## **HEX BARON - Extension Tasks**

These challenges are presented without solutions, and offer to further explore and understand the skeleton program.

- 1. Introduce a GOD mode in which resources are infinite for both sides and nobody can die, once exited (using the command "godmode on" or "godmode off") then the game reverts to normal rules and the resources revert to their values before godmode was enabled.
- 2. Create a computer controlled player
- 3. Make the game more user-friendly so that each time any commands are processed a full description is give, e.g. 5 lumber deducted for upgrading PBDS in hex 12, or Serf has two connections from hexes 12 & 17 and was destroyed in hex 20.
- 4. Introduce a new level of upgrade so that pbds and less pieces can be upgraded to super pbds and less pieces for a cost of 10 lumber but will now generate 2 resources for each dig or saw command.
- 5. Introduce a new rule so that connections from your own pieces don't kill you.
- 6. Introduce an assassin piece that can use a kill command once per game but then it reverts to a serf, the kill command will kill the Baron if it is next to it.
- 7. Introduce a poison piece command so that each player can poison one piece per game, if a poisoned piece is killed the victim gains VPs instead of the killer.
- 8. Introduce a random game command from the main menu where the board is randomly sized and resources are randomised (but fairly with suitable rules for distribution).
- 9. Introduce a new blocking/wall piece that requires three connections to kill it (or possibly is also invincible for three turns).
- 10. Change the rules so that the connection check for killing a piece is made after every move, instead of at the end of the turn.
- 11. Add the ability to modify the terrain (for a cost), or have a new piece with this ability.
- 12. Introduce ranged units that have connections only two edges away (instead of one).
- 13. Introduce a mini serf (or pleb) piece that only costs 1 but cannot be upgraded and will be automatically killed if it ends the turn next to an enemy. It also doesn't cost you a piece from the supply chain to spawn.
- 14. Have an advanced game mode whereby there is one trap square randomly on the board and any piece landing in it will be destroyed. Alternatively, give each player the opportunity to plant one trap on any field not adjacent to the opponent's Baron, once per game.
- 15. Change the rules so that you can choose to have an immovable Baron but in return get 1 extra lumber and 1 extra fuel every turn.
- 16. Introduce a game timer so that each player has 180 seconds (or any configurable value using a constant or inputted variable) to enter their moves. Failure to complete the move in time will result in the player forfeiting the remainder of their moves; whatever they have entered so far will be executed (if possible), after which it will become the other player's turn.
- 17. Add hit points for pieces to change the mechanic of when/how pieces are killed.
- 18. Change the game so that the coordinates system is removed and distances are simply counted by the number of hexes that you need to move through. The IDs should remain. The challenge here is working out / maintaining which tiles are neighbours.
- 19. Change the game rules so that the game is terminated immediately if a Baron piece is destroyed. At the moment if Player 1 destroys Player 2's Baron, they still get to play their turn.
- 20. Change the victory rules at the end of the game so that once the game ends, each player gains VP for all of their remaining pieces according to the VP value for those pieces.