Games Engineering Solutions

From October 2022 to July 2023, more than 40 students of the Games Engineering B.Sc. program will be working on interactive software technologies in the Game Lab II course.

In teams of two, the students design, develop, implement and evaluate a software artifact to support, improve, or completely innovate game design and development. Scientists and companies who have identified concrete needs for interactive software technologies may apply to become stakeholders of a Game Lab II project.

1. **APPLICATION**
   Submit your application until **30.09.**

2. **CANDIDACY**
   Get accepted for candidacy until **15.10.**

3. **STAKEHOLDER**
   Be selected and accompany a student team.

Images from GL2 projects 2021/22 [https://www.youtube.com/channel/UClN-UwQzkZpCbT3jXSepAYg]
Game Lab II
Contents, scope and commitment.

The Game Lab II course has been developed to foster the students’ expertise in designing and developing interactive software technologies. Over the years, various software artifacts have been successfully developed — from software libraries over plugins for engines such as Unity, Unreal or Godot to stand-alone applications.

Game Lab II projects tackle new challenges in the field of Real-Time Interactive Systems or address them in new ways. They need to be feasible by two students working for two terms, also considering the workload of other university courses as well as the formal deliverables expected in the GL 2 course itself, i.e. ample documentation (getting started, API, system overview,…), presentation material (scientific report, poster, trailer), and, of course, a clean and well-crafted code base.

Like other Computer Science programs, Games Engineering is a tough program of study. Unfortunately, a considerable proportion of students will not complete it. As a result, some GL 2 projects are not completed, either. Most projects that are completed are well-received by the stakeholders. Although GL 2 projects are oftentimes rather comprehensive and well-crafted, they still have a proof-of-concept feel to them — they are generally not ready for production deployment.

At the same time, the chosen stakeholders have to dedicate some time on providing feedback to the students — by email, phone, video-chat, or in person. The students are tasked to understand exactly what the stakeholders need and to gather feedback on requirements, mock-ups and functional prototypes throughout the first term (see the timeline on page 1). Minutes are provided to us to ensure a productive process. At the end of the first term, the project is supposed to be functionally complete. In the second term, the code base is refactored, demos, documentation, and deliverables are fleshed out.
How-to Stakeholder
Submission, Candidacy, Stakeholder

Potential stakeholders need to submit an application, be selected for candidacy, and play the stakeholder role, if chosen by a student team.

For the application, please send an email with the following information until the deadline to game-lab-ii@uni-wuerzburg.de:

**Project Name:**
Give the project a meaningful, attractive title

**Project Summary:**
Summarise the project’s motivation, its goal and potential means to get there

**Project Requirements:**
Detail what you envision; this could be little stories about potential users using the software in different contexts for different purposes, elaborations about functionalities the software should fulfill, descriptions of how the workflow could look like, or thoughts on how the software could be implemented

**Additional Information:**
E.g. provide URLs to articles, movies and other sources to better understand the problem and to empower the students to engineer solutions...

**Stakeholder Contact:**
Provide the name and institutional contact details (profile URL, email, phone, address) of the person committed to provide feedback

Your application will be carefully reviewed with respect to the criteria outlined on page 2. In case of an overall fit, we will pass on the application to the students. As part of the dialogue that would ensue between the stakeholders and the individual teams, an understanding regarding the various criteria will be sought.

About 1 1/2 weeks after the start of the semester, the students will choose their topics and reach out to you. In weekly lectures, exercises, and a 2-days workshop, we will teach the students to manage their projects and ensure that their envisioned solutions are aligned with both your and our expectations. To this end, they will repeatedly seek your feedback until the end of the term in February. At this point, their implementations should be functionally complete, refactoring, polishing, and various deliverables will be addressed by the students throughout the second semester.

The project IP is with the students. In case you have commercial interests or want to protect your own IP, we recommend setting up according NDAs or other contracts before the projects will start — teaching is our mandate, so please be ready to handle these matters bilaterally.