AP Computer Science Final Project - README Template

-------------------When README is finalized, remove everything above this line-------------------

Eclipse Warriors

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<u>**Introduction**</u>:
[In a few paragraphs totaling about ½ page, introduce the high-level concept of your program. What this looks like depends a lot on what type of thing you are making. An introduction for an *application* will look different than one for a *game*. In general, your introduction should address questions like these:
What does your program do?
What problem does it solve? Why did you write it?
What is the story?
What are the rules? What is the goal?
Who would want to use your program?
What are the primary features of your program?]

   Our program runs a battle game where two players fight to see who the better fighter is. Solve the mystery of the chosen one who is destined to win the battle. See the breathtaking game written by Frank An and Ishaan Musunuri and continue on this adventure to be the greatest fighter among your friends and other players as well. The rules of the game are simple, two players are given playable characters that can run and jump and sprint, use the characters weapons and special ability to defeat the other character. Last one standing wins. The goal is to be the last fighter standing with health left (each character starts off with 5 hearts). Pro Gamers would want to use this program to conquer their friends as a way to settle beef, bets, rivalry, and the greatest question of all: who is the better GAMER? The primary features of this game is that there are 3 screens, a screen where a player can choose a weapon and special ability, a screen where player 2 can choose their weapon and special ability, and the battleground screen, where the fun begins.

<u>**Instructions**</u>:
[Explain how to use the program. This needs to be **specific**:
Which keyboard keys will do what?
Where will you need to click?
Will you have menus that need to be navigated? What will they look like?
Do actions need to be taken in a certain order?]

Players will have the option to look at the instructions, or to begin playing the game.

Players must choose two characters from the starting screen. Different characters will have different abilities such as attack power, the type of special move, and the speed.

After players choose, they will be transported to a battlefield where they will use their chosen characters to fight each other .

Goal of the game is to defeat your opponent.

Players will be able to punch, and use a special move. The ==special move== will be limited.

Once there is a winner, there will be a pop up stating the winner, and giving the players the opportunity to play another game.

Controls:

- Player 1:
    - W-move up
    - A - move back
    - D - move forward
    - E - ==special move== (3 uses per game)
- Player 2:
    - Up - move up
    - Left - move back
    - Right - move forward
    - Enter - Special Move (3 uses per game)

Features List (THE ONLY SECTION THAT CANNOT CHANGE LATER):

Must-have Features:

[These are features that we agree you will *definitely* have by the project due date. A good final project would have all of these completed. At least 5 are required. Each feature should be fully described (at least a few full sentences for each)]

- Map/Arena - The arena the characters play in and fight in
- 2 Characters - The characters that the two players control to fight each other's characters that can spawn multiple at a time on screen
- Pop Up Instructions - And instructions screen that the user can use to figure out the instructions for the game
- Special Ability, the players have the ability to have the user-controlled do a special ability which makes the character invisible to the other character for 5 seconds
- Screens - The screens are the screens needed to make the game work, including the start on with instructions button, players get to choose what character they want, and the special ability they want and the winner screen which asks if they want to play again.

Want-to-have Features:

[These are features that you would like to have by the project due date, but you're unsure whether you'll hit all of them. A good final project would have perhaps half of these completed. At least 5 are required. Again, fully describe each.]

- Multiple Characters - We want different characters that move slightly differently, special ability is different, etc, instead of just a different skin for each character.

- Different special abilities - Different special abilities that can damage the other characters and help your current character in different situations. Besides invisibility we also want to add
- Attack Feature - Ability to attack other characters with a button press besides solely counting on the special ability to deal damage to the other player.
- Different Maps - Besides the main map, users can play on a variety of maps that can do different things with different terrains that make it better suited for different characters. These maps can
- Animations change - Complex animations when the character does certain actions like cut, attack, spring, etc.

Stretch Features:
[These are features that we agree a *fully complete version of this program would have, but that you probably will not have time to implement*. A good final project does not necessarily need to have any of these completed at all. At least 3 are required. Again, fully describe each.]
- AI characters - Play the Warrior Game against the PC with AI used by the PC to control the various characters, as if the person is playing against another person.
- Characters Talking - When a character takes damage, dies, wins, etc. the character can play a previous recorded sound effect to make the game more funny for everyone playing.
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<u>Class List</u>:
[This section lists the Java classes that make up the program and very briefly describes what each represents. It's totally fine to put this section in list format and not to use full sentences.]
- Main
- DrawingSurface
- Character
  - Bob
  - Steve
  - Jeff
- Map
- Screen
  - EndScreen
  - Map
  - Menu
  - ScreenSwitcher
  - StartingScreen

<u>Credits</u>:
[Gives credit for project components. This includes both internal credit (your group members) and external credit (other people, websites, libraries). To do this:
- Ishaan - UML, README, DrawingSurface, main, StartingScreen, Screen, ScreenSwitcher, Bob

- Frank - README, EndScreen, Map, Mario, Weapon, Sprite, Instruction
- Give credit to all outside resources used. This includes downloaded images or sounds, external java libraries, parent/tutor/student coding help, etc.]