Stadtflucht
Frankfurt

Serious Game for Active Recreation

Stadtflucht is a serious game that promotes physical activity and supports players to de-stress in urban environments. A first study has been conceived for Frankfurt’s east side. The area is developing towards an attractive mix of residential, cultural, commerce and open space areas right next to the river Main, paired with the influx of jobs thanks to the new headquarters of the European Central Bank (ECB).

Guided by a smartphone, participants follow a route along water areas and busy courtyards between a busy autoroute called “Automeile” and Frankfurt’s east harbor area. In Stadtflucht, a loading dock turns in to a Parkour for an “egg and spoon race” with the smartphone, where participants can compete against each other or against their alter ego. Parts of physical activity are counted with relaxation techniques in different places. The application asks participants to lay their finger on the smartphone camera, from which it calculates the skin color and visualizes the player’s pulse, giving an immediate visual feedback about the positive effects.

The use of smartphones enables the analysis of a series of data, such as navigation routes and time spent at the stations, which are reviewed and linked with a qualitative survey on participant’s perception. The long term goal of this research is to improve Serious Games that are promoting active recreation, exercise, and relaxation. As a side effect, we seek to gain insights on participants’ perception of the urban environment and how they can inform co-design and planning processes.

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Urban green spaces and recreational areas promote physical activity, social interaction, and stress release, strengthening therefore physical and mental well-being. In the work context, active breaks help to promote communication between employees, reduce stress and thus increase quality of life. A key challenge for urban planning is to envision and create health-promoting open spaces and other offers, and make them more accessible to users. The research group Urban Health Games develops analysis tools to investigate potentials in learning and working environments that promote physical activity. Based on this, it creates playful interventions and serious games, which promote physical activity and make users aware of how the built environment affects health and wellbeing.

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**A, C, D, F**
Screen from the Android App

**B, E**
Participants relaxing on the harbor area

**G**
Participant becoming active in a side street turned into a slalom parkour