

Final Project: Game Program

Prompt:

You will implement a basic RPG game with three characters types (wizard, warrior, and an additional one of your choice). You will implement the possibility to play a game, in which two characters will fight each other.

The Warrior character fights enemies with a Weapon of choice. Branding a weapon costs stamina. The Wizard character fights by casting spells. Spells inflict damage and require mana to be cast.

Design Requirements:

- Implement Character Class.
 - Create base Character class.
 - Name (you want to give your characters a cool name).
 - Race (you want to specify if your character is a human or a an elf, etc).
 - Level (the higher the level the better the player).
 - Health (health points your character have).
 - Each character has the ability to print out its information.
 - Each character has the ability to attack.
- Implement Warrior Class (inherits from Character)
 - Name, race, level, and health.
 - Weapon (name of the weapon, how much damage it causes, and how much it costs to use it).
 - Stamina.
 - Active weapon (you want to know which weapon you are currently using)
 - Equip weapon (assigns the warrior's active weapon).
 - Attack (reduces that opponent character's health based on the active weapon's damage).
- Implement Wizard Class (inherits from Character)
 - Name, race, level, and health.
 - Spells (list in which each spell contains: its name, how much damage it causes, and how much mana it costs).
 - Mana.
 - Number of spells (you want to know how many spells you have)
 - Add spell (adds a new spell to the wizard)
- Implement character of your choice (inherits from Character)
 - Name, race, level, and health.
 - Be creative! You get to decide what this character looks like and how it fights.

Technical Requirements:

- Must use inheritance.
- Must use more than 3 classes.
- (Bonus) Use polymorphism.
- (Bonus) use text styling (ASCII) to create an aesthetic menu system
- Use comments in your program to explain what each class/section of code does what.

Submission:

- 1–2-page report explaining how the program was designed, what classes were used, and the instructions to operate the program.
- Source code.