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| **Requirement** |  | **Answer** |
| General scenario | Description and background | The guild “The Fellowship of Dungeoneers” acts on behalf of adventurers who make their living through adventure. The guild is situated in the city of Redstart which itself is in the county of Fallingwood. The county historically has had issues with people rising from the dead (most often due to unlicensed necromancy) and brigands praying on the lucrative trade route that traverses the county north to south.  Currently guild information is created and stored by an animated skeleton (called Colin) using a mechanical typewriter, but recently someone has found a PC running Windows 95 and is looking to store guild data in a csv format. |
| Class representing a member | Name | Adventurer |
| Description and types of instance variables | 1. name : String 2. race : String 3. class : String 4. status : String (“Alive”, “Dead”, “Undead”, “Not Sure”) |
| Class holding the membership database | Name | Guild |
| Description and type of Instance variable holding data | 1. name : String 2. adventurers : TreeSet(Adventurer) |
| Rationale for choice of collection type. Include details as to whether this is sorted for example. | A TreeSet is used so adventurers can be filtered by ‘class’ and be printed in sort order by ‘name’. Additional methods will be used to update attributes for an adventurer (usually ‘status’), add new ones as they are recruited or remove them.  One restriction will be that there cannot be more than one adventurer with the same *name, race & class* (an alternate option would be to have a unique member number for each adventurer which is also stored to file, and a static variable stored for the total number of adventurers). |