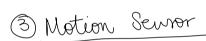
SOFTWARE DIAGRAM: Notes: X denotes an amount of time that will be specified at a later stage (through experience). * denotes the different clarer (ree following pages). There are two options for how the system will run regarding continuity (option) and

(Option 2). Potential additions to the code are written in gray. (from motion seuror*) (wer input) & Motion=0 Option 1 Motion = 1 Servo*1 turns - Wait for - Servo 1
90° X records - turns back 90° Wait for button* (marble input) > Button=1 Button = 0] Potentially: ask user "Are you ready to play _? LED display* and give some rimple nustructions. Ideally turns on no user ruput needed; game stants after X time allow movement (mer input) > Toystick* LED game Stants if lost: restant up to 3 times wait for finish Option 1: Servo 1 closes after X seconds & Motion Sever (MS) is located such that when Finish=1 the marble goer past it (as It returns to the if wow Stanting parition) Servo 1 opens again (or if lost 1 stimes) 4) Question: does the MS ignore water after X times as when the ever asks Servo 2 turus 90° for the system to stop (user right, perhaps temorgh toystick / holding trand over remor, etc. / austher blutton) Option 2: Servo 1 stays open. It closes Wait X seconds either after X rounds or when the wer asks for it to stop (through a method Continuous seria mentioned above). The MS is thus placed (consens selt) runs away from the marble path for X records La might be snupler

CLASSES:	
D Servo For: Servo 1, Servo 2 & Continuous Servo D Button	evill have to undify the parameters for the project, but the code was given in class.
3) Nation Seuror 4) Layrtick 5) LED display	



Wait for \leq Mation = 0

Wation = 1

Call Serva 1

to start

Q: does the MS ignore further movement if The just sustancted Servo 1 to start? (eg: set X secs)

9 Jaystick

Noit for I Button = 1 Button = 0 Wait X (while LED turns on / potentially seconds Wait for wait joi user movement (up, down, left, right) \finish=0 Instruct to Move on LED accordingly

Finish = 1

(5) LED display	
Note: will le the game of	ook more ruto the specifics of uplemented
\ -b	lait for 5 Button=1 utton press Button = 0
ik	splay on potentially what sw desorbed in main SW diagram
if lost: restaut up to 3	Stants LED display, sparts bank when tuput (Tougstick)
times \ w	Joint for Jenish and to fivish = 0 if won (or if lost atimes)
	Turn LED (potential final display off menage)
	Call Servo 2 to start