
Ebola Clinic

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Abstract

Games are a solid medium to spread awareness. It is easier to convey messages and thoughts via games because they are fun and exciting. *Ebola Clinic* communicates the seriousness of the disease and urges

players to donate for the cause in an interactive way. It also showcases the difficulties involved in managing an Ebola camp.

Author Keywords

Health; Ebola; Donation; Aid Workers; Game

Introduction

Ever wondered what causes lack of funds even when there are numerous organizations donating money for Ebola? What are the costs involved in running an Ebola camp? How difficult is it for the Aid workers to keep themselves protected from Ebola.

Ebola Clinic answers these questions in the form of a game. By playing the game, the player will attempt to save as many Ebola patients as possible and prevent the Aid Workers from getting infected. Every action in the game costs money, hence every time the Aid worker wears/removes a suit, it costs money. Every time a patient is detected for Ebola, it costs money. Once the money bar reaches zero, the player will not be able to carry out any actions and will see the patients dying due to insufficient funds. The game will continue to play until a donation screen pops up informing the players that they can make a change if they donate. The game poses ethical challenges to the player where the player has to choose between saving the patient or the Aid worker. It makes them realize how important it is to donate if Ebola needs to be eradicated.

Methods

Since this game was developed as part of our Rapid Prototyping class at The University of Utah, we were told to develop the game using the Unity3D game engine. To outline the exact map of an Ebola Camp we referred the below infographic from "Doctors without borders" website.

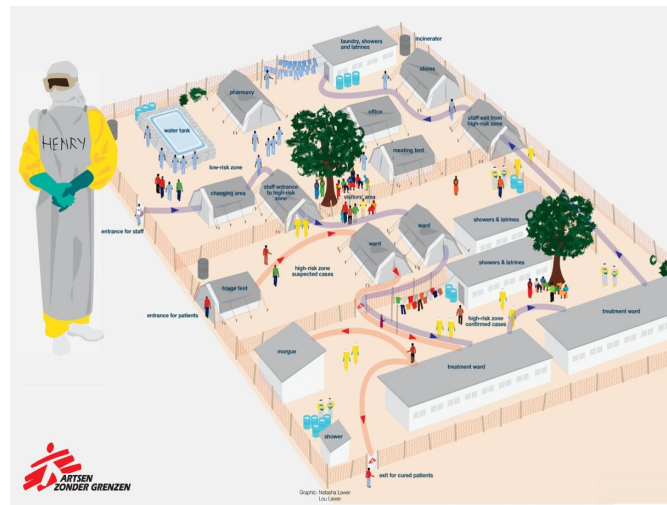


Figure 1: Ebola Camp

We then laid down the minimal version of the map in Unity by picking only the crucial parts of the map such as the Detection ward, Suit up and Suit down room for the Aid workers and the Treatment ward.

Player interacts with the game through point and click using mouse. Whenever the player selects a patient or an Aid worker, the wards to which he can go are highlighted. He then clicks the respective ward and the patient/ aid worker travels there automatically. We achieved the movement using Unity's Navmesh feature.

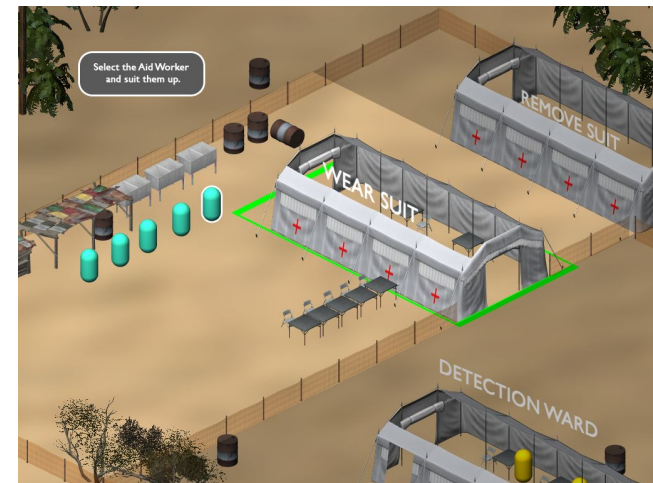


Figure 2: Aid Worker selected and respective ward highlighted

To indicate that the money is being deducted for the player's every action, a dollar sign flies out from the target ward and the Money bar present at the top gets deducted.

Number of Aid workers in the game is limited to 5 and the patients are spawned at regular intervals. The patients can be clean or infected. Infected patients have their health bar hidden which gets exposed once they are detected for Ebola. The patients' health bar continuously decreases hence the player should make sure that he/she detects patient for Ebola and treats them as soon as possible.



Figure 3: Patient & Aid Worker health

After the Aid workers suit up, they too get a health bar which is nothing but the suits health. If it runs out, the aid workers themselves catch Ebola and turn into a patient.

Once the player has moved both the patient and the Aid worker to the treatment ward, the patient's health bar starts increasing meaning his health starts improving but on the other hand the Aid workers suit health starts decreasing. The more time the Aid Worker spends with the patient, the more his suit shield starts to decrease. Hence, the player is supposed to lead the worker to the Remove suit ward before the suit health is exhausted.

When the money bar reaches a specific low, random events of donation are displayed to the user in the form of notifications. These notifications add some money to the money bar so that the player can continue playing. But, the purpose of these notifications is only to make the player aware how donations help in fighting Ebola. The donation popup is shown when the player has no more money to spend. It contains links to the organizations which donate money to the bodies that are fighting against Ebola.



Figure 4: Donation Popup

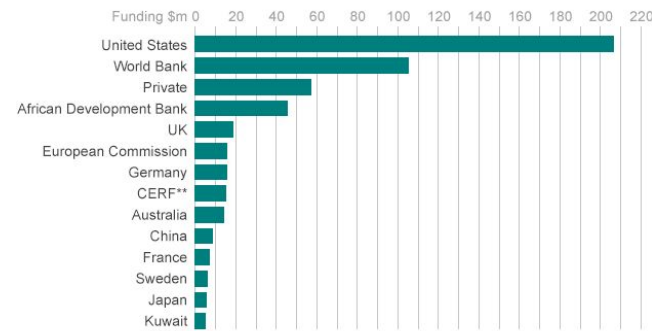
Findings

We started building the game merely as a training tool for the Aid workers to assist them in teaching various precautionary measures against Ebola while they were out in the field treating the Ebola patients. But as we researched over the issue, we came across more serious concerns such as the mismanagement and the issue of lack of funds.

According to USA Today, treating an Ebola patient in the U.S. hospitals costs \$25,000 to \$50,000 a day. Roughly about \$155 million have been spend with funds coming from neighboring countries, private firms and individuals according to the data collected by Financial Tracking Service(FTS). If the disease is not controlled in next 2 years and spreads to the neighboring countries beyond Liberia, Guinea and Sierra Leone, it can cost the world about \$32 billion, the World Bank suggests.

Major humanitarian pledges

Aid requested **\$988m** Donated so far **\$377m (38%)** Pledged* **\$217m**



*As of 17 October **Central Emergency Response Fund

Figure 5: Worldwide Donations

In November 2014, Aid workers at Sierra Leone went on strike over unpaid risk allowance promised by the government. Sheldon Yett, UNICEF's lead man Liberia is finding it difficult to get the Aid workers due to the risks involved.

The reason Aid workers catch Ebola is due to the poor sanitation facilities, unhygienic environment, lack of clean suits and gloves. This can prevented if there were sophisticated Ebola treatment facilities which is only possible with more funds.

Conclusion

We believe that *Ebola Clinic* is a not just game but a medium to make people aware of the devastating situation of Ebola camps in South Africa. Playing this

game will make the player realize how crucial it is to donate.

Acknowledgements

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