App 3 Space Invaders Requirements

Gameplay

* A single human player
  + Player can only move side-to-side
  + Player can shoot by pressing ‘space’
  + Name entry used for score keeping
* 5 ships (different skins) for the player to choose from
  + Each ship has the following parameters
    - Shot Spread (weapon type)
    - Shot Speed
    - Shot Power
    - Movement Speed
    - Health
  + Ships are available via an unlock system which is based on lifetime points
    - Ships are unlocked every 5000 points
* Enemies
  + Move from side-to-side shooting the player
  + Enemies can be destroyed by getting shot at
  + Enemies have varying amounts of health
  + Spaceships are spawned in every 1000 points
  + When all enemies are destroyed a new set of enemies spawn
* Powerups
  + Active and Stack until another power up (other than health pickup) is picked up
    - Increase Shot Speed
    - Increase Shot power
    - Increase Movement Speed
  + Lasts for 5 seconds
    - Enemy slowdown
  + Bonus hit (health + 1)
* Players start with 3 lives
  + Every 1000 points player gets an extra life
  + When out of lives the game ends
* Barriers
  + 4 barriers that protect the player from enemy fire
  + Barriers can be destroyed by either player or enemy fire

Menus and such

* Main Menu
  + Start Game
  + Leaderboard
  + Exit
  + Display Lifetime points
* Pause Menu accessed by pressing ‘esc’
  + Resume by pressing ‘esc’
  + Restart
  + Main Menu
  + Exit
* Leaderboard (Main Menu)
  + Top 5 scores displayed as well as a corresponding name for each score
  + Return to Main Menu
* Leaderboard (When Game Ends)
  + If the player score is in top 5, then it will be added
    - Congratulatory text for making top 5
  + Option to return to Main Menu
  + Option to Quit game
* Name Entry Screen
  + Limit names to 9 characters max
    - If over then error message
* Ship Selection Screen
  + Display Ship Name
  + Display Ship Model
  + Display Ship Stats
  + Button to cycle through ships
  + If ships are locked, then a message is displayed
  + Start button to start the game