Educational Immersive VR-platform "SaveMe" for First Aid Training

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"SaveMe" is an educational VR-platform for teaching first aid skills and helping to manage one`s stress in emergency situations. Contains game elements to make the experience more memorable and enjoyable.

Team: Lonely Whales

Team members

Anastasia Usakova, Anna Kartashova

Members roles and background

We are both bachelor students from ITMO University.

1. Anastasia Usakova - 4th year bachelor student, study program "Information technology in design"
2. Anna Kartashova - 3d year bachelor student, study program "Computer Graphics and Design"

Contact details

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Solution Details

Solution description

The solution is a platform enabling learners not only to gain theoretical knowledge but also to **master skills for dealing with emergency situations** and managing one's stress in a nearly authentic VR experience. Software algorithms calculate user`s level of stress resistance and offer a personal recommendation. User can choose whether to follow it. Then you are about to pick a location (a field, a forest, a city, a factory, etc.) and a case of emergency (snake bite, person hit by a car, electric shock, etc.). After completing all of the cases in location, you are transferred to another one, if you did not stop the gameflow. Depending on the level chosen in the beginning, gameflow takes different paces and levels of realism. This platform can be implemented in schools and universities as well as in the industrial sector. It is also suitable for personal use. An implementation of this platform will help to develop the medical care competence of the general public. Moreover, the recurrent usage of the headset will also help to introduce a large number of people to VR. Summing up, the one who uses the headset will be prepared for emergency and will stay in touch with the latest technologies.

Solution context

No one would disagree with the statement that the **skill of giving first aid is one of the essential basic life skills** that a person should possess. However, schools and universities are often unable to provide sufficient knowledge of the subject as well as necessary practice. As a result, in emergency situations people generally start to panic and cannot provide proficient help to those in need. Meanwhile, we need to remember that the success of the further medical help depends on first aid.

In fact, we are trying to solve not only the problem with the lack of knowledge, but also one with the determination of people to gain this knowledge and get used to a new technology.

Solution target group

The target group is wide, since it includes all the learners from the age of 9 to adulthood. The project offers an educational program with **different levels of difficulty** and **emotional stress** relevant for everybody.

Solution impact

The platform makes learners be **proficient, fully conscious** and **responsible** for their actions in emergency situations. The solution brings social, medical, and technological changes.

Solution tweet text

Educational immersive VR-platform with game elements for first aid training. Take the test to find out your recommended anxiety level, choose location and try to save as more people as possible in the process of acquiring necessary skills!

Solution innovativeness

The previous solutions mostly focused on professional training provided to medical staff in lab conditions. Some of them deliberately distract from the medical procedure. Our platform, however,

allows any person to master the skill of rescuing in a **game mode**. For advanced users, we offer hard levels with a fast pace of situations and a limited amount of time.

Solution transferability

Our platform comes both as an educational program and an entertaining activity. It can also be modified and used as a program for learning to create VR-models (your own avatars, locations). Moreover, it increases the common competence of interaction with VR-technologies.

Solution sustainability

As for expanding the affordances of the platform, we are aimed to engage professional staff either on a voluntary basis or paid basis for health care centers. Moreover, we are intended to create more cases and locations on the platform. If we manage to arrange cooperation with health care centers, we plan to create a specialized module for training professional medical staff. We will also include more game elements to make the experience more enjoyable and comfortable. We are considering both commercial and non-commercial use of the platform. In case of commercial use, we will include advertisement of companies related to medicine, VR-technologies or education by placing their slogans / logos on the elements of the platform`s environment: billboards, medical equipment, etc. Non-commercial use implies distribution in schools, universities, colleges, companies, factories, personal use and possible creation of educational centers.

Solution team work

Our team has been working harmoniously. We used the principle of separation of duties. It is a pity our team consists of two persons only, so we did not have enough time to make a proper prototype. In the future, we would continue to work as a team, as we found a common ground.