Game.UP / Master Lab-Course - Games Engineering

Game.UP

As part of the Game.UP (Gamification in Urban Planning) research project currently running at our chair, we are investigating how game elements and games can be utilised in a meaningful way to support design and planning processes. Examples could be conveying planning information to a heterogenous public or aiding the communication of planning information between planners. Planning processes address complex intercity relationships, regarding both physical and social structures and infrastructures, and occur between various actors. The means of distribution and access to relevant planning information needs to be flexible enough to meet individual stakeholder’s abilities and requirements, and must be able to adapt and change as new questions arise during planning.

Task

For the Master Lab-Course you will be able to design and develop an innovative, interactive multi-player game or serious game, with a focus on the interface, addressing different target audience’s interests, needs, or levels of knowledge; as well as gaining a more in depth knowledge of the intricacies and factors that drive and change our cities. You will be able to mould the topic to align with your personal and group interests.

Possible Themes

- Examining different interactive interfaces.
- Augmentation of traditional architectural plans and models.
- Addressing a heterogeneous public body, to communicate knowledge on planning processes and decisions.
- Aimed at various planners, to train skills or to visualise different planner perspectives.
Abstract and Motivation

There are several existing challenges in architectural urban planning. These challenges hinder enjoyable collaboration to achieve appropriate planning solutions, sustainable design, and social acceptability of architectural projects. Additionally, the way politicians, planners, and the community want to be involved in these decision making processes requires emphasis on the transparency and communication between them. To support future complex developments, communication breakdowns in urban planning and appropriate methods of gamification are surveyed in initial phase of Game.Up. These methods are then to be applied to the identified challenges of participation and communication to construct a working solution.

The three driving bodies in planning are the political, the planning, and the public. They are responsible for the legislation, design, planning, construction, and using what has been built. To accommodate so many different views across so many different tasks is a complicated and often frustrating challenge. Gamification, a relatively new research field, can be applied to the communication challenges as a solution for supporting more creative and flourishing collaborations between the parties involved in architectural urban developments. With gamification, controversies such as Stuttgart 21 can be avoided all together. Instead every group can constructively contribute in an enjoyable way and turn their voice into actions.

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Information

Term: Winter/ Summer Semester
Length: 1 or 2 semesters
Lecturers: Sarah Jenney / Michael Mühlhaus
Time and Place: BIM Lab
Exam: Coursework
ETCS / SWS: 10 / 6 per semester
No. of Students: Teams of 3-4 Students

Contact

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