Competitive Analysis

# Description of Your Planned Project

Briefly describe the project you’re planning to work. What is the goal of the game? What are its main features?

The project I will be presenting is a Star-Trek style 3D chess run on PC. Like regular chess games, it involves 2 players, and each players’ goal is to checkmate and win the game.

It has chessboard, chess set models displayed in canvas; movable chess pieces base on game rules; undo latest moves; spinning camera; changeable chess colors and backgrounds. The player can switch in between playing against computer AI or with a friend.

# Evaluating Your Competition

Identify 3 similar projects that already exist. For each competitor project, write a few sentences that describe:

* What the project provides to the user
* What makes this project unique

**3D chess from** [**https://www.sparkchess.com/**](https://www.sparkchess.com/)

This game is built for regular 2D chess, though displayed in 3D space.

It creates a scenario that player can choose opponents (all computer AIs labeled with different names)

It records time spent on each move,

It can restart the game by changing opponents,

It can save/load the game if the player intents to quit in the middle,

It can display hints of possible next moves that causes threats to opponents,

It can change board style.

**2D chess from** [**http://www.springfrog.com/games/chess/3d-against-computer/**](http://www.springfrog.com/games/chess/3d-against-computer/)

This game set is also built for regular 2D chess. However, it can change in between 3D and 2D modes, or display both.

Record a list of moves in unique notation,

Undo moves,

Freedom to choose sides (White or Black),

It can automatically move if the player clicks of a small “I” button on the sidebar,

It can enter move using notation of letters and numbers.

**TriD chess from Google Play: a legit 3D chess run on android**

Splash screen with tips,

Multiple choices possible in game mode: against AI/ Multiplayers/ AI vs AI; level of difficulty,

Chess pieces in red and blue, spinning perspectives,

Shows possible moves, undo latest moves,

Has sound effects.

# Identify Comparison Dimensions

Come up with a list of at least five attributes or features that you want to compare between the competitor projects. These dimensions should be user focused (i.e., something that the user can directly observe or experience).

For each dimension (**rank ordered from most to least important**), provide both the dimension name and why the dimension is important.

Handy features: Whether features such as undo moves, give hints and display a list of moves are useful and easy to recognize

Distinguishable pieces: 3D chess with rendering and shading that distinguishes the chess and board separately

Rotatable perspective: A rotatable perspective gives the player full inspection to the situation of the game and can determine the next move better

Tutorials: help first-time players familiar with the game rules and handy features

UI: Enjoyable UI keeps players interested

# Comparison Table

Fill out the table shown below with the features you identified in the section above.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Handy Features** | **Distinguishable pieces** | **Rotatable perspective** | **Tutorials** | **UI** |
| Competitor 1 | 8 | 9 | N/A | No | 9 |
| Competitor 2 | 4 | 6 | N/A | No | 7 |
| Competitor 3 | 4 | 6 | Yes | Short tips | 4 |

# Summary

Using the results from your comparison, provide a summary of your findings. You should concentrate on

* Features that your project will need to be competitive
* Identified gaps that your project can take advantage of

These current games have a subset of extra features such as undo/redo moves, highlighting possible paths and threats, recording all moves and game AI. These ideas should be taken into consideration when building my game. However, I had a hard time looking for actual Star Trek style 3D chess built on PC, which makes my designed game unique.

The first competitor has very enjoyable UI, and clicking on each square result in highlighting the piece if the square contains pieces.

For the regular 2D games, a lack of tutorial is probably due to popularity of the game and the developers assume players are already familiarized with it. However, apart from simply making the 3D chess follow its own set of rules, I will also display detailed tutorial to the game since the game rules is not something everyone is familiar with.

In addition, I will focus on displaying enjoyable UI since this is a weakness for actual 3D chess. While a 2D mode can be easily displayed with easily distinguishable and pretty UI design, it is not always the case with 3D models. I will build my own models of boards and supporting cylinders connecting the board, while look for online sources of different sets of 3D chess pieces. The background color/image choice is also important. For the 2D sidebar, I should create buttons that can be easily understood and actually aids players.