

# Gamification Design

**Learning Management System**

# Emerging Technologies

- ① **Game-based Learning:** game-based learning as the design of games for the purpose of learning (Turner et al., 2018).
- ① **Gamification:** use game-like elements in a non-game context (Landers & Armstrong, 2015; Su, 2015; Fui-Hoon).

Challenge: How to design gamification.

# Design Framework

- ① **Project Preparation:** Goals, objectives, project plan.
- ② **User & Context Analysis:** User characteristics & behaviors.  
Understanding business processes.
- ③ **Ideation:** Brainstorming ideas to accomplish goals.
- ④ **Design:** Align goals, user behaviors, mechanics & resources.
- ⑤ **Implementation:** Develop, test, release, and update.

# Use Case: Qlik Learning Portal

- A lack of self-exploration into new features.
- Less use than expected.
- Increase in help desk tickets.

# Project Preparation

**Primary Goal:** Increase adoption of the learning portal, training products and ultimately enable users on data visualization products

## Portal related behaviors:

- Independently explore the portal.
- Commit to a learning path (guided or personalized).
- Visit the portal regularly.
- Watch directional videos to learn about portal features.
- Self-service account management.

## Learning related behaviors:

- Participate in skills assessments to determine training that is needed.
- Complete training videos as part of a learning path or on an ad-hoc basis.
- Register and take certification exams.
- Participate in Instructor-led training (webinars, etc.).
- Desire higher expertise beyond current roles.

# User & Context Analysis

- Characteristics: new & veteran.
- Current behavior vs desired behavior
- Complex portal integration.

Identifies need for gamification to be flexible.

# Ideation

- Brainstorm design and mechanics
- Commonly used mechanics: points, challenges, badges & leaderboards (An, 2020).
- Full game-like experience: storyline, themed progress map, user personas, prompts, challenges, leaderboard, and reward system (points, levels, badges).

# Ideation: Mechanics

- Storyline
- Challenges
- Personas
- Progress Map
- Prompts
- Point System
- Leaderboard
- Badges



# Design

- Challenges are structured and unstructured.
- Completed challenges earn points, fills in project map, edits leaderboard display, prompt displayed.
- Two paths for participation: learning adventure and learn & earn.

# Implementation

- Analyze current technology to determine feasibility.
- Selection of supporting technology is vital to the success of gamification.

# Discussion

- ① Future discussions in implementation.
- ① Practical implementation challenges, combined with a gap in research highlight a need to better understand how gamification design can address goals (Morschheuser et al., 2018).
- ① Study specific mechanics and how they achieve goals.

# References

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