# Custom Game Implementation Guidelines

### Final Assignment & Evaluation Criteria

1. General requirements - please refer to the document “Final Project Assignment General Requirements”
2. General statements
   1. Since the Chess game will not be used - all assets and source code associated with it must be removed from the project
3. The game should contain the following features:
4. Minimum required for grade 3.00
   1. Game layout - at least several layers of game objects - background, panels, static objects & moving objects  
      Bonus points for implementing a “dynamic background”
   2. Keyboard & mouse events implemented and handled by some of the game entities. They must act (move, change state, etc...) by some of those events
   3. Implement at least one animation using a timer.  
      Example: move animation, change frame animation, transform animation, etc...
5. Minimum required for grade 4.00
   1. Implement a start screen for your game with two buttons
   2. Button1: Start Game - starts the game from the beginning
   3. Button2: Exit - closes the application
   4. Implement a win condition for your game
   5. Implement a lose condition - it could be based on remaining time, or remaining moves/lives, your character getting defeated, or something else related to your idea
   6. Your game must be self-explanatory about its mechanism - how to move the character/how the game is played in general.
      1. For example - is the character moved with Up, Right, Down, Left keyboard arrows or with the W, D, S, A keyboard keys or using the mouse
   7. Implement dynamic behavior about the lifetime of the game objects.   
      For example:
      1. your character could kill an enemy and that enemy should be erased from the game
      2. Enemies could “spawn” on the game field
      3. Game objects could / power-ups could “spawn” on the game field
6. Minimum required for grade 5.00
   1. If your game could not be easily self-explained - the game mechanism should be explained to the player.
      1. This could either be achieved in “baking” your explanation at the beginning of the game. For example, the first 10 seconds of the game visualize on the screen the controls - then they disappear
      2. or having a separate tutorial page/game section in the home menu
   2. Implement a winner/loser animation
      1. After the game animations are finished you should be returned to the main screen
   3. Implement some more animations of your choice. For example:
      1. Dynamic (moving) background
      2. Increasing/Decreasing the size of your character or the enemies
      3. Adding particle effects (raindrops, snowflakes, etc...)
      4. When your character of enemy gets defeated, they don’t directly disappear, but first show a “dying/defeated” animation
7. Minimum required for grade 6.00
   1. Implement a scoring system.
      1. Your game should no longer have a binary outcome - win or lose
      2. It should contain scores
   2. Implement a Log screen on the side where you see a History of the game
      1. If your game is not suitable for Log screen you can implement a High Score screen on the start screen
   3. Implement a feature to save the current state (progress) of the Game
      1. if your game does not allow not save the current state “right here, right now” - try to save the last “checkpoint”
   4. The start screen of the game should now have the possibility to **Continue/Load** a previously started/saved game (if any)
   5. Implement a dynamic (moving) background.  
      Assets and animations are completely up to you
   6. Get creative!
8. Sky's the Limit
   1. Improve your game as much as you’d like from this point on
   2. Just a reminder to “save” your progress from time to time so you don’t lose it