FlavourGame: Interaction Design in Hybrid Games

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C3 Digital futures/ Hybrid reality

Context and Focus: Throughout the past years we have seen games with augmented reality [1], board games using smartphones as assisting tools [2], and tablets being used as boards [3], or even games using real food – edible games [4]. This combination of digital and physical components presents new and unimagined possibilities to game designers.
A serious hybrid game model was developed in the scope of the FlavourGame project, which combines the digital component (based on a Tangible User Interface) with a board game. This hybrid game is called FlavourQuest and its objective is to support the autonomy and motivation of children from 10 to 12 years old regarding healthy food choices. In fact, real foods with their flavors, aromas and textures are introduced as props to the players during the game, creating a whole new sensorial experience.

Relevance and impact: Obesity is seen by the World Health Organization (WHO) as an epidemic that will cause several health problems. WHO recommendation number 1 for tackling the obesogenic environment of children and norms is to "implement comprehensive programmes that promote the intake of healthy foods and reduce the intake of unhealthy foods and sugar-sweetened beverages by children and adolescents" [5]. WHO also identifies eHealth as a strategic area [6] . With this in mind, FlavourGame is a project that has a social impact by improving the quality of life and health of children by intersecting Arts, Technology, Communication and Health.

Methodology: Regarding the methodological framework, the FlavourGame project follows a participatory design approach with children who were involved in the design process from the early stages in order to share their ideas and feedback.

Outcomes: In this poster, the various stages of design and development of the FlavourQuest hybrid game are presented, namely: a) the analogue prototype; b) the design of the narrative and its framework; c) the design of the characters and the game tiles; d) the graphical interface of a web app for mobile devices that guides the game tasks, and e) the physical computing layer.

References

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