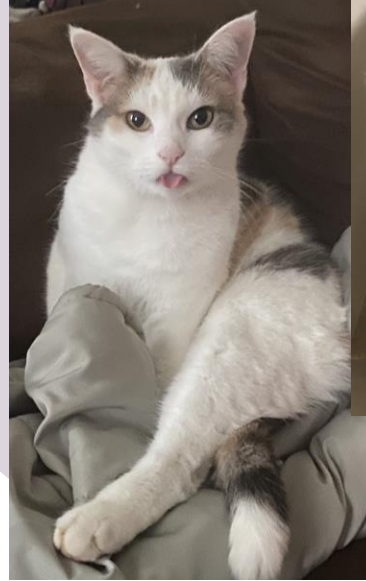
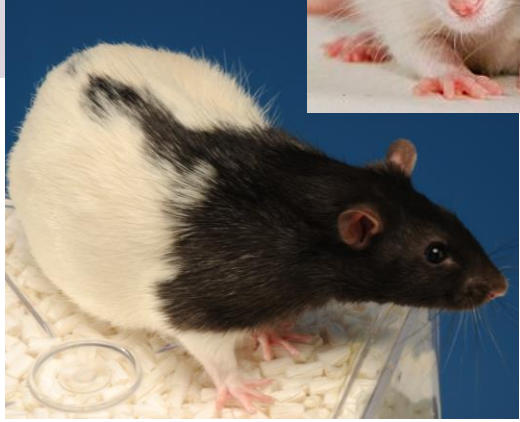


Converting Real Data Into a Game

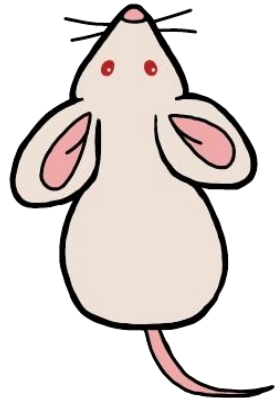
- Each row in the RAD csv file corresponds to a new bout of movement for the rat
- The more a rat moves, the more rows there are in the file
- Assign each rat to a random file
- Accumulate how many rows are in the file
- Make the rat move that far
- Rat that moves the farthest wins

MM:DD:YYYY hh:mm:ss	Elapsed Time	Device	BatteryVoltage	PIRCount	PIRDuration	PIRCountChange	PIRDurationChange
11/6/24 16:08	0:01:00	4	4.12	13	42.08	13	42.08
11/6/24 16:09	0:02:00	4	4.12	18	52.58	5	10.49
11/6/24 16:10	0:03:00	4	4.11	18	52.58	0	0
11/6/24 16:11	0:04:00	4	4.11	23	61.45	5	8.87
11/6/24 16:12	0:05:00	4	4.11	35	88.09	12	26.64
11/6/24 16:13	0:06:00	4	4.12	52	133.46	17	45.37
11/6/24 16:14	0:07:00	4	4.12	58	152.83	6	19.37
11/6/24 16:15	0:08:00	4	4.12	76	192.54	18	39.71
11/6/24 16:16	0:09:00	4	4.12	84	208.01	8	15.47
11/6/24 16:17	0:10:00	4	4.11	91	223.36	7	15.35
11/6/24 16:18	0:11:00	4	4.13	106	255.63	15	32.27
11/6/24 16:19	0:12:00	4	4.12	121	290.41	15	34.78
11/6/24 16:20	0:13:00	4	4.12	122	294.44	1	4.03
11/6/24 16:21	0:14:00	4	4.11	137	327.53	15	33.09
11/6/24 16:22	0:15:00	4	4.12	146	358.19	9	30.66
11/6/24 16:23	0:16:00	4	4.12	153	366.26	7	8.07
11/6/24 16:24	0:17:00	4	4.12	162	378.36	9	12.1
11/6/24 16:25	0:18:00	4	4.12	173	401.6	11	23.24
11/6/24 16:26	0:19:00	4	4.12	193	437.09	20	35.49
11/6/24 16:27	0:20:00	4	4.12	208	468.55	15	31.46
11/6/24 16:28	0:21:00	4	4.12	222	487.93	14	19.38
11/6/24 16:29	0:22:00	4	4.12	235	510.61	13	22.69
11/6/24 16:30	0:23:00	4	4.12	238	518.74	3	8.12
11/6/24 16:31	0:24:00	4	4.12	238	518.74	0	0
11/6/24 16:32	0:25:00	4	4.12	238	518.74	0	0
11/6/24 16:33	0:26:00	4	4.12	238	518.74	0	0
11/6/24 16:34	0:27:00	4	4.12	238	518.74	0	0
11/6/24 16:35	0:28:00	4	4.12	238	518.74	0	0
11/6/24 16:36	0:29:00	4	4.12	240	523.59	2	4.85

Player Characters



EVAN



DOLLY



MABEL



GRITS

Resources Utilized