Developers explore game experience for the blind

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Wait, researchers are talking about a video game for the blind? Come again? Not impossible. Game designers, reports the BBC, have been working on bringing the game experience to the blind and those with vision problems; these developers have been working out what kinds of mechanisms can help these players take on the challenges, story-line experiences and goal pursuits of video games enjoyed by sighted players. One such game recently launched was the focus of a report from the BBC. Developers from Dowino studios in Lyon, France, used a crowdfunding campaign to raise money to turn their demo into a functioning prototype.

The developers tested their game on a group of players who have little to no eyesight and the creators also gathered support from charity organizations. The game is *A Blind Legend*. Players navigate the game by following sounds such as the clash of swords and through guided instructions by the A Blind Legend's daughter. (In a promotional video which had been made when they were inviting supporters, the creators said that Blind Legend follows the story of a knight, Edward Blake, who lost his eyesight and journeys through a forest to free his wife from her violent kidnappers.)

One hears noises of the forest, birds flying and a river flowing. The sounds are information that players can use to locate themselves in their game environment.

The key to the success of these video-less, sound-based games is a production technique known as binaural recording, designed to construct an immersive game world. Binaural recording mimics the way our ears perceive natural sound, giving the game a 3D feel, said the BBC. Players in turn make use of their aural senses to navigate through levels; they play by their ears. With binaural sound, the audio is layered. Allison Meier, writing in GOOD, referred to binaural sound as "a three-dimensional recording method designed specifically for headphones,

which creates a convincing sense of sonic topography." Those who work toward better opportunities for the blind hope that developers will gain awareness of the need and create more such games, exploring how sounds can serve different purposes, such as providing spatial orientation and text descriptions.

A Blind Legend is due for release next year, according to reports. Last year, Popular Mechanics reported on Shades of Doom, an audio-based game replacing visual cues with auditory cues.

More information: www.bbc.com/news/technology-28757186
www.dowino.com/en/