

Backend Interview Task

Technology requirements:

- The application has to use:
 - NodeJS or TypeScript

Task name: Weapon Shop

Task:

Your task is to create 2 entities which will work together to create a functioning shop which sells weapons to adventurers.

Characters should be split into 3 types: Warrior, Wizard, Rogue

Every character should have the following traits(as initial values use what suits you):

- Health
- Mana
- Strength
- Ability power
- Agility
- Starting money
- Current Items Should be an empty array at first

Characters should be able to do the following:

- Tell us their current stats.
 - The stats should be modified by the items stored in the Current Items array
- Tell us what kind of items they have.
- See what shops offer.
 - When a character enters a shop the shop should display what items are for sale

Character has entered the shop:

- 1) Sword HP: 10, MP: 5, Str: 14, AP: 0, AG: 3
- 2) Greatsword HP: 15, MP: 0, Str: 20, AP: 0, AG: -3
- 3) Rapier HP: 5, MP: 7, Str: 10, AP: 0, AG: 7
- · Buy items from shops.

 When an item is bought the character's money should be reduced by the cost of the item and the item should be stored in the current Items array

Shops Should be able to do the following:

- Offer items to the characters visiting them. The offered items should be different for every character type(For example a wizard should not be offered warrior items).
- If an item is bought, it should still be offered by the shop.

The items in the shops should have the following traits:

- Name
- Price
- Stats which correlate with what characters have (Health, mana, agility, etc.).

The task does not require it to be interactive, meaning it's not required to setup while loops and await user input. We should be able to write out the following steps:

- 1. Create a character
- 2. Create a shop along with the items which it will be selling
- 3. Send the character into the shop
- 4. Buy an item.
- 5. See the stats.