

Press release

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BUDDY4ALL - BRINGING YOUNG AND OLD TOGETHER BETTER DIGITALLY

A digital platform to promote social inclusion and support by offering intergenerational activities

Vienna (AIT): A new European research project led by the AIT Austrian Institute of Technology is building a bridge between generations to promote social belonging among senior citizens and young adults. Buddy4All aims to provide intergenerational, virtual and professional support for older and younger adults in an unprecedented way. Location-based mixed reality (MR) games and cognitive training will be developed to provide effective support and intergenerational activities for mental and physical health combined with all-age motivation and fun in a novel and unique approach. The project is co-funded by the EU's AAL JP programme and national funding agencies in Austria (Österreichische Forschungsförderungsgesellschaft FFG), Switzerland (Switz Innovation Agency Innosuisse) and Portugal (Fundação para a Ciência e Tecnologia FCT).

Challenges among old and young

As society ages, the number of older people living alone is steadily increasing. The impact of this trend is exacerbated by declining mental health and physical fitness, which can lead to withdrawal, fear of going out and eventually social exclusion. Older people often feel overwhelmed by today's technology. In many cases, they have no one to support them with their recurring problems (e.g. technical problems). The Corona crisis has also caused an increase in loneliness and isolation among older people. But young people also currently have their problems. Studies show that the Covid-19 pandemic has had negative effects on mental health, psychosomatic complaints and anxiety, especially among young people - due to home schooling, severely restricted physical contact with friends and a lack of everyday structures.

Young people who come from difficult family situations often have no adult role models they can trust.

Digital platform supports across generations

Buddy4All promotes mental and physical health, offers cross-generational interaction between younger and older generations, virtual personal support for everyday activities and professional support (e.g. from social workers, carers, etc.) for sensitive issues. Analogous to the buddy principle, the project is based on the idea that users always have a companion and a contact person. The system includes three types of buddies: "Real Buddies" (both younger and older adults), "Virtual Buddies" (computer-assisted help) and "Professional Buddies" (professional carers and social workers). The buddy system will include different functionalities, which will be developed in the research project together with the potential users in workshops, in order to achieve a high level of user-friendliness and utilisation. The project aims to improve the well-being and active lifestyle of both younger and older adults. Using a mobile app and a new type of mixed reality glasses,

Buddy4All will provide personalised support. Buddy4All aims to connect older and younger adults across generations, enabling cross-generational interaction where older and younger adults benefit from each other's experiences. This includes "location-based" MR games, where young people can play together with seniors who are in a different location. The young people see virtual elements superimposed on reality and have to move from place to place in the real world to find them. Senior citizens can follow what the young people see on a tablet and solve puzzles together. Furthermore, a combination of cognitive and physical training is offered to add activity and fun to traditional brain training. The application is complemented by a combination of virtual, professional and intergenerational support. On the one hand, this leads to a sense of social belonging as well as to the promotion of mental and physical fitness in order to maintain personal well-being, which leads to a healthy lifestyle.

As project coordinator, AIT is contributing its many years of expertise in the areas of image recognition, virtual and augmented reality, measurement of user experiences as well as with the development of virtual assistance and digital training methods. Elisabeth Broneder, project coordinator at the AIT Center for Digital Safety & Security: "In the Buddy4All project, we use novel digital technologies to bring older but also younger people together in an entertaining way and support them in their everyday lives. By allowing both target groups to benefit from each other's experiences in this way, we not only promote social inclusion, but also create cross-generational understanding for each other and mutual trust."

Computer scientist Miroslav Sili from the AIT Center for Technology Experience refers to the user-centred approach and the agile development of innovative digital methods and solutions: "In the project, it is particularly important to us to collect and take into account the actual and acute wishes and needs of future users. For this reason, we are even more pleased that both senior citizen and youth organisations and experts are involved in the project.

The project partners

The development of Buddy4All requires a holistic and interdisciplinary approach. Experts from the fields of computer science, software development, human-computer interaction, software architecture, user interface design, psychology and social work are therefore involved in the project. The project partners in the consortium are: AIT Austrian Institute of Technology (project coordinator, AR/VR, virtual support systems, Austria), SALUMENTIS OG (Mental Health Software, Austria), soultank AG (Human-Centred Design, Switzerland), Kresk Tecnologias de Informação, Lda. (UI and mobile applications, Portugal), GedächtnistrainingsAkademie e.U. (cognitive training, Austria), Jugendinitiative Triestingtal (social services for young adults, Austria) and terzStiftung (service providers in work with the elderly, Switzerland).

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