

## Project Description

**Group Name:** Five Guys

**Team Members:**

Peter Clukey

Alex Landry

Forrest Swift

Austin Langley

**App Name:**

The Quarto App

**App description:**

An app version of the game Quarto, in which players place pieces on a four-by-four board.

These virtual pieces can have any combination of the following four qualities:

- 1) tall or short pieces
- 2) colored or oppositely colored pieces
- 3) square or circular pieces
- 4) hollow-topped or solid-topped pieces

This app will virtually render the following qualities, as well as allow two players to follow the basic rules of the game. The two players will take turns placing pieces until one of them places a piece such that it completes a row of four pieces with a common quality. This could take the form of a row of four pieces all being tall, hollow-topped, or square, etc.

Like Quarto in real life, the Quarto app has a set of pieces for both players such that both players may use any of the possible pieces with no limitations on qualities for a particular player. In addition, the players cannot select their own pieces to place, it is their opponent who chooses which piece the player may place.

The Quarto app will allow certain variations in rules to suit the player, one of the most common being the winning set of qualities of pieces being in a two-by-two square instead

of a line of four. The app will also be user friendly. What we mean by this is that it will be very straightforward on how to play and what the user can and cannot do. Something like a hint system may be implemented or even a page on the app that will give the user a chance to get familiarized with the game.

Quarto doesn't have many apps based on the board game. There are some basic online websites where you are able to play against an AI or another player. A lot of these applications are very basic and do not have a very good UI system. I've noticed that some are not very straightforward with telling you how to play. One thing that will be important is informing the player what the rules are and how to play the game instead of just assuming the player has that knowledge beforehand. When looking at similar apps they are all very basic and they don't offer much to the user. There are not many apps for this game because it's still a very small board game in terms of user base. When searching for Quarto on the app store you find one app that states it is no longer usable. Our application will have the polish that these other applications lack. They do not seem to be user friendly and offer very little in terms of information about the game. One thing that one of the online applications allows is for you to change the difficulty of the AI player you are facing. This feature is great for users who do not have much experience with the game. Because there are not many apps for this board game. There are not a lot of things to look at but from the few that exist they seem very basic and not well laid out. They are also very outdated when it comes to the layout. One of the biggest improvements that can make our application better than others is having a clean and easy to understand user interface. When I go to these apps and the user interface is not visually appealing it puts me off of the app which is what we don't want to have happen when a user sits down to use our application.