Dark Patterns in Games Catalog

Consent Form: Dear Participant,, you have been invited to participate in a research study in which we propose a catalog of Dark Patterns in games. Dark Patterns in the context of games are recurring design practices intentionally used by game developers to create negative experiences for players, which are against their interests and likely to occur without their consent (J. P. Zagal et al., 2013). Our goal is to evaluate Dark Patterns in game development, inform players about them, and propose solutions to encourage companies to stop using these patterns. Participation in this research is not mandatory.

1) Procedure: To participate in this study, we kindly ask for your cooperation in evaluating the catalog of 13 Dark Patterns and providing feedback on each pattern based on your experience as a player or developer. After data collection, your name will be removed, and it will not be used at any point during the analysis or presentation of results.

2) Handling of Potential Risks and Discomforts: We will ensure your privacy and anonymity during data collection. The data collected in this study will not be used for any professional or personal evaluation but solely for research purposes related to the Dark Patterns catalog.

3) Benefits and Costs: This study will contribute valuable findings to Software Engineering research. You will not incur any expenses or costs by participating in the study.

4) Research Confidentiality: All information collected in this study is confidential, and your name will remain anonymized.

5) Participation: Your participation in this study is very important and entirely voluntary. You have the right to decline participation or withdraw from the study at any time, without penalties. If you decide to withdraw, please notify the responsible evaluator.
For any questions, please contact the researchers in charge:

Anonymous

1. **Consent Statement:** I have read, or had someone read to me, the information   *
    contained in this document before signing this consent form. I have received an
    explanation of the technical language used to describe this research study and
    answers to all my questions. I also confirm that I have received a copy of this
    Informed Consent Form. I understand that I can withdraw from the study without
    any penalties. I am over 18 years old and voluntarily consent to participate in
    this study.

    ( ) Yes, I do consent

    ( ) No, I do not consent

About you

Before evaluating the catalog, please answer a few questions about your gaming
experience.

2. How many hours per week do you spend playing games? *

    ( ) Less than 5 hours

    ( ) Between 5 and 10 hours

    ( ) Between 10 and 20 hours

    ( ) Between 20 and 30 hours

    ( ) More than 30 hours

3.   What genres of games do you usually play? *

- [ ] MMORPG
- [ ] MOBA
- [ ] FPS
- [ ] Battle Royale
- [ ] Action/Adventure
- [ ] Sports Games
- [ ] Single Player RPG
- [ ] Fighting Games
- [ ] Racing Games
- [ ] Other

1. Grinding

Category: Temporal Dark Patterns

Definition: Grinding refers to any repetitive and tedious activity required to achieve a goal in a game, typically used when no more convenient methods of progression are available. This approach often coerces players to spend significantly more time than they originally intended.

Example: In role-playing games (RPGs) like Black Desert Online, players must defeat monsters to earn in-game currency and items. As players progress, they realize they must dedicate more time to keep up with others, creating an endless cycle as the game is frequently updated with new content.

Player Performing Repetitive Actions in Black Desert Online

4.   Is the definition and example of **Grinding** clearly stated ? *

⬭ Yes

⬭ No

5.   If not, what is unclear ?

_____

_____

_____

_____

_____

6. Considering the provided definition, do you consider this issue to be a problem ? *

◯ Yes
◯ No

7. If you'd like to justify, why do you think so ?

_____

_____

_____

_____

_____

8. Have you noticed this Dark Pattern in any game ? *

◯ Yes
◯ No

9. If yes, in which game ?

_____

10. How harmful do you think this Dark Pattern is ? *

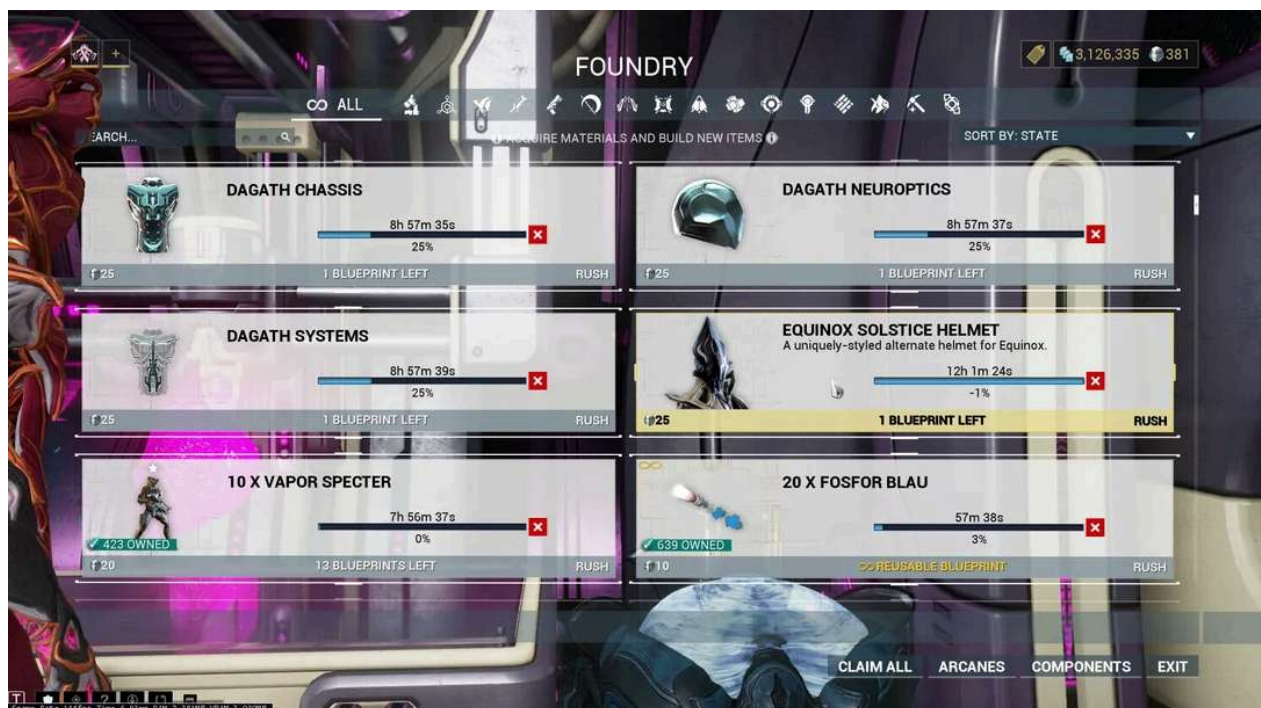|	1	2	3	4	5	6	7	8	9	10	
Not	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	Very Harmful

2. Playing by Appointment

Category: Temporal Dark Patterns

Definition: Playing by Appointment occurs when a game requires players to log in at specific times to achieve objectives, penalizing those who miss these designated times. This mechanic pushes players to adjust their routines around the game. If there are no penalties for missing these times, this becomes a non-issue.

Example: In online games, events may happen at set times, such as 8:00 am and 6:00 pm, where missing out means forfeiting valuable rewards, leading players to adjust their schedules. However, in games where these rewards can be obtained later, this issue is mitigated.

Time Required for Crafting Items in Warframe

11.   Is the definition and example of **Playing by Appointment** clearly stated ? *

⬭ Yes

⬭ No

12.   If not, what is unclear ?

_____

_____

_____

_____

13.   Considering the provided definition, do you consider this issue to be a problem   *
       ?

◯ Yes

◯ No

14.   If you'd like to justify, why do you think so ?

_____

_____

_____

_____

_____

15.   Have you noticed this Dark Pattern in any game ? *

◯ Yes

◯ No

16.   If yes, in which game ?

_____

17.   How harmful do you think this Dark Pattern is ? *

           1   2   3   4   5   6   7   8   9   10

Not ◯   ◯   ◯   ◯   ◯   ◯   ◯   ◯   ◯   ◯ Very Harmful

3. Endowed Progress

Category: Temporal Dark Patterns

Definition: This pattern refers to a misleading sense of progression that was ceded to encourage players to continue playing beyond their initial intent. The initial advancement is often much faster than the progression required in later stages, forming a dark pattern.

Example: In a game with a battle pass, the first few levels are easy to achieve, creating a sense of progress. However, subsequent levels require much more time, coercing players to keep playing based on their initial progress, even if it demands more time than they planned.

Battle Pass in Teamfight Tactics

18.   Is the definition and example of **Endowed Progress** clearly stated ? *

⬭ Yes

⬭ No

19.   If not, what is unclear ?

_____

_____

_____

_____

_____

20.   Considering the provided definition, do you consider this issue to be a problem   *
      ?

⬭ Yes

⬭ No

21.   If you'd like to justify, why do you think so ?

_____

_____

_____

_____

_____

22.   Have you noticed this Dark Pattern in any game ? *

◯ Yes

◯ No

23.   If yes, in which game ?

_____

24.   How harmful do you think this Dark Pattern is ? *

	1	2	3	4	5	6	7	8	9	10	
Not	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	Very Harmful

4. Fear of Missing Out

Category: Temporal Dark Patterns

Definition: Fear of Missing Out (F.O.M.O) is used in games through daily login rewards, battle passes, frequent updates, and surprise events with exclusive items. This mechanic pressures players to regularly check for updates to avoid missing out on potential rewards. The randomness and frequency of these events increase player anxiety, aggravating this dark pattern.

Example: In Final Fantasy XIV, surprise events can occur at any time, offering rare items available only for a few hours upon defeating certain enemies. The unpredictability and frequency of these updates lead players to remain vigilant and anxious about missing any opportunity.

Players Waiting for an Enemy to Spawn in *Final Fantasy XIV*

25.   Is the definition and example of **Fear of Missing Out** clearly stated ? *

◯ Yes

◯ No

26.   If not, what is unclear ?

_____

_____

_____

_____

_____

27.   Considering the provided definition, do you consider this issue to be a problem   *
?

◯ Yes

◯ No

28.   If you'd like to justify, why do you think so ?

_____

_____

_____

_____

29.   Have you noticed this Dark Pattern in any game ? *

◯ Yes

◯ No

30.   If yes, in which game ?

_____

31.   How harmful do you think this Dark Pattern is ? *

	1	2	3	4	5	6	7	8	9	10	
Not	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	Very Harmful

5. Pay to Skip

Category: Monetary Dark Patterns

Definition: This pattern persuades players to spend money to overcome challenging stages, easing progression after payment. This creates the illusion that paying is worthwhile; however, new levels eventually require more payments, resulting in frustration and greater expenses than anticipated. This is often linked to Grinding, where players pay to avoid repetitive tasks.

Example: A player encounters a difficult stage and buys an item to advance. The next levels become easier, but soon another challenging stage appears, prompting more spending and creating a cycle of unexpected costs.

Pay to Skip in The Sandbox 2

32.   Is the definition and example of **Pay to Skip** clearly stated ? *

⬭ Yes

⬭ No

33.   If not, what is unclear ?

_____

_____

_____

_____

_____

34.   Considering the provided definition, do you consider this issue to be a problem   *
      ?

      ( ) Yes

      ( ) No

35.   If you'd like to justify, why do you think so ?

_____

_____

_____

_____

_____

36.   Have you noticed this Dark Pattern in any game ? *

      ( ) Yes

      ( ) No

37.   If yes, in which game ?

_____

38.   How harmful do you think this Dark Pattern is ? *

|	1	2	3	4	5	6	7	8	9	10	
Not	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	Very Harmful

6. Loot Boxes

Category: Monetary Dark Patterns

Definition: Loot Boxes are randomized item containers, available through gameplay or real money. The problem lies in the lack of transparency about the odds of obtaining rare items, often hidden or difficult to access. Some countries, like China and South Korea, require companies to disclose these probabilities and set daily purchase limits, but this is not yet a global standard, leading players to spend more than they intended.

Example: A player purchases a loot box hoping for a rare weapon but receives only common items. Unaware of the true odds, they continue buying boxes, spending far more than they initially planned.

Loot Box in League of Legends
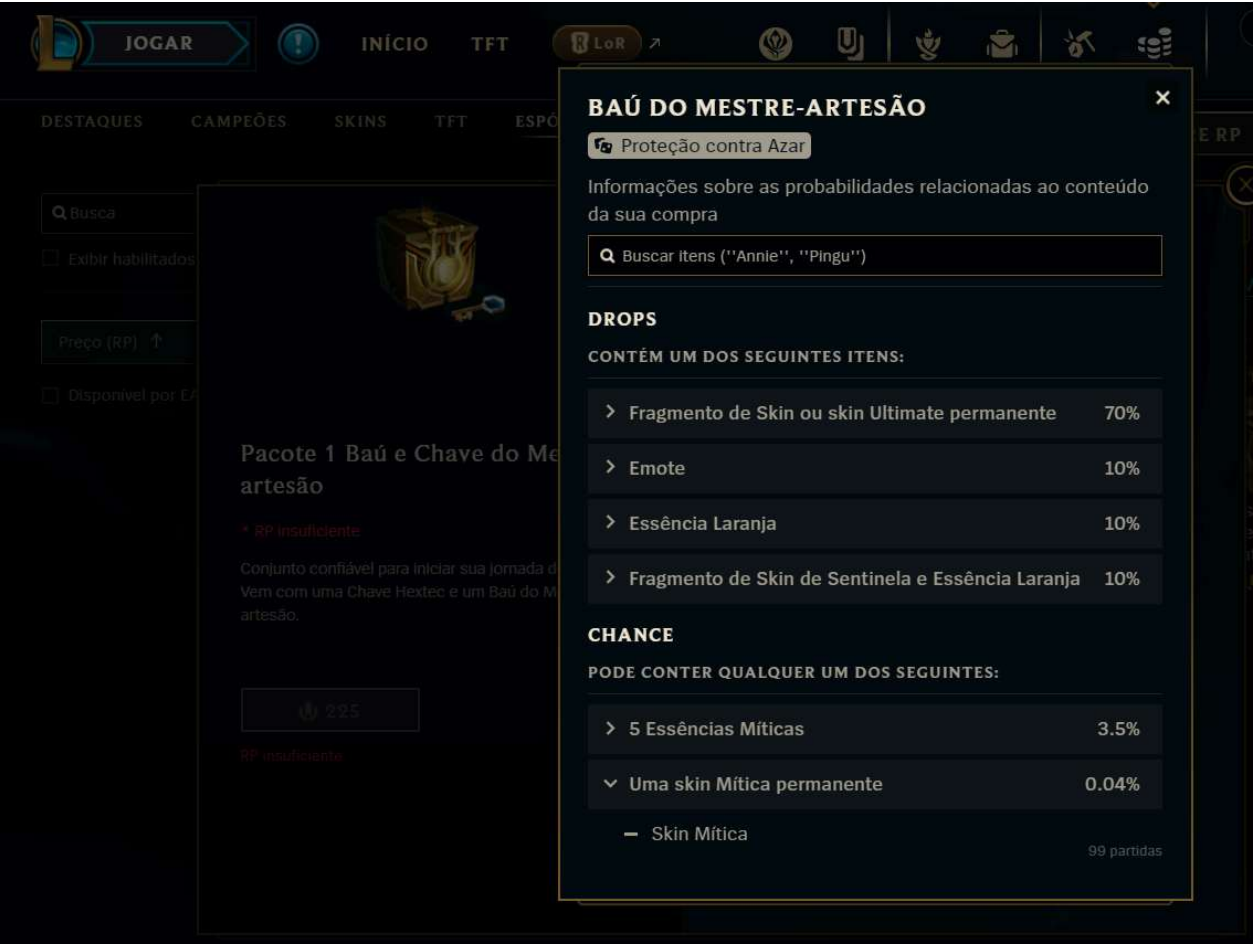
39.   Is the definition and example of **Loot Boxes** clearly stated ? *

◯ Yes

◯ No

40.   If not, what is unclear ?

_____

_____

_____

_____

41.   Considering the provided definition, do you consider this issue to be a problem   *
       ?

       ◯ Yes
       ◯ No

42.   If you'd like to justify, why do you think so ?

       _____

       _____

       _____

       _____

43.   Have you noticed this Dark Pattern in any game ? *

       ◯ Yes
       ◯ No

44.   If yes, in which game ?

       _____

45.   How harmful do you think this Dark Pattern is ? *

                   1   2   3   4   5   6   7   8   9   10
       Not ◯   ◯   ◯   ◯   ◯   ◯   ◯   ◯   ◯   ◯   Very Harmful

7. Invested Value

Category: Monetary Dark Patterns

Definition: This pattern exploits the Sunk Cost Fallacy, making players feel compelled to continue playing due to the time or money they've already invested. The problem arises when games continually extend goals, making players feel that quitting would waste their past investments.

Example: In games like World of Warcraft, players invest years completing objectives. With each new paid expansion, more goals are added, compelling players to keep playing to avoid wasting their invested time and money.

Subscription in World of Warcraft

46.   Is the definition and example of **Invested Value** clearly stated ? *

○ Yes

○ No

47.   If not, what is unclear ?

_____

_____

_____

_____

_____

48.   Considering the provided definition, do you consider this issue to be a problem *
       ?

       ◯ Yes

       ◯ No

49.   If you'd like to justify, why do you think so ?

_____

_____

_____

_____

_____

50.   Have you noticed this Dark Pattern in any game ? *

       ◯ Yes

       ◯ No

51.   If yes, in which game ?

_____

52.   How harmful do you think this Dark Pattern is ? *

|	1	2	3	4	5	6	7	8	9	10	
Not	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	Very Harmful

8. Pay Wall

Category: Monetary Dark Patterns

Definition: This pattern imposes a cost for full participation in the game. Although payment is optional, non-paying players experience a limited game or a competitive disadvantage. This paywall is often subtle and unexpected, creating frustration and pressure to spend money, forming a dark pattern.

Example: A player starts a free game but soon realizes important areas, characters, or items are locked behind a paywall. Without payment, their experience is limited, and in competitive games, they cannot fairly compete with paying players.

Card Set in Hearthstone
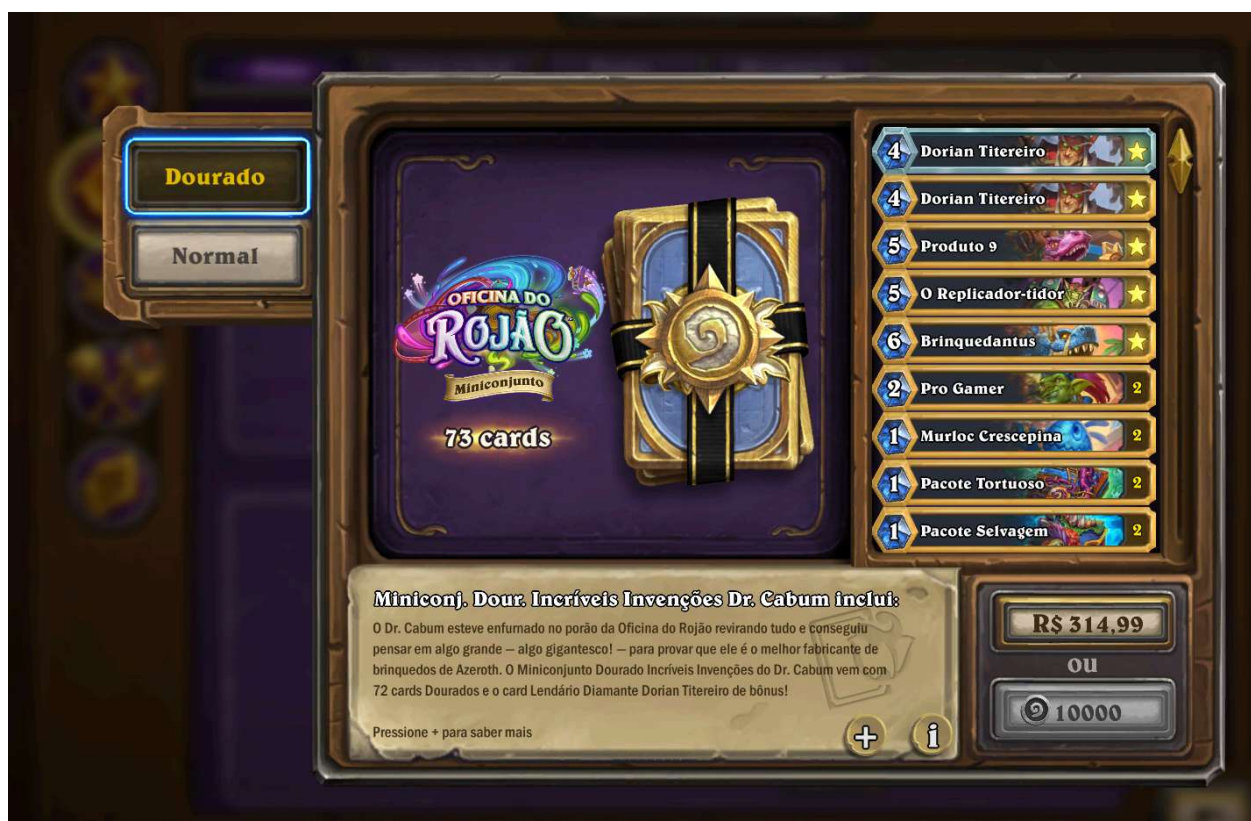
53. Is the definition and example of **Pay Wall** clearly stated ? *

◯ Yes

◯ No

54. If not, what is unclear ?

_____

_____

_____

_____

_____

55. Considering the provided definition, do you consider this issue to be a problem *
?

◯ Yes

◯ No

56. If you'd like to justify, why do you think so ?

_____

_____

_____

_____

_____

57.   Have you noticed this Dark Pattern in any game ? *

⬭ Yes

⬭ No

58.   If yes, in which game ?

_____

59.   How harmful do you think this Dark Pattern is ? *

	1	2	3	4	5	6	7	8	9	10	
Not	○	○	○	○	○	○	○	○	○	○	Very Harmful

9. Pre-delivered Content

Category: Monetary Dark Patterns

Definition: This pattern occurs when a game is marketed as complete but contains locked content that requires additional payment to access. These locked features, already present in the game from the start, are disguised as downloadable content (DLCs), deceiving players who thought they purchased the entire game.

Example: In fighting games like Mortal Kombat, the game is sold as complete, but many characters and maps are only accessible through extra payment. These features were part of the game from launch, leaving players feeling they bought an incomplete game and forcing them to pay more to access everything.

Character Selection in *Mortal Kombat X*

60.   Is the definition and example of **Pre-Delivered Content** clearly stated ? *

◯ Yes

◯ No

61.   If not, what is unclear ?

_____

_____

_____

_____

_____

62. Considering the provided definition, do you consider this issue to be a problem *
?

◯ Yes

◯ No

63. If you'd like to justify, why do you think so ?

_____

_____

_____

_____

_____

64. Have you noticed this Dark Pattern in any game ? *

◯ Yes

◯ No

65. If yes, in which game ?

_____

66. How harmful do you think this Dark Pattern is ? *

          1   2   3   4   5   6   7   8   9   10

Not ◯   ◯   ◯   ◯   ◯   ◯   ◯   ◯   ◯   ◯   Very Harmful

10. Monetized Rivalries

Category: Monetary Dark Patterns

Definition: This pattern takes advantage of players' competitive drive, encouraging them to spend more to achieve or maintain a desired ranking, such as on leaderboards, pushing them to spend beyond their initial budget.

Example: In a game with a leaderboard, players can buy items or upgrades to improve their ranking. Seeing their rank threatened, players feel pressured to spend more money to maintain their competitive status, often investing more than they initially intended.

Players' Ranking in Black Desert Online

67.   Is the definition and example of **Monetized Rivalries** clearly stated ? *

◯ Yes

◯ No

68.   If not, what is unclear ?

_____

_____

_____

_____

_____

69.   Considering the provided definition, do you consider this issue to be a problem *
       ?

       ◯ Yes

       ◯ No

70.   If you'd like to justify, why do you think so ?

_____

_____

_____

_____

_____

71.   Have you noticed this Dark Pattern in any game ? *

       ◯ Yes

       ◯ No

72.   If yes, in which game ?

_____

73.   How harmful do you think this Dark Pattern is ? *

         1   2   3   4   5   6   7   8   9   10

Not ◯   ◯   ◯   ◯   ◯   ◯   ◯   ◯   ◯   ◯ Very Harmful

11. Social Obligation

Category: Social Capital Dark Patterns

Definition: This pattern pressures players to participate in group activities to maintain their social status in the game. Those who opt out experience slower progress and lose access to certain content, feeling obligated to meet group goals.

Example: Guild systems exemplify this pattern, where leaders assign tasks to members and penalize non-participants, compelling players to invest more time in the game to maintain their social standing.

Guilds in World of Warcraft

74. Is the definition and example of **Social Obligation** clearly stated ? *

◯ Yes

◯ No

75. If not, what is unclear ?

_____

_____

_____

_____

_____

76. Considering the provided definition, do you consider this issue to be a problem *
?

◯ Yes

◯ No

77. If you'd like to justify, why do you think so ?

_____

_____

_____

_____

_____

78.   Have you noticed this Dark Pattern in any game ? *

⬭ Yes

⬭ No

79.   If yes, in which game ?

_____

80.   How harmful do you think this Dark Pattern is ? *

	1	2	3	4	5	6	7	8	9	10	
Not	○	○	○	○	○	○	○	○	○	○	Very Harmful

12. Impersonation

Category: Social Capital Dark Patterns

Definition: This pattern pretends to befriend players, using their name and image to motivate them to play more. While its effectiveness has declined over time, as players recognize the tactic, it still persists.

Example: Some games send notifications or messages that appear as if they are from friends, encouraging players to return or perform actions in-game, attempting to manipulate players into spending more time playing.

Impersonation in Forza Horizon 4

81.   Is the definition and example of **Impersonation** clearly stated ? *

⬭ Yes

⬭ No

82.   If not, what is unclear ?

_____

_____

_____

_____

_____

83. Considering the provided definition, do you consider this issue to be a problem *
?

   ◯ Yes

   ◯ No

84. If you'd like to justify, why do you think so ?

_____

_____

_____

_____

85. Have you noticed this Dark Pattern in any game ? *

   ◯ Yes

   ◯ No

86. If yes, in which game ?

_____

87. How harmful do you think this Dark Pattern is ? *

	1	2	3	4	5	6	7	8	9	10	
Not	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	Very Harmful

13. Social Pyramid Schemes

Category: Social Capital Dark Patterns

Definition: This pattern slows player progress unless they recruit others to play, offering exclusive benefits in return. While pyramid schemes are illegal as business models, this system is often covertly embedded in certain game designs.

Example: A game may require players to invite friends to obtain certain items or advance to new levels. Without these new recruits, the player's progress is slower or even blocked, promoting the game's spread in a way akin to a pyramid scheme.

"Recruit a Friend" Page in World of Warcraft

88.   Is the definition and example of **Social Pyramid Schemes** clearly stated ? *

◯ Yes

◯ No

89.   If not, what is unclear ?

_____

_____

_____

_____

_____

90.   Considering the provided definition, do you consider this issue to be a problem   *
       ?

       ◯ Yes
       ◯ No

91.   If you'd like to justify, why do you think so ?

_____

_____

_____

_____

_____

92.   Have you noticed this Dark Pattern in any game ? *

       ◯ Yes
       ◯ No

93.   If yes, in which game ?

_____

94.   How harmful do you think this Dark Pattern is ? *

	1	2	3	4	5	6	7	8	9	10	
Not	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	Very Harmful

Final thoughts

Finally, please answer a few questions about the catalog as a whole.

95.   Do you agree that a forum-style website, where players could vote on games   *
       that use these patterns in their development, would help reduce their use by
       companies ?

       ◯ Yes, I agree
       ◯ No, I disagree

96.   If you wish to justify your answer, why do you think that ?

       _____

       _____

       _____

       _____

       _____

97. How would you feel knowing, before playing a game, that the company responsible frequently uses many of these patterns in the development of their other games ?

98. How can this catalog be used to reduce the occurrence of the listed Dark Patterns ?

99. Do you have any suggestions for improving the Catalog of Dark Patterns in Games ?