Date	Time Start	Time End	Description	Duration	Total Hrs
9/16/2022	8:00:00 AM	9:00:00 AM	first nosenchuck meeting	1:00:00	1:00:00
9/29/2022			thesis proposal doc	0:21:00	1:21:00
10/6/2022	5:38:00 PM	5:43:00 PM	first eye prt file	0:05:00	1:26:00
10/25/2022	9:00:00 PM	12:00:00 AM	looking for inspiration in engineering library	3:00:00	4:26:00
10/25/2022	1:08:00 PM	1:21:00 PM	old draft	0:13:00	4:39:00
10/26/2022			meeting notes doc	0:38:00	5:17:00
10/28/2022	9:30:00 AM	10:00:00 AM	nosenchuck meeting	0:30:00	5:47:00
11/11/2022	8:30:00 AM	9:00:00 AM	nosenchuck meeting	0:30:00	6:17:00
11/18/2022	8:30:00 AM	9:00:00 AM	nosenchuck meeting	0:30:00	6:47:00
12/2/2022	8:30:00 AM	9:00:00 AM	nosenchuck meeting	0:30:00	7:17:00
12/8/2022	11:21:00 AM	12:45:00 PM	PDR presentation	1:24:00	8:41:00
12/8/2022	4:36:00 PM	5:01:00 PM	PDR presentation	0:25:00	9:06:00
12/9/2022	8:30:00 AM	9:30:00 AM	nosenchuck meeting	1:00:00	10:06:00
3/1/2023	8:00:00 PM	12:30:00 AM	fried the teensy 4.1	4:30:00	14:36:00
3/2/2023	10:00 PM	12:00:00 AM	started looking for materials	2:00:00	16:36:00
3/2/2023	8:35:00 AM	9:41:00 AM	BoM sheet	1:06:00	17:42:00
3/2/2023	11:26:00 AM	1:16:00 PM	BoM sheet	1:50:00	19:32:00
3/2/2023	4:55:00 PM	5:49:00 PM	BoM sheet	0:54:00	20:26:00
3/3/2023	4:30:00 PM	4:40:00 PM	BoM sheet	0:10:00	20:36:00
3/5/2023	9:00:00 AM	12:00:00 PM	started modeling the eye, settled on dimensions	3:00:00	23:36:00
3/5/2023	8:00:00 PM	9:00:00 PM		1:00:00	24:36:00
3/5/2023	3:34:00 PM	5:03:00 PM	laid out components	1:29:00	26:05:00
3/6/2023	4:20:00 PM	4:27:00 PM	More BoM and ordering	0:07:00	26:12:00
3/6/2023	9:12:00 PM	11:39:00 PM	put the battery holder in the assembly	2:27:00	28:39:00
3/7/2023	10:45:00 PM	1:24:00 AM	modeling linkages based on instructables	2:39:00	31:18:00
3/8/2023	8:53:00 PM	12:00:00 AM	eyeball_asm_draft1 (first draft with the webcam determining the dimensions)	3:07:00	34:25:00
3/8/2023	8:24:00 PM	11:42:00 PM	refining model up to making stl for printing the next day	3:18:00	37:43:00
3/9/2023	9:51:00 PM	11:30:00 AM	nozzle 0.4mm troubleshooting	13:39:00	51:22:00
3/9/2023	12:45:00 PM	1:30:00 PM	first 3d print started (failed later at night)	0:45:00	52:07:00
3/9/2023	8:48:00 PM	10:34:00 PM	modifying main support	1:46:00	53:53:00

3/11/2023	10:26:00 PM	10:52 PM	Ordering components	0:26:00	54:19:00
3/15/2023	7:39:00 PM	12:25:00 AM	cleaned up first printed parts and figured out 5-40 screws work well as pins	4:46:00	59:05:00
3/16/2023	11:15:00 AM	1:52:00 PM	worked in conference room on support block	2:37:00	61:42:00
3/16/2023	3:15:00 PM	8:45:00 PM	finished up support block and set it up to print	5:30:00	67:12:00
3/17/2023	10:45:00 AM	11:45:00 AM	picked up printed parts and cleaned them	1:00:00	68:12:00
3/17/2023	2:00:00 PM	6:00:00 PM	assembled and printed new parts	4:00:00	72:12:00
3/17/2023	7:50:00 PM	11:31:31 PM	created first full prototype	3:41:31	75:53:31
3/18/2023	10:00:00 PM	12:00:00 AM	sorting out time sheet	2:00:00	77:53:31
3/19/2023	7:57:19 PM	1:00:00 AM	got the camera screw holes correct (yes it took 5 hours)	5:02:41	82:56:11
3/20/2023	2:00:00 PM	3:00:00 PM	cleaned up head v2 parts, reprinted eye because of wrong dimensioning on camera holes	1:00:00	83:56:11
3/20/2023	4:20:00 PM	6:39:30 PM	designed new servo mount	2:19:30	86:15:41
3/20/2023	8:03:59 PM	11:32:43 PM	decided color scheme, modeled outer shell, made support block connections	3:28:43	89:44:24
3/21/2023	12:11:30 PM	1:08:05 PM	worked on body	0:56:35	90:40:59
3/21/2023	9:45:31 PM	12:57:59 AM	finished body, placed baseplate, almost finished the servo mount block, still have to work out how to screw shell pieces	3:12:29	93:53:27
3/22/2023	1:04:04 PM	6:03:50 PM	wiring for slip ring, body connector to base	4:59:47	98:53:14
3/22/2023	7:31:56 PM	8:54:15 PM	started on baseplate with ball bearing	1:22:19	100:15:33
3/23/2023	10:30:00 PM	12:15:09 AM	discovered lazy susan bearing, offset assembly from center of gravity to make space for slip ring	1:45:09	102:00:42
3/24/2023	1:00:00 PM	2:30:00 PM	CNC'd robot body with the help of Al	1:30:00	103:30:42
3/24/2023	3:30:00 PM	6:30:00 PM	did some stepper motor modeling, holes in acrylic plate	3:00:00	106:30:42
3/25/2023	1:30:00 PM	5:30:00 PM	gear modeling	4:00:00	110:30:42
3/25/2023	7:30:00 PM	9:00:00 PM	modeled and printed base with gear	1:30:00	112:00:42
3/26/2023	8:00:00 PM	9:00:00 PM	widened holes for magnets	1:00:00	113:00:42
3/28/2023	8:32:28 AM	9:40:24 AM	magnet tests, reprinting	1:07:56	114:08:38
3/28/2023	10:10:00 AM	11:40:00 AM	laser cut the baseplate	1:30:00	115:38:38
3/29/2023	8:30:00 AM	9:30:00 AM	made drawing for brackets	1:00:00	116:38:38
3/29/2023	12:30:00 PM	2:55:00 PM	milled and drilled brackets	2:25:00	119:03:38

3/29/2023	4:20:00 PM	6:30:00 PM	countersunk and cut screws and glued magnets	2:10:00	121:13:38
3/29/2023	7:30:00 PM	11:15:00 PM	assembled full assembly for the first time	3:45:00	124:58:38
3/31/2023	3:30:00 PM	6:30:00 PM	crimping slipring	3:00:00	127:58:38
4/3/2023	4:30:00 PM	12:47:00 AM	started python coding, gave up on slipring	8:17:00	136:15:38
4/4/2023	7:45:00 AM	9:30:00 AM		1:45:00	138:00:38
4/4/2023	4:45:00 PM	6:00:00 PM		1:15:00	139:15:38
4/4/2023	7:30:00 PM	10:07:37 PM	got face_recognition working in python	2:37:37	141:53:16
4/5/2023	8:45:00 PM	9:50:00 PM	accelstepper investigating	1:05:00	142:58:16
4/5/2023	2:00:00 PM	3:00:00 PM	serial coding	1:00:00	143:58:16
4/5/2023	9:00:00 PM	11:40:00 PM	got stepper moving	2:40:00	146:38:16
4/6/2023	9:00:00 AM	9:50:00 AM	accelstepper working	0:50:00	147:28:16
4/6/2023	8:00:00 PM	11:45:00 PM	pySerialTransfer discovery	3:45:00	151:13:16
4/7/2023	1:00:00 PM	2:30:00 PM	pySerialTransfer echo program	1:30:00	152:43:16
4/8/2023	9:00:00 AM	12:30:00 PM	servo send/receive script	3:30:00	156:13:16
4/8/2023	1:00:00 PM	7:16:43 PM	used struct printing to diagnose why the servos were skipping because I can't print anything else out	6:16:43	162:29:59
4/8/2023	7:45:00 PM	11:53:37 PM	fried my teensy	4:08:37	166:38:36
4/9/2023	10:30:00 AM	12:30:00 PM	actually teensy magically started working again, coding	2:00:00	168:38:36
4/10/2023	2:00:00 PM	6:30:00 PM	got face following code working with servos	4:30:00	173:08:36
4/10/2023	10:00:00 PM	12:15:00 AM	gluing on eye support	2:15:00	175:23:36
4/11/2023	8:00:00 AM	9:00:00 AM	nosenchuck meeting, finished physical model	1:00:00	176:23:36
4/16/2023	11:00:00 AM	1:00:00 PM	added back old step stick, Bondo prepped parts for sanding	2:00:00	178:23:36
4/16/2023	1:30:00 PM	11:45:00 PM	sanding and priming	10:15:00	188:38:36
4/17/2023	4:30:00 PM	6:30:00 PM	final assembly	2:00:00	190:38:36
4/18/2023	7:00:00 PM	10:08:40 PM	assembly and testing	3:08:40	193:47:16