DUNGEONS & DRAGONS

Exercise for units 4 to 5

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1. SRS.

1.1 Introduction.

We are planning to implement a mobile video game to play Dungeons & Dragons. In this game there are two player roles:

- The Dungeon Master, who is in charge of telling the story and showing each player their current situation and options. For instance, he must tell if any player is in front of a monster, or trapped in a dungeon, and also tell him the consequences of his/her actions
- The "normal" player, who just throw the dice, move his/her player and responds to the questions asked by the Dungeon Master according to his/her current situation.

At the beginning of the game, each player must choose his/her role. Only one Dungeon Master is allowed, and up to 4 normal players. The Dungeon Master starts by explaining the initial situation of the story, and chooses one "normal" player to start the game. The rest of players are assigned their turn sequentially and automatically.

In each turn, a "normal" player must throw the dice, move the player and wait for the Dungeon Master to give him/her a message. This message is about a fight against a monster, or a possible escape from a horrible situation. The Dungeon Master must inform the player about the minimum score that he/she must get with the dice in order to go on. Then the player must throw the dice to face this situation, and if he/she scores at least the number of points asked by the Dungeon Master, then he/she keeps playing. Otherwise the game will show the message "You died", and the player finishes the game.

This game goes on until every player is dead, or one of them passes 10 rounds with the Dungeon Master. Then, this player receives a "You won" message.

It is expected to be a very popular video game, so we need to have several servers to connect the players without losing availability. Also a huge Oracle database will be needed in order to save the games.

Users are asked to register at the beginning of the game, with an e-mail that must not be previously registered, and a password, which will be encrypted in the system for security reasons. The first time we log in, the mobile application must be able to remember the login so that we don't need to do it again.

1.2 System requirements.

- Several servers: needed to connect the players without losing availability, because it is expected to be a very popular video game.
- Huge oracle database: will be needed in order to save the games.

1.3 Functional requirements.

- Registration: Users are asked to register at the beginning of the game, with an e-mail
- Login: If they are registered, they can login.
- Email checking: Registration e-mail that must not be previously registered
- Remember login: The mobile application must be able to remember the login so that we don't need to do it again.
- Rol selection: At the beginning of the game, each player must choose his/her role. Only one Dungeon Master is allowed, and up to 4 normal players.
- Initial situation explanation: The Dungeon Master starts by explaining the initial situation of the story
- Player's order setting: The Dungeon Master chooses one "normal" player to start the game, the rest of players are assigned their turn sequentially and automatically.
- Dice throwing: In each turn, a "normal" player must throw the dice.
- Player's caracter movement: In each turn, a "normal" player moves the player and wait for the Dungeon Master to give him/her a message.
- Messages delivery: Dungeon Master to gives the player a message about a
 fight against a monster, or a possible escape from a horrible situation and
 informs the player about the minimum score that he/she must get with the dice
 in order to go on.
- Display you died/you won: If the score is too low to accomplish the
 action, the game will show the message "You died", and the player
 finishes the game, otherwise, when one of the players passes 10 rounds
 with the Dungeon Master. Then, he receives a "You won" message.

1.4 Non-functional requirements.

 Password encryption: passwords will be encrypted in the system for security reasons.

2. USE CAUSE DIAGRAM.

