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Virtual Reality Game for Falconry

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Traditions and culture play a major role in our society, as they are the source of a person's pride and honor. One of Qatar's National Vision 2030 pillars that relates to the social development aims at preserving Qatar's national heritage. Thus, from this perspective, an innovative idea to use Virtual Reality (VR) technology to preserve traditions evolved. The game simulates the genuine Qatari Hunting Sport, which is considered as one of the most famous traditional sports in Qatar. However, practicing this sport is very expensive in terms of time, efforts and resources. Since this sport is challenging physically, only male adults can join. This project will not only preserve the traditional sport from extinction, but will also allow children from both genders to participate in it. The game will be an innovative means to help spreading Qatari heritage by commercializing it to the world. Moreover, it will help to learn the rules of such a sport in a safe and entertaining environment. The game is one of its kind since it is merging technology and heritage at the same time. The game is a virtual reality game that teaches younger generations about their antecedents' pastimes. It is a simulation of traditional falcon sport that will teach children, step by step and in an attractive manner, the basics of the sport like holding the falcon, making the falcon fly, and much more. In addition to that, we are cooperating with a hardware team from computer engineering that is working on customizing a glove that will ensure total immersion of the player in the game by making him feel pulled whenever the falcon is on his hand and release the pull when the falcon is not. Another main idea behind this project is to develop a strong relationship between the Qatari people and their heritage, which would then be more accessible throughout the year, instead of only special occasions. It will also help expats in Qatar to explore such an extraordinary heritage game on national events like national day, sport day... This project stands out with its original idea and captivating implemented features like the

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desert environment, the realistic audios, the visual effects, the gameplay... The game in not limited to only visual effects, although it is a key element, yet behind it countless algorithm implementations and deployment processes. It was crucial to conduct an ethnography study to accurately simulate the game by visiting Qatari society of AlGannas a specialist meeting with a specialist mentor to know more about the hunting sport in Qatar, and collecting more information about different falcon species in the state. This game can serve as a great ambassador of the Qatari falconry hunting sport in local and international events. Falconry is not limited to Qatar. Since 2012, this sport has been considered as an intangible cultural heritage of humanity according to the UNESCO. We tried to customize the game to make it exclusively designed for Qatar by adding features that only Qatari hunters do like holding the falcon on the left hand only.