GAM360 - Minutes

Mid Week Meeting 1 - 13/11/2024

Dan - Present

Alex - Present

Louis - Present

Cas - Present

Ronny - Present

Maya - Present

Viktor - Absent (with reason)

Josh - Present

Dan - researched omni wheels vs meccanum wheels found that omni wheels is the way to go. They are sturdier 10 pound a wheel. **Next step is to get Ben to buy some wheels. Suggest three wheels needs to look into it more.**

Josh - decided to go for linear actuator over a stepper motor with a screw as it does most of the complex features built in so will reduce time of making the actuating. **Next step is to integrate small one into scissor lift and purchase a bigger one.**

Maya - so far done nothing this week. **Next step is to continue with sprint goal.**

Ronny - made a stool to be used for the MVP, **going to start to do the sprint goal assigned.**

Cas - printing models for the early prototypes of the other lifting mechanisms. **Next steps assembling the thing.**

Louis + Alex - so far done nothing, **code the retrieval of data from the app.**

Viktor - **Message from teams:** is there anything new that you want to talk today? Just making sure if it is worth it to go today because I am struggling with money so just to know so I can safe some pounds in transport, if you wanna know how I am doing in the project, right now just fix a bug where there was like a black overlay when you scroll down and now working in a dark mode as well, also gonna look to do the drag and drop thing for the layout.

Mid Week Meeting 2 - 20/11/24

Dan - Present

Alex - Present

Louis - Present

Cas - Absent

Ronny - Present

Maya- Present

Viktor - Absent

Josh - Present

Alex + Louis - not yet done post stuff, attempt coding communication today.

Dan - got Andy to buy wheels going with 3 arrangement and should arrive by the end of this week, if it arrives redesign robot and research movement of omniwheels, new iteration of robot.

Maya - researching component options going to design circuit, get the base done and fusion model sorted for locomotion stuff, new iteration of robot.

Josh - redesigned components based on the linear actuator created components that should be sturdier, when linear actuator arrives plug it in, start looking at swarm centralised behaviour.

Ronny - setup pi, going to refine aruco marker detection.

Mid Week Meeting 3 - 27/11/24

Dan - Present

Alex - Present

Louis - Present

Cas - Absent (appointment)

Ronny - Present

Maya- Present

Viktor - Absent (moving house)

Josh - Present

Josh - made rails for moving part of scissor lift to make it stable, talking to woodlane milling about material for bed of scissor lift.

Maya - pcb stuff for on top of raspberry pi, laser cutting new prototype base today, assembly cost, going to catch up with Cas and check in and help her integrate more into current work.

Ronny - working on bridging gap between the scissor lift and the app, need to work on a server to receive information from the app.

Alex - been working on communication, talk about app design in proposal.

Louis - fixed some bugs on app, setting up server on pi with Ronny.

Dan - pcb stuff and laser cutting new prototype base today.

Investor pitch - usp is ease of use - modularity any number of robots can be connected, the app is user friendly.

Mid Week Meeting 4 - 04/12/24

Dan - Absent

Alex - Absent

Louis - Absent(sick)

Cas - Present

Ronny - Present

Maya - Absent

Viktor - Absent

Josh - Present

Josh - got scissor lift working, need to refine by adding stepper motor mount to the base and getting ben to cut the new rails.

Cas - got the spring mechanism working, new slider design, researching passive hydraulics.

Ronny - got communication between pi and app sending packets with web sockets, gonna create communication from pi to arduino to turn stepper.

Mid Week Meeting 5 - 11/12/24

Dan - Present

Alex - Present

Louis - Present

Cas - Present

Ronny - Present

Maya - Present

Viktor - Absent

Josh - Present

Josh + Cas - got all separate parts for scissor lift ready to go josh just needs to print out the rest of the parts and get it wired up and running, cas is going to work on the top plate to have some sensor for if it touches the table and mounting part for camera.

Dan + Maya - going to fully assemble robot and look into what couplings for the thing.

Ronny - going to write some movement code for the robot

Alex + Louis - set up server database, set up json file transmission and some extra bits and bobs

Viktor - set up a task for him to do drag and drop

Mid Week Meeting 6 - 08/01/25

Dan - Present

Alex - Absent (with reason)

Louis - Absent (with reason)

Cas - Present

Ronny - Present

Maya - Present

Viktor - Absent

Josh - Present

Maya - made pcb soldering up

Cas - working on top part of scissor lift

Josh - helping with top part and going to do research into the new market need to put scissor lift code on github, make final scissor lift assembly

Dan - printing stand offs

Ronny - made some template code needs to be put on git also making new stool

Post Demo Day Meeting - 14/01/25

Dan - Present

Alex - Present

Louis - Present

Cas - Present

Ronny - Present

Maya - Present

Viktor - Present

Josh - Present

Initial next steps:

Scissor lift geared

Camera attach to top plate (maybe pi cam)

Get new encoded motors/consider

Odometry and PID to get robot to move specific distances in x and y

Start communication hub pi5 to robot

Robot handling incoming data from communication hub

Get original location of app working for drag and drop

Robot centering function based on aruco marker

Place chair in grid, send location of chair to pickup and desired location to be placed, robot uses odometry and pid to go to chair position in grid, centers itself with aruco marker, lifts chair and then moves to desired location places it down goes to 0,0.