

Adventure Game Assignment /10 C /30 T /45 A/K

The assignment can be completed individually, or in pairs. The assignment is for evaluation.

Fantasy is a functional yet simplified adventure game which needs further development.

1. The game is based on the idea that there exist a land of castles each with a given number of different rooms. Different rooms may or may not contain gold and may or may not contain radiation.
2. A room may also be void of both gold and radiation.
3. Elfs and other creatures (yet to be introduced by you) roam different castles and take some amount of gold where they could find it.
4. Other creatures may choose to take other items or perform other activities (such as destroy items or part of the castle).
5. Elf can only take a certain amount of gold it can carry. **Elves start the game with 0 gold and 100% health.**
6. Occasionally an Elf and its helper can lose some of its health if exposed to existing radiation in some of the castle rooms.
7. Elves and their helpers always state their name and what room they are entering or leaving. Every time an Elf accumulates more gold the gold is added to its total gold wealth.
8. The health of an Elf is always displayed if the Elf was exposed to radiation. Each exposure causes the Elf to lose 10% of its health. At 30 percent the health of the Elf becomes critical as at least 25% health is necessary to return home (away from the castle). The Elf must leave the castle at that point with all accumulated gold it can carry.

Part I Create a UML card for each class provided in the code supplied with the assignment **/10 T**

Part II Expand the storyline by adding locations of different type (**not more castles**), characters involved in the game and actions performed; minimum one of each.

- You must use inheritance AND/OR an interface to add additional data types to your application.
- Include the **improved storyline** in your top comments. **/10 C**
- Create a new UML card for each new class you create.
- Create a UML diagram reflecting the relationship between the different classes in the set. **/20 T**

Ultimate due date Fri, April 21