



Universität
Zürich^{UZH}

Digital Game-Based Learning

Project Summary



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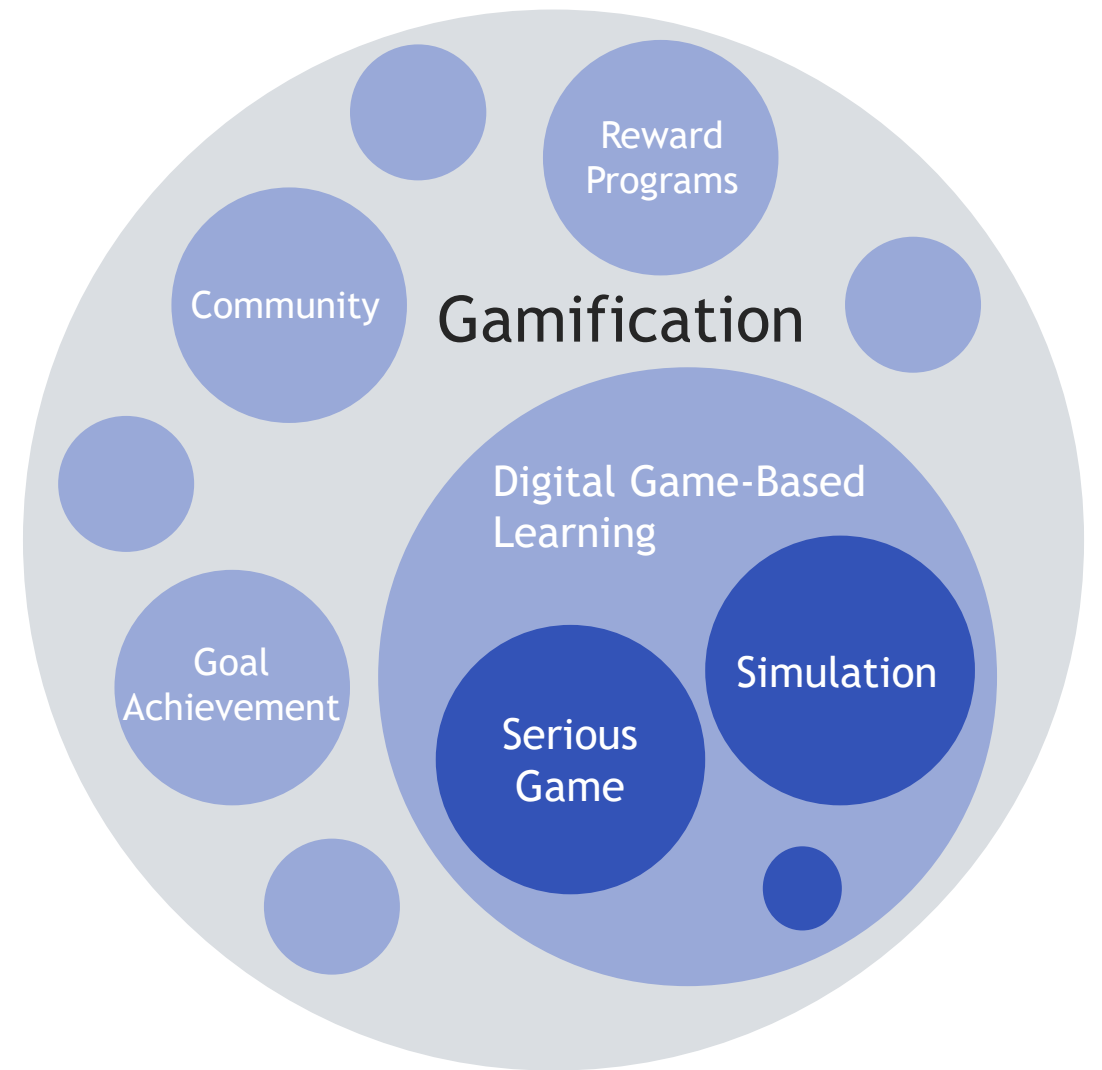
Why Game-Based Learning

“Traditional learning has provided superficial learning through text books. Games are best at teaching a deeper level of learning.”

Eric Klopfer, MIT

“I absolutely loved the Portfolio Management Game, it was great fun and required us to apply our knowledge and to work meticulously to come up with good decisions for our portfolio, our customers, and our bank in general. It's a very educational, fun tool.”

Student from our International Summer School in 2020



Executive Summary

Current research in the field of Game-Based Learning shows that learning complex topics as well as gaining experience in realistic, digital business games increases learning success among students. The goal of the project is to use the experience gained so far in the use of third-party simulations to expand competencies in the design and creation of own browser-based simulations tailored to the needs of students. The development of own competencies shall also help with designing own simulation games as well as to build up know-how to support other interested parties.

The project is intended to serve both students and teachers. Teachers are to strengthen their digital skills in designing online simulations so that they can create simple simulations themselves using suitable frameworks and use them in teaching. Students benefit from this project by strengthening their digital skills in online simulations. They will be able to apply the theoretical concepts learned in the lecture in a practical, interactive and digital way. In addition, students learn to collaborate in teams in a decentralized manner and make efficient decisions even without face-to-face contact. This ability is becoming more and more important in today's business world, as decentralized teamwork is becoming more and more common.

Please visit our website if you are interested in Game-Based Learning: www.gbl.uzh.ch

The results of the project and further Game-Based Learning contents are summarized on the project website at www.gbl.uzh.ch

- **GBL in Use:** Game-Based Learning at the Department of Banking and Finance of the University of Zurich
- **Knowledge Base:** Terms and definitions in the fields of Gamification and Game-Based Learning
- **Development:** Learn how you can proceed if you want to develop your own Simulation or Serious Game
- **Roadmap:** Short overview of our next steps and the continuation of the project

Location: /

Home GBL in Use Knowledge Base Development Roadmap About Us

Game-Based Learning

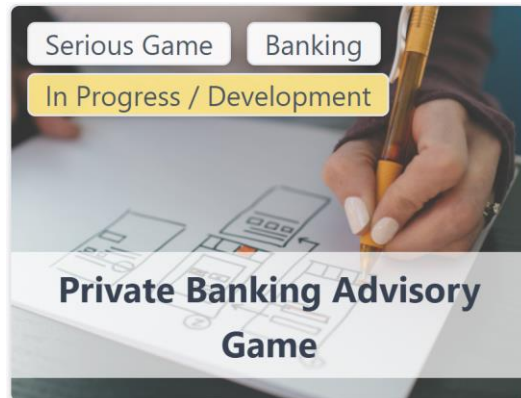
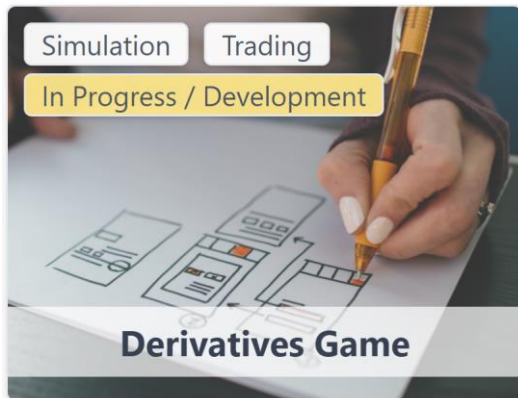
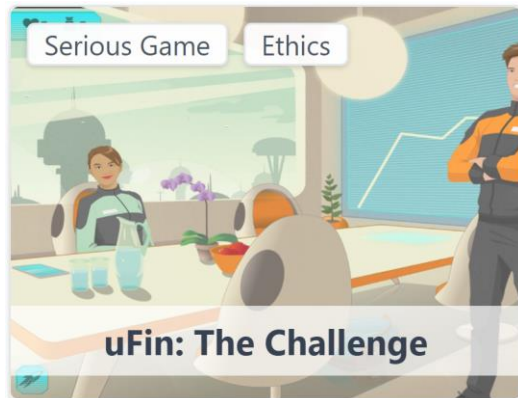
Learning-by-doing. Literally.

GBL for teachers

GBL for students

GBL for developers

Simulations and Serious Games that have been developed or are being developed at the Department of Banking and Finance of the University of Zurich.*



A selection of lectures and seminars that contain Game-Based Learning elements at the Department of Banking and Finance of the University of Zurich.*

Advanced Portfolio Management Game (S)	3 ECTS Master
Banking Game: Gesamtführung einer Bank (S)	3 ECTS Bachelor
Behavioral Ethics (S)	3 ECTS Bachelor
Business- & Finance-Game (S)	3 ECTS Bachelor
Commodity Trading (L+E)	3 ECTS Master
Finance for the Future: Investments, Sustainable Finance & FinTech (Summer School)	6 ECTS Bachelor

* The following listing contains games and courses that are being used or being developed at the Department of Banking and Finance. The listing intends to provide a general overview and also includes games and courses not developed within this specific project.

Get to know the terms and definitions in the fields of Gamification and Game-Based Learning. Our interactive knowledge base contains the know how and best practices we have accumulated while developing games and simulations for our own teaching. It will be further expanded in an upcoming project.

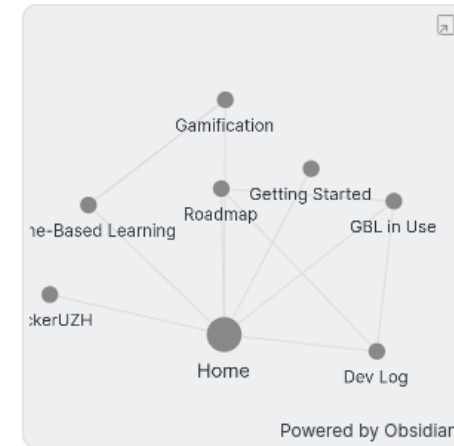
Home

Welcome to our [Gamification](#) and [Game-Based Learning](#) knowledge base. Our knowledge base contains the know how and best practices we have accumulated while developing games and simulations for our own teaching, as well as when implementing [Gamification](#) principles in our apps (e.g., the [KlickerUZH](#)).

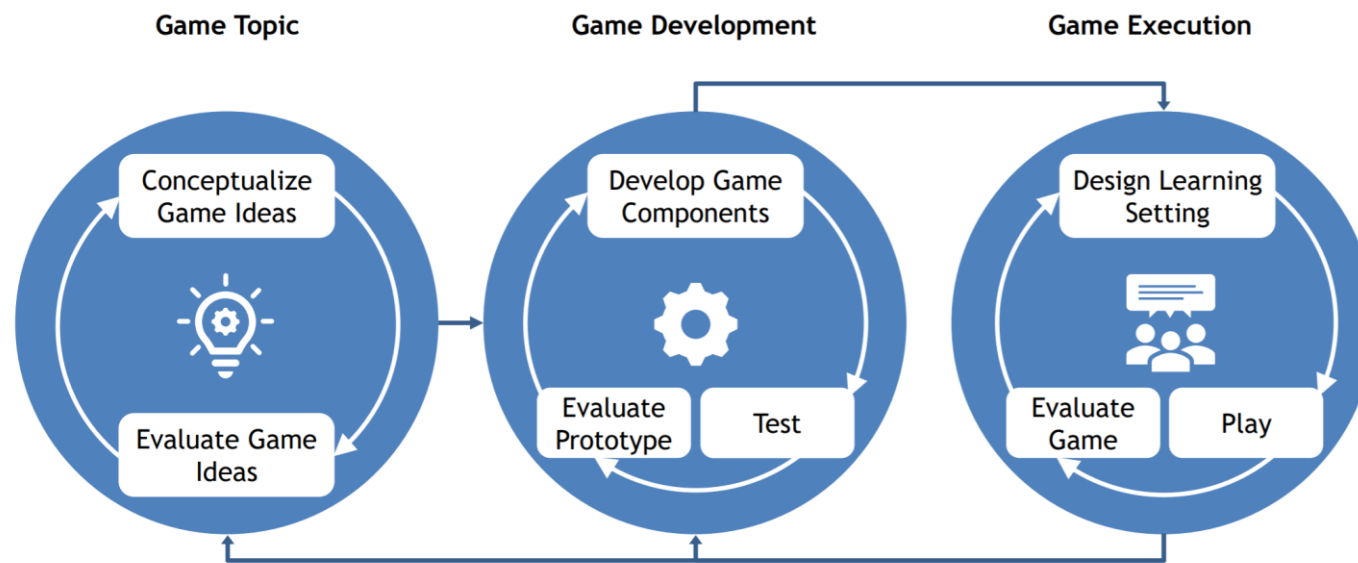
To get started, check out one of the following resources:

- For a short guide on how this networked knowledge base works, see [Getting Started](#).
- To get an overview of the courses, games and simulations we have developed or are currently working on, see [GBL in Use](#).
- For the current planning and development progress of our projects, see [Roadmap](#) and [Dev Log](#).

INTERACTIVE GRAPH



Learn how you can proceed if you want to develop your own Simulation or Serious Game. Use our resources as a support and for guidance in your own development.



Introduction to Digital Game-Based Learning

10 min

To get started with game development in the context of game-based learning, it is important to first understand the terminology, as well as its key effects. Our resources will help you understand if you should apply game-based learning to your use case and what results you can expect.



- Game-Based Learning is a growing field of interest with a potential of supporting teaching, improving learning, and making the entire learning process more engaging.
- Simulations and serious games can be used for such educational purposes. Whereas simulations represent a simplified real life situation, serious games can be realistic but also seek to educate in a more entertaining manner.
- Game-Based Learning works because content is learned and retained more easily due to improved engagement with the learning matter and because intrinsic motivation is fostered by the gamified approach.

Resources

📄 Slides (PDF)

Next Module →

Game Development Workflow

5 min

Game Topic

10 min

Game Development

10 min

Game Execution

15 min

Further Resources and References

Get an overview of how the project will be extended in future work.



GBL @ UZH: Establish an overview of how Game-Based Learning is being used at the University of Zurich.



GBL Knowledge Base: Expand the knowledge base and learning resources with know-how and best practices on Game-Based Learning and game development.



Game Development Toolbox: Develop technical and content-related resources that can be used when designing and developing learning games.



Simulation Platform: Create a foundational framework that can be applied when implementing simulations.



GBL Community: Establish and foster a game-based learning community at the University of Zurich and connect with interested external parties.

We strive to develop our roadmap and goals based on the needs of the community. If you are interested in Game-Based Learning and would like to be involved in the project, please fill out the following form on our website to join our user group: <https://www.gbl.uzh.ch/roadmap>



Get in contact



Exchange ideas



Expand your digital skills

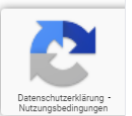
Email *

Institution

I would like to

- join the user group on MS Teams
- participate in surveys
- get notified about new releases

Submit





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