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DIGIHEALTH

Gamification
Within e-learning in Pharmacy

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Questions

- What is a gamification?
- Why using gamification is useful in learning?
- How to be apply gamification?
- Did I Developed educational game?

At the surface

- **Gamification**

The application of typical elements of game playing (e.g. point scoring, competition with others, rules of play) to other areas of activity, typically as an online marketing technique to encourage engagement with a product or service.

More Deep

- Gamification:
- The application of game-design elements and game principles in non-game contexts. It can also be defined as a set of activities and processes to solve problems by using or applying the characteristics of game elements. Games and game-like elements have been used to Educate, Entertain and Engage for thousands of years. Some classic game elements are; Points, Badges, and Leaderboards.
- Points are used as visual identifiers of progress in sports, reward cards and video games
- Badges display achievement, whether from service in the military or a gold star on school report card
- Leaderboards are used across sports, sales teams, and in general life to present competitive placement.

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Useful In learning

The use of game elements and thinking to motivate, engage and change behavior.

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Benefits of Using Gamification in Education

- **Motivates students and learners**
- Interesting techniques used in various games with challenges and rewards help in motivating students and learners in the best prospects.
- **Enhances student engagement**
- Games have always been having a different approach for students. Involving studies can enhance students' engagement differently and positively.
- **Reduces faculty burden**
- Gamification provides an easier way to teach and learn, it reduces faculty burden by letting students understand more quickly and properly.
- **Improves overall learning experience**
- Students must get a proper understanding of whatever is being taught to them, and all this, gamification can help a lot expand and improve the overall learning experience in a better way.

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How to apply Gamification?

- Gamification in Grading and Result Declaration.
  - Example: Manage all the operations like attendance, admission, examination, and grading in a better and simplified manner. Institutions can change the evaluating marks using the experience point system.
- Promoting Studies using Gamification
  - Example: Developing games using concepts and syllabus of courses.
- Teamwork
  - Example: To generate more interest in students, faculties can share rewards, points, or even power-ups that can even help in boosting morale and team spirit.

- How to Use Gamification in Higher Education?. Academiaerp. https://www.academiaerp.com/blog/how-to-use-gamification-in-higher-education/

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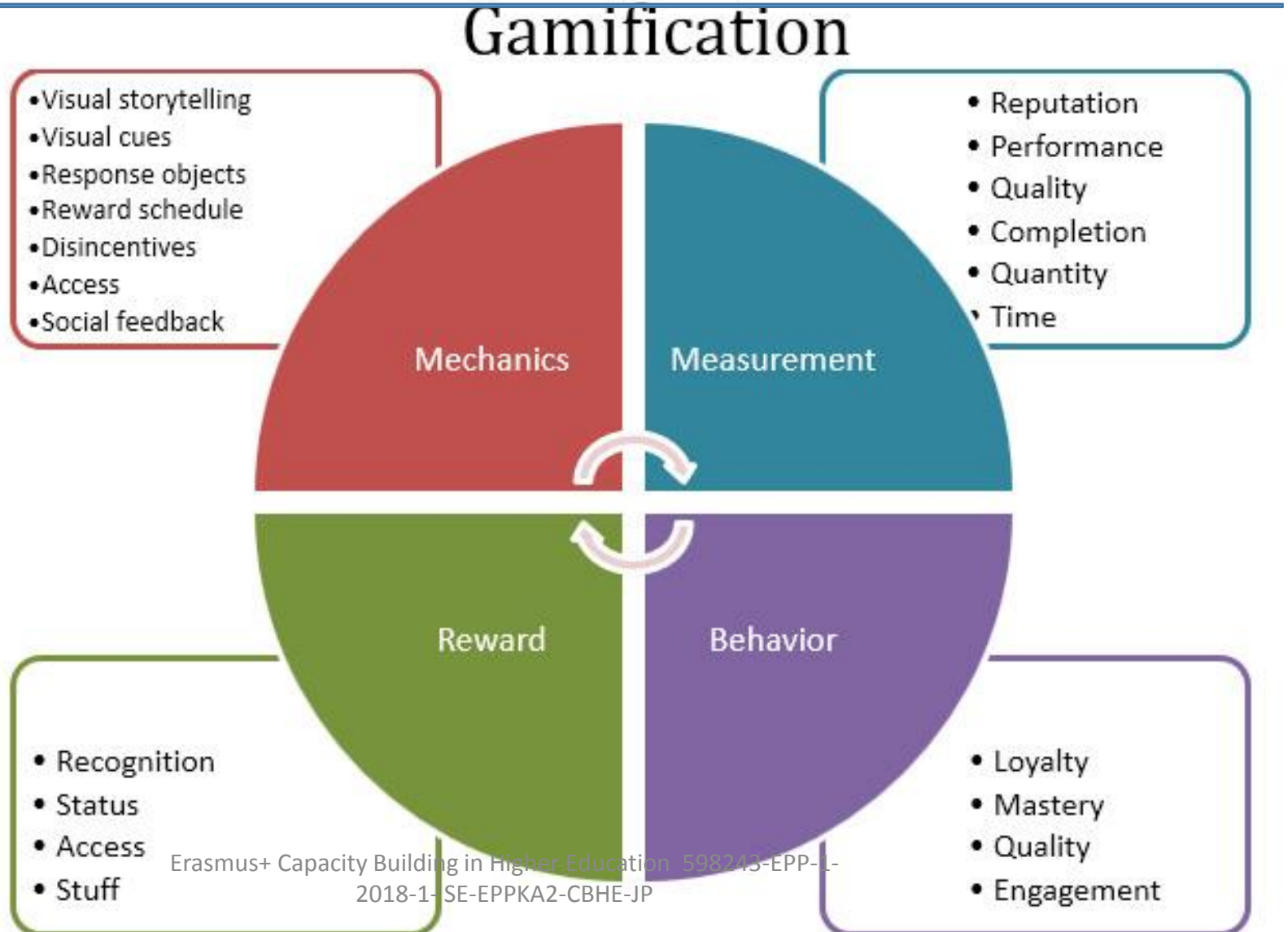

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Developing my games

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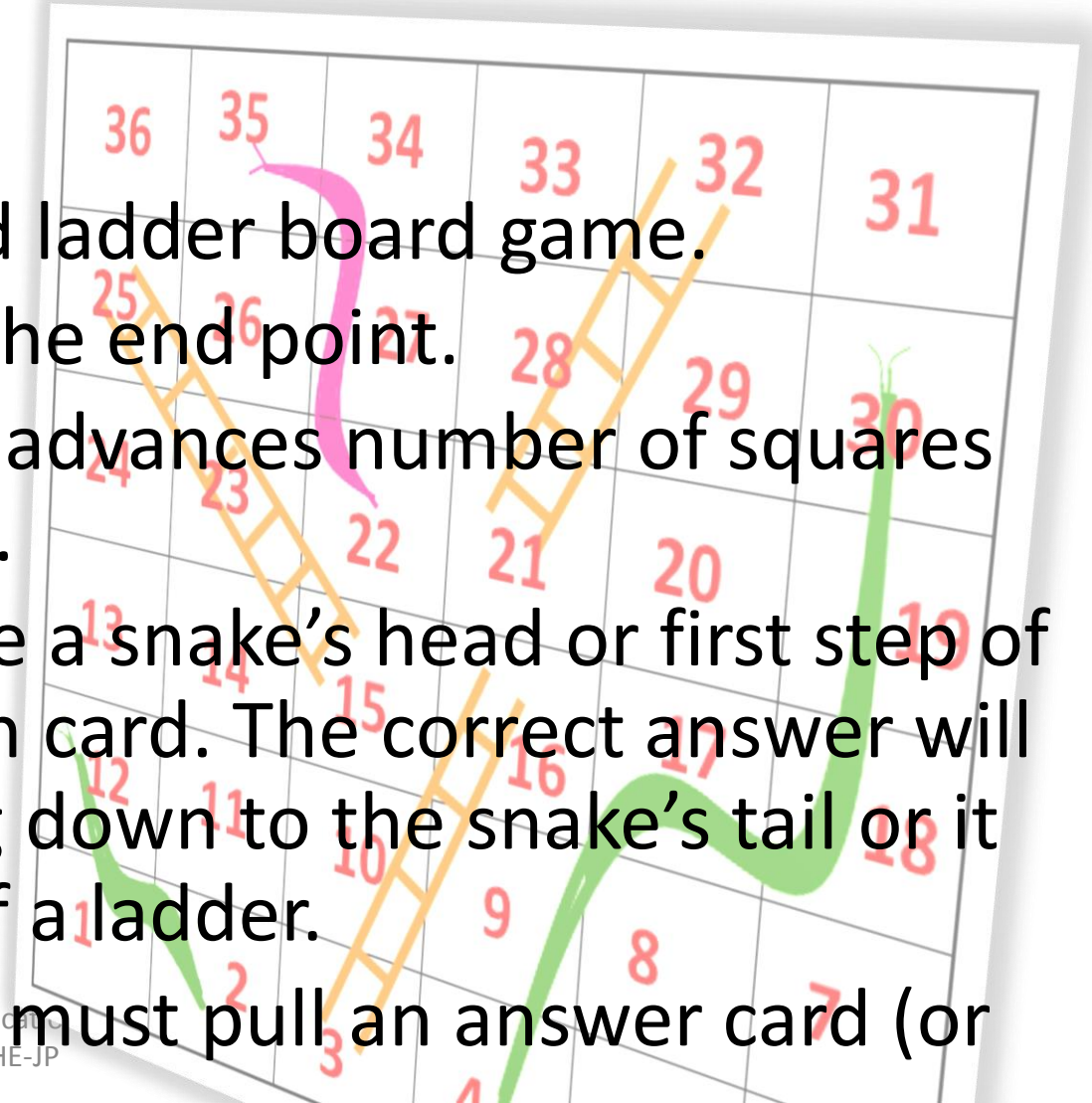
Drug Discovery and Development

Objectives:

- Introducing student to the process of new drug developing.
- Activate student's imagination about discovering and developing new drugs
- Learning using some short video about new concept.
- Learning by answering to short MSQs.
- Having fun while learning against a colleague.

- **The idea:**
  - The game is similar to snake and ladder board game.
  - The winner is the first to reach the end point.
  - Each student plays the dice and advances number of squares equals to what he get from dice.
  - If he reached a square that have a snake's head or first step of a ladder, he must pull a question card. The correct answer will prevent the player from slipping down to the snake's tail or it lets him go up to the last step of a ladder.
  - If he reached a green square he must pull an answer card (or



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Introduction to pharmacy car race game

Objectives:

- Introducing student to different pharmaceutical domains.
- Activate student's imagination about discovering and developing new drugs
- Learning using some short video about new concept.
- Learning by answering to short MSQs.
- Having fun while learning against a colleague.

Idea:

- Driving the car by using the arrow keys or by sliding finger on screen.
- Choosing the right answer by clicking on it or pressing keys from 1 to 4.
- Hitting another car will decrease health.
- Answering questions of introduction to pharmacy to recover health.
- Two colleagues can play, one drive the car and the other answers the questions.

Use the **arrow keys** to drive the car and choose the right answer **by clicking on it or pressing keys form 1 to 4.**
What are you waiting to start driving your car?

1. I am not sure because **hitting another car** will badly affect my **health**.
2. I am not ready to answer questions of **introdutcion to pharmacy to recover my health**.
3. I am waiting my colleague because he will help me to drive or to answer questions.
4. I am enable to read the billboards that show **hints** to answer questions.

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Treatment of IND is approved during:

1. Phase 1.
2. Pre-clinical study.
3. Phase 1 and phase 2.
4. Phase 2 and phase 3.

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Recorded on
screencapture.com

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Lab puzzle game

Objectives:

- Making student more encaged to laboratory producers.
- Helping student to identify the different tools used in lab.
- Learning using short video about laboratory expriments.
- Having fun while learning against a colleague.

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Idea:

- To put parts of video in the right place to solve the puzzle.
- Recognition the experiment, its steps, and its tools are essential to solve the puzzle in short time.

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- *Gamification has some real potential!*

- *Thank You*

- *Dr. Mazen Rajab*