



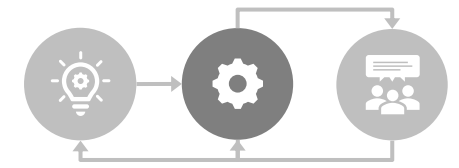
Universität
Zürich^{UZH}

Digital Game-Based Learning

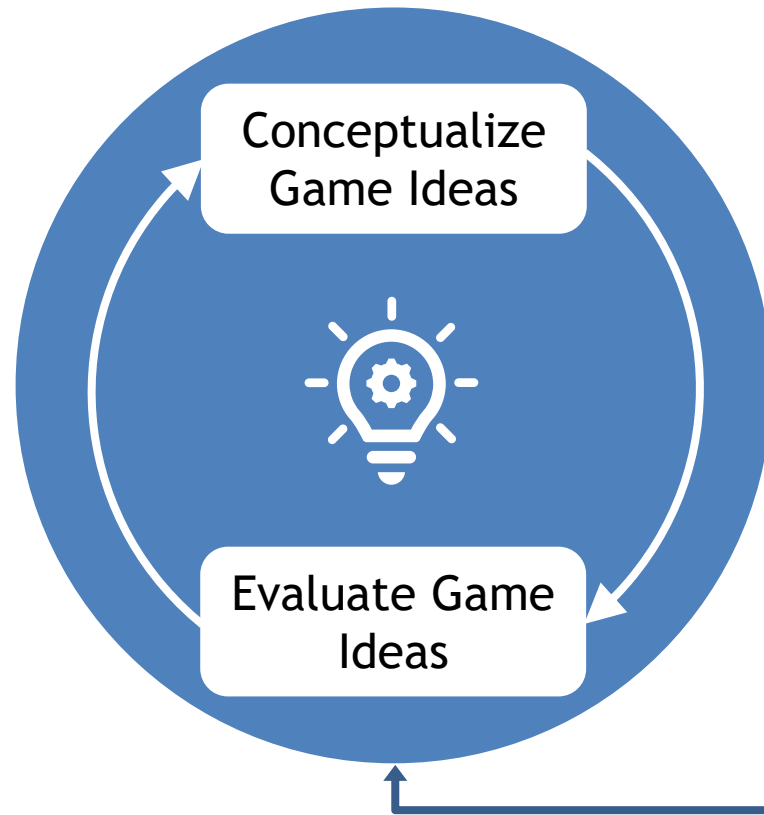
Game Development



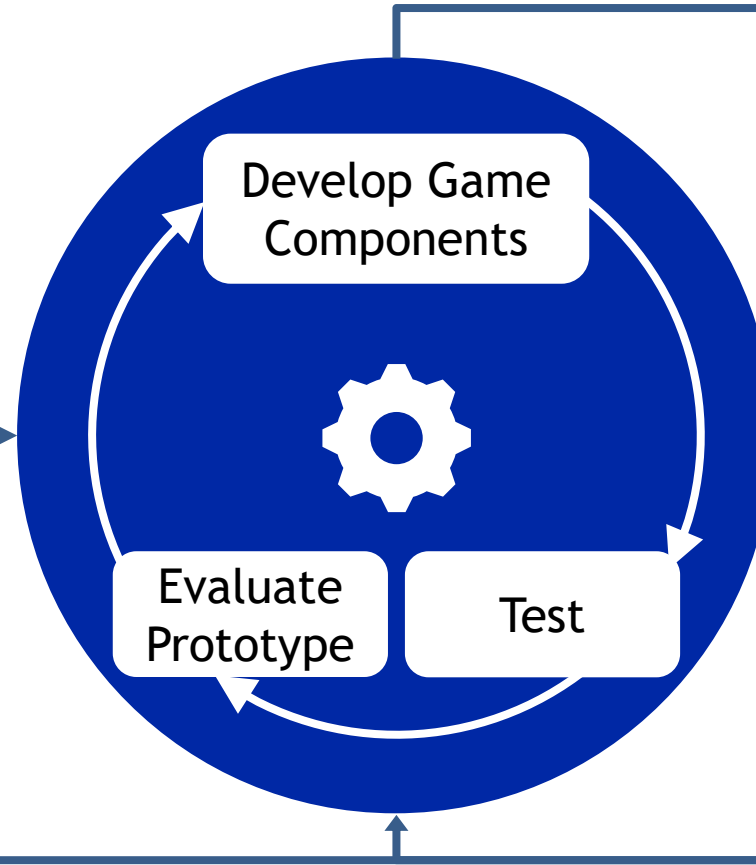
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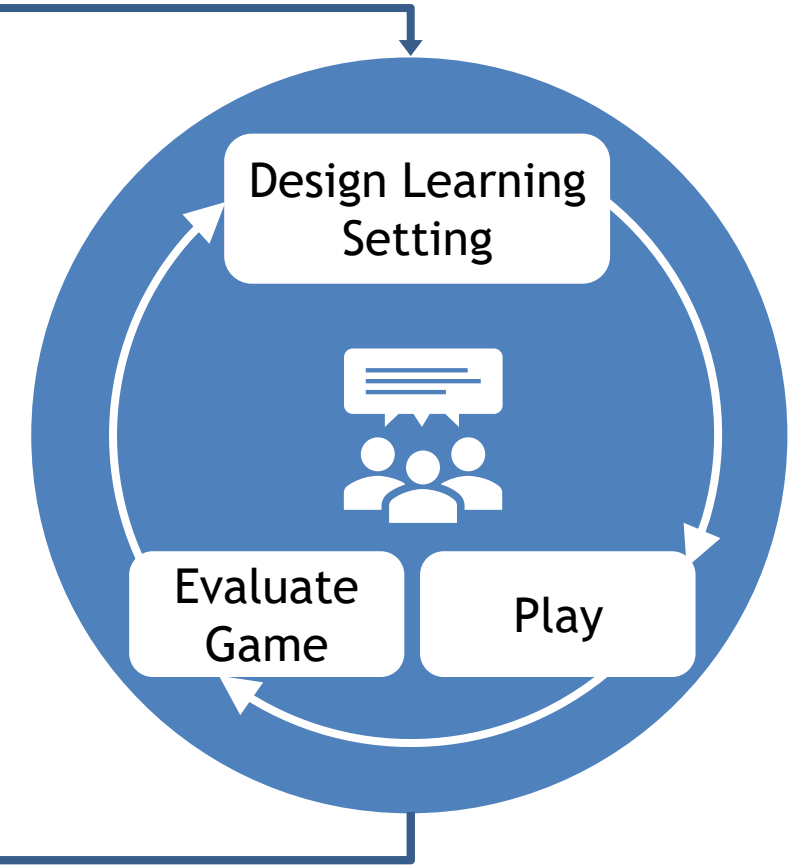
Game Topic

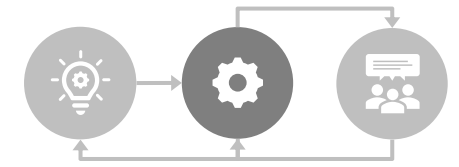


Game Development

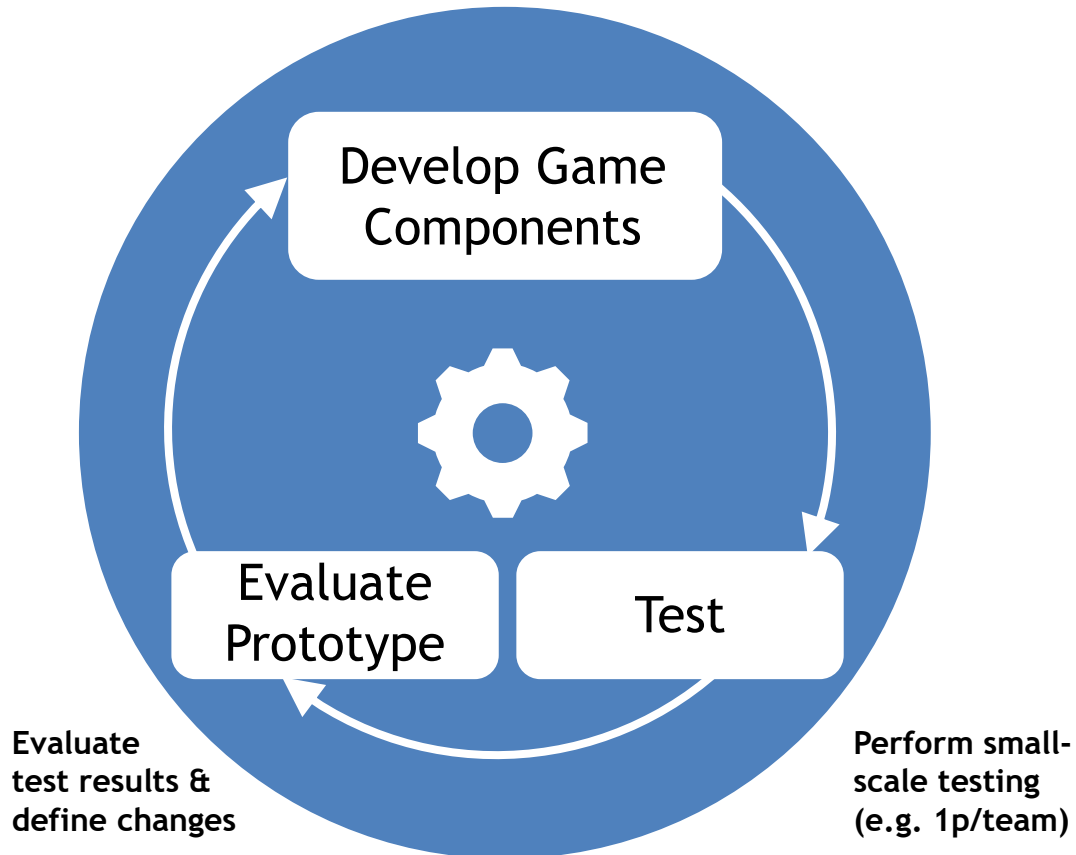


Game Execution





Develop content-related and technical parts (concurrently)

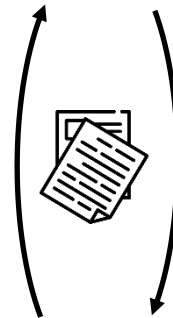


Responsibilities



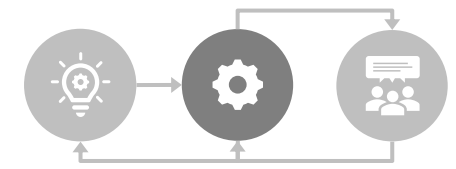
Content:

- Design (UI, Workflows, Models, Content, Characters)
- Organize small-scale testing
- Prepare guidelines for usage
- Define game rules:
 - Reward (Socialization, Feedback)
 - Persistence (Storytelling, Debriefing)
- Define game scenario:
 - Interface & interaction (Scenes, Context, Characterization)
- Document design approach and procedures



Technical:

- Design user interactions (UX)
- Develop and integrate models, reports, and UI
- Supervise testing (technical & observations)
- Document code & development practices



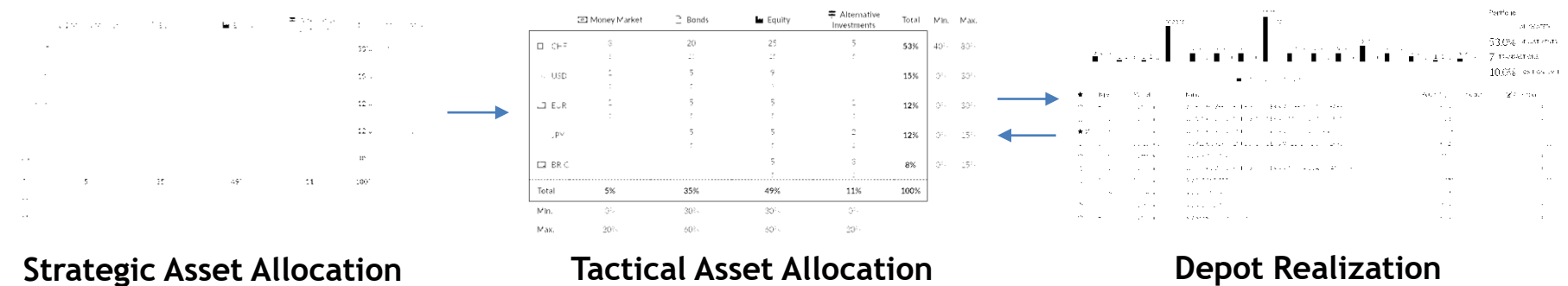
1. Learning outcomes

- Understanding the value of and difference between a strategic and tactical allocation
- Understanding the concept and application of different customer types
- Understanding the process of depot realization under constraints

2. Thought processes, theories and concepts

- Thinking about the long-term risk profile of customer types
- Thinking about the short-term influence of macroeconomic factors
- Building a diversified portfolio corresponding to one's tactical market view

3. Key decisions and dependencies



Best Practice from Our Experience



- Use existing resources to create win-win situations (e.g., provide thesis topics that support the game development in terms of game models or ideas).
- Build on technical frameworks that provide a solid foundation. Reuse existing materials where possible.
- Document your approach to both content and technical development to allow for future extensions.



- Often it is not possible to implement all the desired components of a game from the beginning. Ensure that the components you develop are of high quality and that they fit together well, making the game enjoyable.

Key Takeaways

1

Let potential users test your game regularly throughout the development process. Organize small testing sessions with a few participants to evaluate interactions.

2

Evaluate testing sessions with user-centered approaches to investigate the player workflow and potential usability issues. Investigate how players approach and reach their learning objectives during play.

3

Focus on your prioritized development goals and keep a wish list for further development. Ensure that what is built is of high quality and fits together well.