The project “training of Soft Skills for Surgical teams using an immersive Serious Game” (S4Game) has been funded with support from the Erasmus+ Programme of the European Union. The main aim of the project is to provide health professionals (surgeons, nurses, anaesthesiologists) with an innovative approach to acquire and develop soft skills in the field of surgery. To reach that goal, a handbook and an immersive Virtual Reality (VR) based serious game (SG) will be developed.

Non-technical skills or soft skills are interpersonal (e.g. communication, teamwork), cognitive (e.g. decision-making, situational awareness) and personal resource (e.g. coping with stress and fatigue) skills that complement technical skills, and contribute to safe and efficient task performance. Soft skills has increasing importance in surgery and surgical training as a traditional focus on technical skills acquisition and competence is no longer enough for the delivery of a modern, safe, surgical practice.

The handbook provides up to date information about new approaches and innovative methodologies on training of soft skills using VR and SG for surgical teams in the OR. It is intended to assist CVET teachers, trainers and mentors and their institutions to organize training activities.

The S4Game is a console game with the aim of improving soft skills required during work in an OR, such as communication, teamwork or leadership. The different roles involved in the OR (surgeon, nurse and anaesthetist) will be present in the SG in the form of 3D avatars, allowing for the recreation of the typical interaction during the surgical procedure.

For further information, check our website: www.s4game.eu.

INTELLECTUAL OUTPUTS

IO1. HANDBOOK OF SOFT SKILLS TRAINING USING VIRTUAL REALITY AND SERIOUS GAMES FOR SURGICAL TEAMS IN THE OPERATING ROOM

Handbook with new approaches and innovative methodologies on training of soft skills using VR and SG for surgical teams in the OR. It is intended to assist CVET teachers, trainers and mentors and their institutions to organize training activities. The handbook will be divided in two main parts: methodological guidelines and practical cases.

IO2. S4GAME

An integral part of the training activities gathered in the guidelines and will be translated into the national languages of the consortium, to increase acceptance and facilitate the training of communication skills, as communication in the mother tongue is always easier.
CONSORTIUM

The S4Game consortium brings together an international research and innovation group with rich experience in European projects and have wide experience in surgical training and training health professionals.

CENTRO DE CIRUGÍA DE MINIMA INVASION JESUS USÓN, CÁCERES, SPAIN (CCMIJU)

The Centro de Cirugía de Minima Invasion Jesus Usón (CCMIJU) is a multidisciplinary institution devoted to research and training in minimally invasive surgical (MIS) techniques. It is committed to technological development and innovation in healthcare, and for its advancement it works closely with institutions from all over the world. The latest generation equipment and singular scientific facilities are available at CCMIJU, allowing for the highest possible level of research and training for health professionals worldwide. For further information: https://www.ccmijesususon.com/en/

CHARLES UNIVERSITY, FACULTY OF MEDICINE IN HRADEC KRÁLOVÉ, HRADEC KRÁLOVÉ, CZECH REPUBLIC (CUNI)

Charles University is the largest and oldest university in the Czech Republic, founded in 1348. The Faculty of Medicine in Hradec founded in 1945, provides training in general medicine, dentistry and nursing to approximately 1500 graduates (300 of them in English), has 20 accredited doctoral study programmes, both in Czech and English, 230 doctoral students and 49 areas of specialized postgraduate education, in which some 190 researchers work. It has participated in 6FP, 7FP, Erasmus+ KA 1-3, CEEPUS and DG Justice programme. CUNI has different faculties whose lines of work are aligned with the objectives of the project and allow the involvement of a multidisciplinary team to undertake the tasks. For further information: https://www.lfhk.cuni.cz/

POLYTECHNIC INSTITUTE OF PORTALEGRE - SUPERIOR SCHOOL OF HEALTH, PORTALEGRE, PORTUGAL (ESS-IPP)

The Superior School of Health (ESS-IPP) is an organic unit of the Polytechnic Institute of Portalegre dedicated to teaching and to scientific research in the health area. The school mission is to create, transmit and disseminate knowledge, targeted towards the scientific domain of health sciences through high-level qualification, for differentiated publics, at various moments of academic and professional pathways, promoting and carrying out research and promoting the technological development and the communities, in cooperation with regional, national and international entities. For further information: https://www.ipportalegre.pt
SEMMELWEIS UNIVERSITY, DEPT. OF SURGICAL RESEARCH AND TECHNIQUES, BUDAPEST, HUNGARY (DSRT-SU)

With an over 240-year-old tradition of academic excellence, Semmelweis University is widely recognised as one of Europe’s leading centres of medicine. Department of Surgical Research and Techniques, Semmelweis University is dedicated to multispecialty research, education and training focused on minimally invasive techniques. Our aim is to provide a structured training program in video-endoscopic surgery and related topics for the practicing clinicians and assisting personnel as well as the surgeons in the training and other medical professionals from around the world, main research interest is related to use of different virtual training tools.
For further information: http://semmelweis.hu/mutettan/en/

VIRAL STUDIOS, BADAJOZ, SPAIN (VS)

Viral Studios is a young and innovative company, founded by two computer engineers specialized in video games, virtual reality and game learning. The company specializes in the development of its own products and solutions to the general public, other companies and the public sector; based on immersive and interactive technologies for education & training, marketing and the entertainment industry. It is composed of four computer engineers, an illustrator, a 3D designer, an architect, a commercial director and two students of the last course of industrial engineering.
For further information: http://www.viralstudios.es/

MEETINGS

Two meetings have been held in the past months and that helped to make S4Game progress.

KICK OFF MEETING OF S4GAME PROJECT – 9-10/04/2019. CÁCERES, SPAIN

The Kick off Meeting aimed at getting to know each other, to revise a general overview of the project and to launch IO1.

The First Progress Meeting focused on the methodological guideline of the handbook of soft skills training and the practical cases.

DISSEMINATIONS

Prof. Sánchez-Margallo presented the current stage of S4Game Project at the SMIT 2019 Congress on 10-11/10/2019. in Heilbronn.
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