

# PROG7312 TASK 1 RESEARCH

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## Introduction

The Dewey Decimal system, while mostly unknown to the average person, is an extremely important and fundamental aspect of the modern library system. Learning and fully understanding this system can be tedious for librarians however it is of paramount importance that the system is fully understood. This research document shall explore gamification features that can be used to make the process of learning the Dewey Decimal system for novice librarians. Of the researched gamification features, one feature shall be selected with a motivation for the choice. This chosen gamification feature shall then be implemented into the application that shall be developed for novice librarians to learn the Dewey Decimal system.

## Gamification Features

1. Leaderboard
2. Achievements
3. Progress bar
4. In app currency
5. Levels

(Baraishuk, 2018)

## Gamification Choice & Motivation

I have elected to use a leaderboard as my gamification feature. In the context of the application, I believe a leaderboard is the most appropriate gamification feature to apply as it allows the application to remain simple while still performing its purpose.

The leaderboard shall show the time and name of the user and users shall only be eligible for the leaderboard if they complete the task with no mistakes with the top 10 scores being displayed. Showing more scores on the leaderboard shall present a greater range of scores, preventing users from being discouraged by showing them only the best scores which they may not be able to compete with at their current level (Duggan & Shoup, n.d.).

The addition of a leaderboard brings in a sense of competition of users which shall motivate users to intrinsically improve their skills (Duggan & Shoup, n.d.). furthermore, this sense of competition will distract users from the fact that they are learning the process has become gamified resulting in more time spent engaging with the application and more skill development.

When applying the Bartle Test of Psychology, a test which breaks gamers into four categories which are the achiever, explorer, socialiser, and killer, it can be seen that a leaderboard is an appropriate gamification feature for the application. A leaderboard applies to the socialiser and achiever

categories, which comprise of 70% and 10% of gamers respectively, according to Bartle's research (Kumar, et al., 2020). Based on this, 80% of gamers should find enjoyment with the leaderboard system.



Figure 1: Bartle's Player Type (Kumar, et al., 2020)

## Conclusion

In conclusion, it is evident through research that a leaderboard is the most appropriate gamification feature for the Dewey Decimal learning application. While other gamification features such as levels were in contest, the leaderboard is shown to have the simplest and most notable application. The inclusion of the psychological aspect of gamification features, seen in Bartle's Test of Psychology has further cemented the motivation for the use of a leaderboard.

## References

- Baraishuk, D., 2018. *5 Most Popular Gamification Features (With Examples)*. [Online] Available at: <https://elearningindustry.com/gamification-features-5-most-popular-examples> [Accessed 8 September 2021].
- Duggan, K. & Shoup, K., n.d. *How to Work with Leaderboards in Gamification*. [Online] Available at: <https://www.dummies.com/business/customers/how-to-work-with-leaderboards-in-gamification/> [Accessed 9 September 2021].

Kumar, J. M., Herger, M. & Dam, R. F., 2020. *Bartle's Player Types for Gamification*. [Online]  
Available at: <https://www.interaction-design.org/literature/article/bartle-s-player-types-for-gamification>  
[Accessed 12 September 2021].

Monroe County Public Library, 2021. *How To Use the Dewey Decimal System*. [Online]  
Available at: <https://mcpl.info/childrens/how-use-dewey-decimal-system>  
[Accessed 8 September 2021].