

Team 13

Project Title: Automated Chess board

Date: 10/17/2021

## Members:

- Luke Dirks
- Nathan Kelly
- Jeet Nair
- David Imhoff
- Nathan Bellows
- Dawson Munday
- Isaac Sachse-

## What we've accomplished in the past week/what we've been researching

-Luke Dirks – I have started doing research into the different microcontrollers and languages we will use for the software side of the project. Additionally, I have started writing a few test programs using stockfish. I have also been done quite a bit of work for the documentation assignments for the project.

-Nathan Kelly - I have researched and ordered hall effect sensors and designed a test setup to test viability.

-Jeet Nair - Starting to look into stockfish and how to use its inputs and outputs to modify the game. Hopefully, we'll be able to do more work in the coming weeks. A lot of stuff we want to do relies on physical construction and materials to arrive to do so.

-David Imhoff - Helped record audio for lightning talk presentation and helped with other required docs for the week. Decided on using an integrated screen for UI, so I've done some research on that. Started looking into stockfish implementation options.

-Nathan Bellows - Helped record audio for the lighting talk. Additionally, help write the documentation for the week. I also did some research into the Stockfish Chess AI.

- Dawson Munday- This past week I was sick with an upper respiratory infection that really knocked me out so I was not able to work on this class much while also having other class exams to tend to

## What we're planning to do in the coming week

-Luke Dirks – We need to finish our design lighting talk and document. I plan on continuing to prototype the stockfish interface. Additionally, once the sensors arrive we will begin testing those as well.

-Nathan Kelly - I plan on testing the hall effect sensors and start the design for application to the project.

-Jeet Nair - We're going to start working on some prototype programs for the Stockfish interface and see how it reacts with a Raspberry Pi. Hopefully, in the near future, we will also be able to make some prototypes for our Hall Effect sensors.

-David Imhoff - Begin testing with stockfish and beginning steps of developing a UI. Need to finish required docs for the week

-Nathan Bellows - I will help design the prototype for the stockfish interface. I will also do some research into the different touch screens we could use for the user interface.

- Dawson Munday - Have been absent from the team so I am going to reach out to see what can be researched or worked on to help the team

-Isaac Sachse- Working with Nathan (and whoever else wants to join) on testing our sensors and building a small scale board to test movement sensing and planning ahead for piece movement.

## Issues we had in the previous week

-Luke Dirks – People are still pretty busy with midterms and interviews. Additionally, the parts we wanted to test haven't arrived yet so we have been stuck waiting for those.

-Nathan Kelly - I couldn't make the meeting due to schedule conflicts.

-Jeet Nair - Midterms made work a little difficult for many of us but overall, no major issues.

-David Imhoff - Some difficulties with scheduling and communication, but nothing major

-Nathan Bellows - We are still waiting on parts to arrive, and we need to make decisions regarding stepper motors and the touch screen.

- Dawson Munday - Was sick with URI, I am about over it now so I hope to be able to be of more help now

-Isaac Sachse- Was in Indianapolis, is now waiting on parts to arrive to begin testing so there is not much work to be done.

