Health care administrators must be lifelong learners, as the healthcare system is under constant change. Gaming technology aims to employ game mechanics and game thinking to change the process of how people learn. The research project involves acknowledging factual evidence of health care administration research and coupling it with gaming technology as the educational medium. This is all done in order to facilitate learning and manage a safe patient care environment.

**Background**

- Gamification offers several effective ways to motivate users into action such as challenges and rewards thereby motivating people to achieve their goals.
- In a Role Playing game people assume roles of a character in a fictional setting and hence take responsibility of acting out those roles within a narrative framework.

Example scenario of our RPG in a hospital setting:

Sarah Smith, is in her office. She opens a folder labeled medication administration.

Kimberley Jones, the chief nursing officer of the hospital enters the room.

I need to know how many patients are on antibiotics for a project.

We have developed a computer simulation [game] that prepares the administrator for a variety of challenges they face in day-to-day management.

- One of these challenges includes the effectiveness of hand hygiene program.
- The role-playing 2D game (2D RPG) we developed involved various decision-based questions within the game allowing the user to deeply involve, analyze and make decisions.

C# code, Piskel, Tiled, Medibang, and Unity software used.

**Objective**

- Our goal is to attain safe patient care by education people the importance of hand hygiene program.
- We are also looking forward to spread awareness about gamification for education purposes by employing technical game mechanics and branching consequences to study real life cases and also solve various problems.

**Methods**

We conducted a focus group of several undergraduate students majoring in healthcare administration to play the game.

Through this interface we noticed that there are more interactions and immense thought process while they were playing.

Therefore it was surmised from the feedback that if people are more engaged they are likely to learn more.

Music and the art of the game contributed to players motivation.

Decision points engaged the player.

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**Results/Discussion**

- We have developed a computer simulation [game] that prepares the administrator for a variety of challenges they face in day-to-day management.
- One of these challenges includes the effectiveness of hand hygiene program.
- The role-playing 2D game (2D RPG) we developed involved various decision-based questions within the game allowing the user to deeply involve, analyze and make decisions.

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