Change Request for the Dragon Adventure Game

The change request identifies three additional new requirements gathered from customer feedback from initial user acceptance testing.

Specific Changes

A number of teams of software design experts have completed versions of the Dragon Adventure Game, as part of the coursework requirements for the course "CSC444F Software Engineering I". A cross section of the customer base has now been shown partial documentation for each of these programs, and has expressed general approval.

Indeed, the customers got very excited at the prospect of many happy hours playing various adventure games, and immediately suggested a large number of modifications that would increase their satisfaction. Many of these modifications have been dismissed by the Software Mediation Executive as too expensive to implement, especially those suggestions concerning colour graphics, ports to various proprietary games consoles, and voice controlled, networked, multi-user systems.

However, after a lengthy period of negotiation with the customers, the SME has identified three major alterations to the original specification that should be considered for version 2 of the Dragon Adventure Game. These are described below. The teams participating in the course are asked to consider each of these alterations carefully, and select one of them to implement for version 2 of the game. Selection can be based entirely on an assessment of the cost to make each change, and the impact the change will have on the overall size and quality of the program. Teams should be careful to document any limitations or assumptions made while implementing these alterations. (NOTE: you do not make any of these changes to your game for the demo!)

1. Levels of play and winning conditions

Some potential users pointed out that they would get bored of the game quickly unless the game got progressively harder the longer you play it, and that there should be some ultimate objective that constitutes winning the game. Accordingly, they have suggested that the game incorporate a number of 'levels' of play, where each level is accessible once the previous level is complete. 'Complete' here means that all the treasure has been collected. At each level of play the game should get harder in some way. This could be achieved by having more monsters, angrier monsters, stronger monsters, etc. Initial game configurations should be checked to ensure that the levels do get progressively harder. An overall objective could be achieved by collecting a set of artifacts that can be used together to construct a special weapon to kill a special monster located on the highest level of the game. Other ways of implementing an overall objective are possible.

2. Map layout checking

Several potential users commented that the current version of the game can construct maps that make no sense. For example, if you move from room A to room B by going north, there is no guarantee that going south from room B will get you back to room A. This makes it hard to keep track of where you are, and very hard to backtrack over the path you have been on. Hence, the maps constructed by the game need to be checked that the rooms do connect up properly. Also, the maps should be drawable on paper, which means that for a particular level, the set of rooms and connections between them should be laid out on a single plane. As an extra challenge, the game should include a maze of corridors, in which the player can easily get lost unless he or she draws a map.

3. New interactions with creatures

Some of the potential users commented that it is a little limiting to have the only possible interaction with other creatures in the game being to fight them. Given the current media debate about violence in movies and computer games, these users would like to see more creative forms of interaction with creatures. An obvious suggestion is to allow the player to buy and sell artifacts to other creatures. Some rooms in the game could be shops, and the creatures in them shopkeepers, who will sell the artifacts in the room for particular prices, and may even be willing to bargain over the prices. Other creatures may just be quite happy to buy artifacts from the player, or to sell artifacts to the player. This modification will require additional dialogue handling to allow the player to talk to creatures in order to make trades. It may also require new actions to cover play possibilities such as stealing artifacts from creatures or shops, and for shopkeepers to challenge the player if the shopkeeper thinks the player has stolen anything. The shopkeeper might give the player a chance to pay, or might not, depending on the shopkeeper's predilection. Of course, some shopkeepers might falsely accuse players of theft!