

CENTER FOR HISTORY AND ART IN SWARZĘDZ



For the Centre of Art and History in Swarzędz we developed a comprehensive multimedia setting. An extensive set of multimedia solutions, including interactive animations and games using virtual and augmented reality technology, as well as Kinect and Leap Motion, was created for the exhibition that presents local history and culture.



Year of completion: 2018
www.muzeum-swarzedz.pl

FACILITY DESCRIPTION

The Center of History and Art in Swarzędz is a unique cultural institution with its headquarters in the building of a former fire station. The center presents the most important moments in the history of the city and region. In a beautiful and interactive way, it presents the traditions and historic sites of the municipality. It also shows the rich history of carpentry and works of local artists.



PROJECT SCOPE

As part of the project, we have implemented an integrated multimedia project which presents the history of Swarzędz and the historic fire station building in a modern way. The multimedia setting of the permanent exhibition, which we have developed, intrigues and introduces the visitor to the interactive world of rich culture and traditions of the whole region.



The scope of the project included the following elements:

- Virtual Windows – 4 animations in the form of an album with a set of archival photos presenting the history of Swarzędz from the 1920s until now.
- Interactive map – a touch table with a map of the region. It allows the user to compare the city from the old days (1988) with the current situation.
- Virtual changing room (3D model) – the visitors can go back in time and change into costumes characteristic for the early 20s and 30s (using Kinect technology).
- Fireman animation – main attraction referring to the history of the fire station building. The animation presents a pre-war fireman who slides down the banister and meets guests at the entrance to the Center. This material is displayed by a projector equipped with a movable mirror.
- "Firefighting" Game – a game in which every visitor can be embodied as the main fireman character and extinguish fire in the tower of the former fire station. An interactive and engaging game using Virtual Reality technology (the Oculus kit) and a surround sound system.
- Virtual tour of the city – with this Unity 3D application (using the advantages of Virtual Reality) you can take a night ride around the city, transporting yourself to the early 1930s.
- Block game – an application for the youngest visitors, which uses interaction between both the real and the multimedia world. Cameras placed on the stand are able to detect the location of physical blocks used by children and to recognize the correct location of the structure.
- Virtual furniture factory in the Carpenter's Area – an application (operating the Leap Motion device) with which you can construct a virtual piece of furniture that was historically produced in factories in Swarzędz.
- Virtual Books – a set of applications for 4 interactive displays showing the history of Swarzędz (including: The Greater Poland Uprising, Second World War, important characters associated with this region and the history of local scouting).
- Infomat app – this app presents the history of the building adapted for the disabled (with instructor support).

TECHNOLOGIES
USED

- Unity 3D applications
- Virtual Reality (Oculus)
- Augmented Reality
- Kinect
- Leap Motion