SOEN 343 - Fall 2020

Exercise 1

Context

Final Fantasy Tactics is a video game released in 1997 which became a cult classic because of its Job System, difficulty, and art style. Considering that the complexity of the Job System is hard for the players to understand, imagine modeling this game by the developers' perspective. In this exercise let's think of how to partially model this game.

Description

The Job System allows characters to be customized. The character starts with the job Squire. He can become a Knight, Monk, or Geomancer. Each job is bounded by pre-requirements.

For example, to be a Knight the player must have levels on Squire; to be a Monk the character must have levels on Knight, and so on. Each job has a specific list of skill the character can learn.

As soon as the character learns a Skill, he can change the job and it will be memorized. As you can see, this mechanic allows great variety for the player. Also, the character has different items he can use, like weapons, armors, and jewelries.

Note that, if the character is deleted (dismissed from your party), the skills he learned will be erased. However, the Job System and the items are not affected.

Task: Create a simplified domain model for the Job System of the game Final Fantasy Tactics described above. Define the relationship and its multiplexity.

TIP 1: Use UML aggregation and composition to stress the requirements between jobs.

Tip 2: Use UML generalization for items.
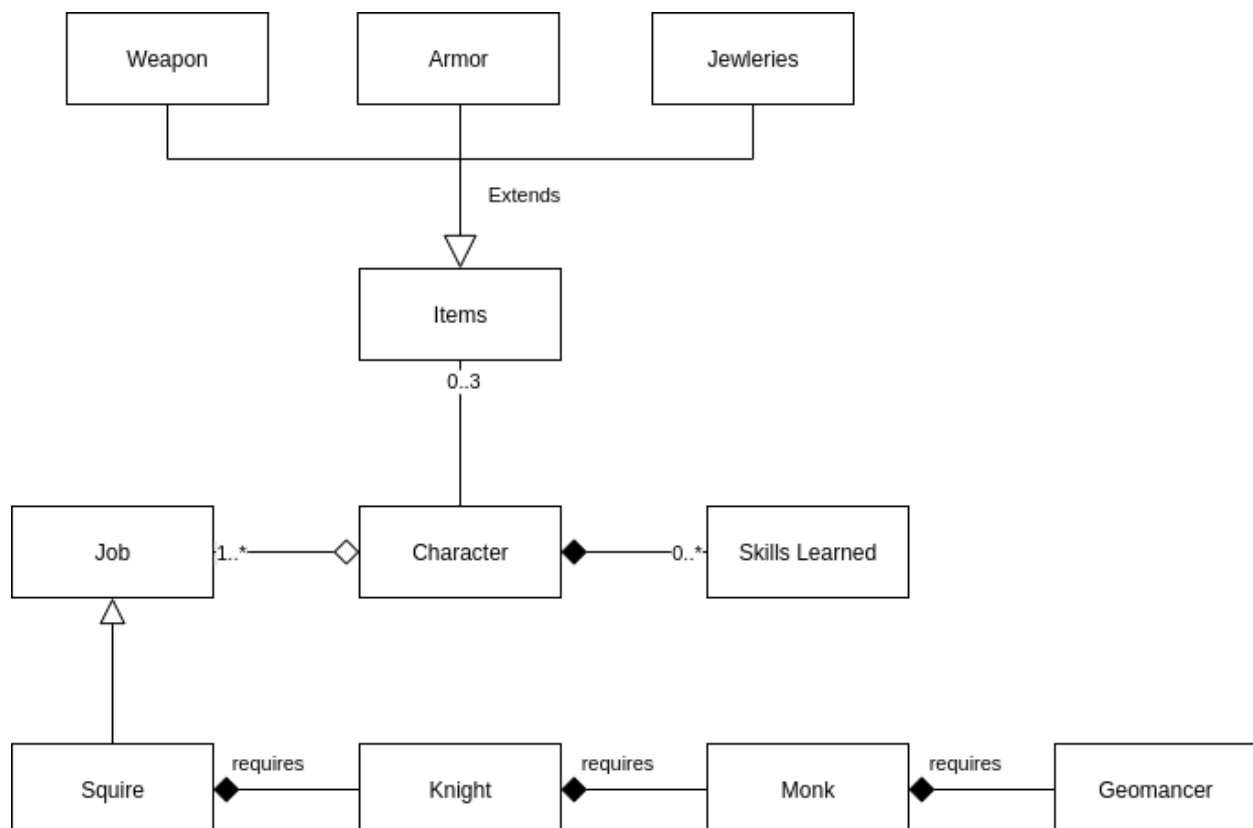
Important points

- The UML model must contain, at least, the following entities: character (player), job, skill, and items.
- By simplified model we mean that it is not necessary to model or the game, but the entities mentioned above.
- If a character is deleted (dismissed), it does not make sense to keep the skills he/she learnt. However, the items should remain.
- There are more than one correct representation as long as you respect the requirements, the relationships and multiplicities of the entities makes sense
- The character has levels in each Job. However, he can have only one Job at the time. Once he learns a Skill from a Job, it remains on the Character, not on the Job. This way he can change to another Job and learn other Skills.