QOSI
Summer 2020
Quantum Chess

This project aims to build a fully functional quantum chessboard, on which two players can play a game.

We will use Pygame to implement the graphical aspect of the board and Q# for the quantum parts.
The code can be run in python by importing qsharp as a python library. More details on doing that can be found here.

Pre requisites

1. Linear algebra
2. Complex numbers

We will be covering the basics of these and their implementation in Q#.

Timeline of the project

Week 1
Getting started with Q#

Week 2
Constructing the board and pieces, assigning allowed moves to each piece

Week 3
Implementing measurements and the quantum moves- split and merge

Week 4
Implementing entangled pieces