

## Criterion A – Planning

Total word count (not including success criteria): 330

### Scenario

My client is my Grandfather, David Hague, who is 86 years of age. He has pieces missing from his original chess board game and claims he is slowly finding it harder to remember the moves of each piece and general rules of the chess. It is his one of his favorite games and he would like to still be able to play it with his wife. After discussing this issue with my grandfather over email (Appendix 1) we agreed that the best solution would be to design a simple to use program that would emulate a game of chess. This would be an altered game of chess allowing for easier gameplay, implementing features such as visual indications showing possible moves of selected pieces and the implementation of simpler rules. He also mentioned he would like for the program to be able to inform the user if any of the players is in check or if a checkmate has occurred, since it is hard for him to identify this himself. He would also appreciate the ability to save the layout of game to resume later.

### Success criteria – agreed with my client (Appendix 1.3, 1.4)

1. An intuitive GUI that represents a chess board
2. Incorporates menu screen
3. Straightforward and intuitive interaction with the game (Use of buttons)
4. Simplified version of chess with less rules – Game ends with kicked king or checkmate
5. Will evaluate whether check or checkmate has taken place and inform the user
6. Visually display the possible moves of a piece on the board when it is selected
7. Able to undo moves
8. Include a text field that informs the players about events in the game
9. The possibility to save the layout of the game for later play

### Rationale

I have decided that the product should be a computer program, as it will allow for full customizability of the product and the implementation of all required features.

I have selected Java as the programming language. Java programs are available for use across multiple platforms, ensuring its functionality on my grandfather's computer or tablet. As an OOP programming language, it includes features such as inheritance, which allows me as the creator to save time and avoid repetition in code. Creating an effective GUI can be done easily with use of preexisting libraries such as the Java swing library and the implementation of a GUI is essential since my grandfather is not very familiar with computers.

Other solutions, such as purchasing chess game software, were also considered. However, the provided solution does not involve additional costs and can be customized to the needs of my client.