

# Horrors or Hamilton AR Experience



## What?

Hamilton Horror AR is a dynamic, interactive augmented reality experience combining LARP, escape rooms and Pokémon-Go style game play, inspired by the history of the atmospheric ruined castle at Manorhamilton in rural Ireland!

## How?

In the summer of 2018, Virtual Reality Ireland created an interactive and innovative gameplay experience combining concepts from Live Action Role Play (LARP), escape rooms and augmented reality. The project was built for a tourism experience to take place at an impressive castle ruin, Manorhamilton castle, in the rural countryside of Ireland.

We worked with both a local historian, Seosamh Mac Muirí, and writer/director SORCHA HEGARTY to create 5 x 3 minute scenes, capturing story moments from the life of the original landlord and plantation owner, Sir Frederick Hamilton, who built the castle circa 1630's.

The initial MVP (minimal viable product) was a straight-up storytelling augmented reality application (a way to 'scale Living History experiences'), however on play testing, at the site with stakeholders, it became clear that the end-to-end user experience needed to be more dynamic, interactive and dramatic.

From looking at the stories of Frederick Hamilton's life, as he is remembered in folklore and at the historical context of the time period, it became clear that the horror genre was particularly apt for this more creative interpretation.

Sir Frederick himself in popular memory was a cruel and vicious man and lived in a violent time which was riven by bloody rebellions as the British crown began to make its first attempts to colonise the Island of Ireland.

Set against the backdrop of this incredibly picturesque ruin, players are guided by a magic mirror (an iPad in disguise!), to discover the ghost of Sir Frederick Hamilton. Prompted by the player roles they are given on entry, they anger the ghost, and must then find a way to break the curse and banish Sir Frederick in order to escape the castle.

To achieve this, we created video content by filming our actor, Neil Flemming in a green screen studio, in historically accurate costume, as the character of Sir Frederick. The first shoot was the standard story-telling iteration, and once we decided to proceed with the horror genre, we filmed the character again with full horrific prosthetic makeup, wielding an axe and gesturing to a noose hanging from the virtual ceiling.

In the post production process, the filmed character was combined alongside animated CG (computer graphic) assets such as a lavish banquet table, a looming gallows and an exploding cannon.

It was key to the design that the 'tech' elements would be hidden as much as possible, so that the experience feels magical and not technological, and lets the audience buy in to the enchanted world. Our prop maker, Sonia Haccius, created a bespoke case for the iPad to fulfil a complex brief – weatherproof, looks like a decorative mirror, encase a small Bluetooth speaker and still provide access to all buttons, charging port etc.

The experience begins with Áine, the spirit and voice of the magic mirror, who has visual representation of her speech in the form of a pulsating field of light. She guides the characters (a medium, archaeologist, exorcist and historian) to find magic symbols around the physical site. Once they find and scan these symbols, Sir Frederick Hamilton appears in short vignettes. The players hear him speak about his life, but when the archaeologist removes Sir Fredericks' treasure (which he has been instructed to do), all hell breaks loose! The mirror 'cracks', blood starts dripping across the mirror and the ghost roars out, in extreme close-up (providing a great jump-scare) "WHO ARE YOU? WHAT ARE YOU DOING IN MY CASTLE?".

The mirror tries to warn the players NOT to assemble Sir Frederick's physical shield (pieces of which are scattered around the castle site) but the ghost, now in control, distorts the message so that the players are misled and instead DO assemble the shield. Once the object is scanned, the ancient dark spirits of the land appear to surround the players and consume their souls as the ghost gloats that now he is free. Using clues on their player cards, the users have to figure out a way to stop the ghost. Once they do, the ancient spirits turn on the ghost and he is bound once more to the ruins of his castle. Order is restored!

## **The TECH PART**

The app is developed in Unity. We had an array of technical challenges with AR triggering which meant that we ported 4 times to different mechanisms of orienting, anchoring and triggering the content. The journey brought us from using ARCore on Samsung Tab A devices, to Vuforia (but tracking was not stable), to ARKit, where CG elements jittered when users moved, and finally to using Vuforia Fusion on iPad, albeit with its own challenges, which provided us with the robust triggering solution we needed.

Combining video and CG also brought some technical challenges regarding formats, encoding, scale, colour etc.

## **ROLL-OUT**

The experience is being launch on Halloween 2018 (the week of 30<sup>th</sup> Oct) alongside local actors who will support the experience. In addition, there are plans for a physical audio setup of speakers that will enhance the sites atmosphere providing spatial audio linked to timecodes in the app.

## **TEAM**

Sorcha Hegarty – Writer/director

Camille Donegan – Creative Producer

Emmet Burke – Unity developer

Manu di Marco – Video editor

Tim O Donovan – Spatial audio designer

Terry Madigan CEO of Virtual Reality Ireland / Producer