# **Gamification case study**

## Part1 - Khan Academy

## Gamified process used in Khan Academy

During the learning process on Khan Academy a series of badges can be unlocked. These badges have different unlock conditions including watch video for certain period of time, finish quizzes and complete a course. When condition is fulfilled the corresponded badge will light up and displayed under user profile. There are 6 categories of badges in Khan Academy. They are the following.[^1]

Badge Name	Number of Badges	How to Earn		
Meteorite	35	Mastering a certain number of skills, participating in a discussion forum, or watching a certain amount of video instruction		
Moon	33	Master a specific area or through consistent learning (mastering a number of unique skills, watching videos for a specific number of sequential days)		
Earth	17	Mastering additional skills, correctly answering problems in a row, watching a number of hours of video, forum participation, or by donating money		
Sun	11	Additional mastery of skills, large participation in discussion forums, or vast video watching (10 hours of a single topic).		
Black Hole	3	Unknown - Not given		
Challenge Patches	35	Proving proficiency in a specific skill		

## Motivation of gamifying this process

In the modern age of technology stimulus are every around us especially on an online platform. It is challenging to keep users attention. In addition, study is a boring process so it is even harder to be concentrated. By implementing a badges system users can be reworded during study which improves user engagement and motivation.[^1]

#### **Impacts**

There are not a lot of statistics available for public but since all Khan Academy videos are hosted on Youtube we can use the Youtube data as a reference. Currently the official account of Khan Academy has 7.23 million subscribers and in total 1.9 billion video views[^2] which put it on the front row of education platforms.

[^1]: Morrison, B. B., & DiSalvo, B. (2014). Khan academy gamifies computer science. Proceedings of the 45th ACM Technical Symposium on Computer Science Education. https://doi.org/10.1145/2538862.2538946

[^2]: Khan Academy statistics. (2022, April 23). Social Blade. Retrieved April 23, 2022, from https://socialblade.com/youtube/user/khanacademy

## Part2 - A gamified boarding pass

Boring an airplane is a long and complicated process. It takes 5 to 6 steps from entering an airport terminal to sit on the airplane seat which takes on average 2 hours. And the steps are commonly unclear especially for a first time passenger.

### Your boarding pass is your road map to the plane.

One of the possible solution is to print a road map on the boarding pass with clear instruction of what to do on each steps. A road map and achievement system can be commonly found in games.

#### An example of in-game road map

#### **Benefit**

In case of the boarding pass. Road map will show you each step of your boarding process and by complete them you "unlock an achievement".

This helps provide a clear instruction on "what to do next" which reduces passenger waiting time and anxiety.