## **Game Design Document: SeriousFun**

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#### **Team member names:**

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#### Permission to Show Your Work in Future Classes:

We hereby grant permission to show this report in future courses as a sample project.

# 1 Title

Schooled!

# 2 Razor

Competitive resource management game in an educational setting.

# 3 Slogan

Survive the Semester. Terrorize the Term.

# 4 Top level summary of your game idea

Survive the semester in this educational environment where you'll learn about the needs and wants of university life. Work hard to improve your grade, but make sure you don't go bankrupt!

Watch out for the diabolical students who want you to fail and don't let anyone beat your grade. Take risks or play it safe, it's up to you to become the best student possible.

# 5 Player experience goal(s) + atmosphere users should experience

#### Items from Lazarro's4 Keys 2 Fun (2014):

Hard Fun": mastery, achievement, "fiero"):	not at all  x-0  highly so
Easy Fun: Exploring, Imagination, Curiosity, Absorption	not at all  x-0  highly so
Altered States (Serious Fun): Values & Meaning	not at all  x
People Fun: Relationships, social bonding etc.	not at all  x0  highly so

### Items from Yee's Player Motivation taxonomy (2006):

#### **Achievement**component

<b>Advancement</b> — The desire to gain power, progress rapidly, accumulate in-game symbols of wealth or status	not at all  x0 highly so
Mechanics —analyzing the underlying rules and system in order to optimize character performance	not at all   highly so
Competition — The desire to challenge and compete with others	not at all  x0 highly so

Socialcomponent

<b>Socializing</b> — Having an interest in helping and chatting with other players	not at all			
	highly so			
Relationship — The desire to form	not at all			
long-term meaningful relationships with others	highly so			
<b>Teamwork</b> — Deriving satisfaction from being part of a group effort.	not at all			
nom being part of a group enort.	highly so			
	Immersioncomponent			
<b>Discovery</b> — Finding and knowing things that most other players don't	not at all			
know about	highly so			
Role-Playing— Creating a persona	not at all			
with a background story and interacting with other players to create an	-x0  highly so			
improvised story				
Customization— Having an interest in customizing the appearance of their	not at all  x0			
character	highly so			
Escapism — Using the online	not at all			
environment to avoid thinking about real life problems	x0  highly so			
8 items from <b>Hunicke</b> et al's taxonomy of "fun":				
1. <b>Sensation</b> : Game as sense-pleasure	not at all			
	x0  highly so			
2. <b>Fantasy</b> : Game as make-believe	not at all			
·	x  highly so			
3. <b>Narrative</b> : Game as drama	not at all			
o. Harrative. Came as diama	x0			
	highly so			

4. **Challenge**: Game as obstacle course not at all |------x---0--------| highly so 5. **Fellowship**: Game as social not at all framework |-----x-0------| highly so 6. **Discovery**: Game as uncharted not at all |------| territory highly so 7. **Expression**: Game as self-discovery not at all |-----x--0------| highly so 8. **Submission**: Game as pastime/go-to not at all |-----leisure activity highly so

#### **Summary**

The main goal of the game that we want to achieve is to foster a competitive environment that teaches our players a lesson about the post-secondary environment. We want players to feel conflicted about their two sets of resources (currency and grade) and create dilemmas for players when they have to choose between reducing grade or currency. Furthermore, we want to have an atmosphere where the competition in the game gets players invested in the game and they feel inclined to hinder their opponents, leading to interesting, exponential retaliation. We feel that the competitive nature that we want to attain will also act as a lesson as there are many situations in the educative environment where competition levels are extremely high. Lastly, we've been able to achieve an environment with a dynamic sense of people fun. During our playtests, we've found that, especially at the end of the game, there is a lot of players negotiating and pleading their case so that their opponents won't attack them.

# 6 Introduction

#### **Premise**

You and your friends have just enrolled in one of the most prestigious universities in the area, but rumour has it that all students are cursed with misfortune. Struggle to survive without failing the semester and stand above your peers through any means necessary.

#### **Objective**

Have the highest grade out of all players by the end of semester (game) without losing all of your money.

#### **Core Gameplay**

Every round (week), each player draws an event card from the center deck and responds to it. Players are also able to perform an additional action of choice during that turn. This process repeats until the end of semester (10 weeks).

# 7 Narrative/Story

There is no strong narrative element.

# 8 Game mechanics

#### **Number of Players**

3-4 Players

#### **Audience**

Our game is specifically targeted towards high school seniors and newly admitted university students.

#### Setup

- Each player gets 20 coins
- Each player sets their grade to 75
- Event cards are placed in the middle of the playing area
- Remaining coins are placed in the middle of the playing area with event cards
- Each player gets a cheat sheet to see the actions that can do each turn

#### **Procedures**

Each round

- Go around in a circle
- Each player gets a turn

Every player turn (in no particular order):

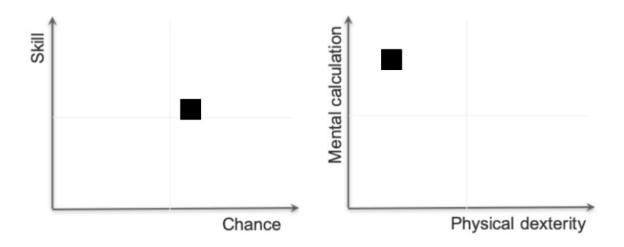
- Draw an event card, read it aloud and follow it's instructions
- Commit a player action

#### Rules

- The game lasts for 10 rounds
- If a player has less than 0 coins, they must take out a loan to get more money
  - When the game ends, players must pay off any remaining debt. If they are unable to, they lose.

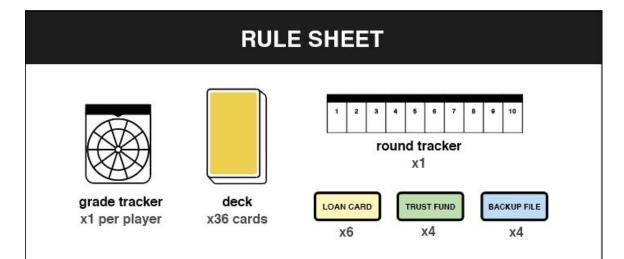
- Grade can't go beyond 100, or less than 0
  - Players cannot spend grade they don't have
- A player cannot have 2 'Student Council' cards or 2 'Job Opportunity' cards
- If two leading players have the same grade, the richer player wins

# 9 Play matrix



Schooled's gameplay reflects a balance between chance and skill where players are presented with both a random event card and one action of choice every round. In addition, the game requires a certain amount of mental calculation and resource awareness in order for a player to succeed. This is due to heavy reliance on resource management across all aspects of the game such as penalties, rewards, and win conditions. The implementation of long-term cards and abilities forces players to predict and plan for the future, all while having to worry about the present because there were times when players tried to plan too far into the future, they were unable to survive the present.

# 10 Rule Sheet



**Goal:** Have the highest grade at the end of the game without being in debt. If a tie occurs, the richer student wins.

#### Rules

- This is a 3 4 player game.
- The game lasts for 10 rounds.
- Each player starts with 75 Grade, and 20 Coins.
- Grade cannot be greater than 100, or less than 0.
- If a player runs out of Coins, they must take out a Loan for 10
   Coins. This player must pay off this debt at the end of the
   game, or else they lose. Even if, they have the highest grade.

#### **Procedures**

- Take turns, going around in a circle. Youngest starts.
- Each turn, in no particular order:
  - Draw an Event Card, and follow its instructions.
  - Commit a Player Action (see Actions cheat sheet)

# 11 Playtesting script including testing goals, questions, and assumptions/ hypotheses

#### (1) In-game Observations

- (a) Big satisfaction from high-risk, high-reward
- (b) If someone gets a lead, it doesn't last long
- (c) Lots of bargaining and trying to avoid attacks at the end of the game

#### (2) Post-game questions

#### (a) What is the hardest part of the game to understand for you?

- (i) Description of student council and work opportunity (say start of every turn)
- (ii) Keeping track of turns
- (iii) Some attacks are overpowered (pencil case)
- (iv) Spill coffee (maybe worth 3)
- (v) Magic 8 ball description needs to say it replaces the event draw
- (vi) Reword debt rule (AT (or AFTER) instead of BY)

#### (b) Did the game drag at any point?

(i) Not really

#### (c) Was anything frustrating, or wasn't fun?

- (i) Fighting to get out of debt
- (ii) Turn tracker.
- (iii) READ THE CARDS OUT LOUD. Add this into the rules.

#### (d) Were there particular aspects that you found satisfying?

- (i) Putting people in debt
- (ii) -20 on library burn (good rolls)
- (iii) Passive money gain (student council and job opportunity)

#### (e) Did you feel that the game offered an unfair advantage to some players?

- (i) Not really
- (ii) Being the first player (waterproof binder card = safe from coffee)

#### (f) Did any event cards or player actions feel over or underpowered?

(i) Pretty balanced overall

- (g) Was there a specific moment where you felt extra excited or annoyed during the game?
  - (i) -20
  - (ii) Getting targeted (stealing pencil case is a lot)
- (h) Did you have a strategy for winning? What was it?
  - (i) Build coins as much as possible
- (i) Did you find any loopholes in the system?
  - (i) no
- (j) What elements do you think could be improved?
  - (i) Strategies are very reactionary
  - (ii) Strategy isn't too deep (maybe limit targeting)
- (k) Were you interested in the game and its outcome during the entire time that you played? If not, why?
  - (i) For the most part
  - (ii) Even when out, they enjoyed screwing with people
- (I) Would you prefer a chart in the middle of the game to see everyone's grade, or would you prefer to keep your grade tracker close to you?
  - (i) Chart in the middle, 4 dials, turn counter.

#### (3) Revision Ideas

- (a) Description of student council and work opportunity (say 'start of every turn' instead of 'every turn')
- (b) Nerf pencil case attack and change language to 'destroy' 'steal' implies that players get coins
- (c) Spill coffee (maybe cost 3 monies)
- (d) Magic 8 ball description needs to say it replaces the event draw
- (e) Reword debt rule (AT instead of BY)
- (f) Consider a blocking ability to attacks
  - (i) Backup file (-12 coins, protect against any grade drop one time)
  - (ii) Trust Fund (-20 grade, protect against any money drop one time)
- (g) Strategy isn't too deep (maybe limit targeting so that you can't get attacked by every other player in one turn)
- (h) Chart in the middle, grade dials (4), turn counter.

# 12 Insights and results from playtesting: Test for <u>foundation/fun</u> and <u>structure</u>, then later for <u>functionality</u>, <u>completeness</u>, <u>loopholes</u>, <u>balance</u>, and dominant <u>strategies</u>

Issue name & brief explanation	Issue category	Playtestin g session # where the issue found	Severity rating / Priority: [low, medium high, critical	Resolving mechanism
Long term strategy - Except for the student council/job opportunity cards, players can't do much long-term strategizing.	Structure	3	medium	Implemented the backup file and trust fund system where players can protect themselves for a grade/coin drop event.
Good vs Bad balance - too many bad event cards compared	Structure	2	high	Change the ratio so that it is more close of a 3:1 ratio. Have 2 of each card.

to good event cards.				
Players are able to purchase a backup file action (-12 coins, but protect grade loss) to avoid paying for trust fund action (-20 grade, but protect coin loss).	Loophole	4	medium	Specified that bypassing protection purchases with another protection effect is not allowed
Players didn't realize right away that they cannot have more than one 'Student Council' or 'Job Opportunity' cards each	Functionality	5	low	On those two event cards, we have explicitly stated that players cannot have more than one of these cards for each of them

# 13 Analyze your game in terms of decision types, dilemmas, rewards, surprise, and endings

# 13.1 Decision Types

#### **Short Term**

- Many decisions in the game a short-term decisions. Many times, players would look around the board and decide what to do for that turn based on their own, current

predicament or based on the position of a competitor at that moment. Most of the time, players were very focused in-the-moment and wanted to deal with the present rather than the future. There are many decisions being made concerning player actions. As each turn a player can commit one action, players face some important decisions about what they will do along with their event card each turn.

#### **Long Term**

- The 'Student Council' and 'Job Opportunity' cards allow players to worry more about the future. With the ability to gain in-game currency passively over time, players started to think about what the future of their game would look like and how they could build themselves up to protect themselves in the future. We have also added in two additional actions for players (backup file for grade protection and trust fund for coin protection) which is kept with the player until he or she uses it.
- The 'Backup File' and 'Trust Fund' player actions also allow players to consider the future and use some long-term strategizing. The ability for a player to protect themselves from attacks results in two effects. Players can block any attack or event once, but opponents often feel reluctant to attack players with this protection. Because of this effect, these protections come at a great cost and create the possibility that players can put themselves in danger by sacrificing such a big part of their resources. It creates an interesting dynamic between some long-term security against the random element of our game and how much players are willing to cooperate with one another.

#### 13.2 Dilemmas

#### **Attacking**

- Especially at the end of games and at moments where the game had at least two clear leaders, when players were attacking one another, they would take their time to try and figure out what they want to do. They would take a look at each players position and what card effects they have and see what move is the most detrimental and worthwhile towards their own position in the game. This also leads to bargaining between players as they try to convince one another that they should not be attacked or that attacking players should attack anyone else but them. This leads to further dilemma and creates a much more intense atmosphere.

#### **Event Card Decisions**

Some event cards offer players choices as to how they can affect their game. Players can choose between source and tradeoff effects, stagnant effects and persistent ones, and no-risk-no-reward and high-risk-high-reward. Players often had to weigh the outcomes of each decision and make a decision as to what is the most worthwhile based on where in the game they were at.

#### 13.3 Rewards

#### Risks

Players felt very rewarded whenever they were successful in rolling a dice. When cards like 'Broken Bike' and 'Book Burning' work out for a player, there was an immediate reaction of excitement and joy. On the other hand, when a roll was unsuccessful, competitors got very excited and happy to know that they weren't going to be affected or that their opponent will get negatively affected.

## 13.4 Surprise

#### **Event Cards**

The biggest sense of surprise comes from the event cards in our game. The point of event cards in Schooled are to simulate the surprising events that can happen to students. For event cards, there is usually a positive or negative surprise. When players received and immediate or long-term positive effect, we noticed that players often audibly displayed their pleasure in a surprised matter. But when a negative event card was drawn, players would similarly voice their surprised displeasure and then use their actions to recover from the event.

#### High-Risk, High-Reward

- Some of our cards allow players to choose between safer options or high-risk, high-reward options. Players often would do the high-risk, high-reward when they started to get more desperate. As the odds of getting a positive effect are pretty slim, players felt joyfully surprised on the few occasions when these rolls worked out for them.

## 13.5 Endings

- Throughout the majority of the game, players felt invested in the outcome of the game. Because players are always able to affect the outcome of the game, they felt like a part of the game and that they had an element of control on the ending of the game. Also, we often found that the game would come down to at least two players so there often wasn't one clear winner at the end of the game who would easily win. So there was often a tense environment at the end of games that created a satisfying game resolution.

# 14 Overall Reflection

#### **Brainstorming**

- We originally had a lot of trouble brainstorming the concept for our game. We felt that board games can be a challenging medium for a serious fun game. So we decided to build a game for our audience. By analyzing our audience (being highschool students) we looked at what kind of game would be the most meaningful for our audience. That is when we came up with the idea of creating a game that helps simulate a post-secondary environment. From there, the idea of a resource management just came naturally as we

decided a game about teaching balancing money and grades would be very fitting and beneficial towards a highschool audience.

#### Designing

- When designing the event cards and player actions we were focused on creating events that work with our premise as well as have meaningful and logical effects on the game. We were able to stay within the theme of our game, the biggest challenge was ensuring that our effects seemed fair and logical based on the theme of the game. Furthermore, as our game is about making a commentary about post-secondary life, we put some of our own experiences in the game (mixed with the occasional comical one) so that the game felt mostly realistic and logical for its players.

#### **Prototyping**

- Creating physical prototypes of our game offered some challenges. One issue that we had to consistently change with each iteration was the wording for specific cards and the rules of our game. This was just a matter of continuously refining our language to explicitly state how the rules and cards function so that there was no confusion or grey areas for players when playing the game. The biggest issue we had was how to layout and display game and player information.
- We originally set up our game so that players would keep their grade and currency amount directly in front of them. When we started using poker chips to display money values, that made it easier for players to tell who has how much money, but players were still struggling to figure out opponents' grades without having to explicitly ask. So we decided that by using a centrepiece to clearly display each player's grade in one location, it would make it easier for players to figure how well each player is doing.
- One of the biggest issues we had was having players keep track of the turns in the game. Schooled operates on a turn limit, so it is essential for players to know what turn they are on and how many turns remain at all times in the game. We tried mixing a turn count with each player's grade, but this led to confusion as players kept forgetting to increment their turn trackers and people would have different counts. So we've decided to add one more universal centrepiece that will catch players' gaze so that they can remember to increment the turn counter and the start of each round.

#### **Playtesting**

- During playtests, our biggest focus was on the grade and money values on event cards and player actions. Because our game is a resource management challenge, we knew that the most important goal that we needed to reach was a balanced resource system that doesn't feel unfair while still remaining challenging and making players feel tense. Overall, we found that some punishing event cards were too severe and that a couple of player actions were a bit too expensive. So with numerous playtests, we were able to continuously refine our values so that our actions and events feel like they offer just as much as they take away.

#### Critiquing

- A common feedback we received from critiques was that we should try to allow some more long-term strategizing. We do offer a little bit with our 'Student Council' and 'Job Opportunity' cards, but players are not guaranteed to receive these effects as they are event cards. We thought of playing around with the idea of allowing players to use their player action to purchase one-time use abilities to protect against the attacks of enemy players (For example, a player could you their action to purchase a waterproof binder to protect themselves from a coffee spill attack from another player). From this idea stemmed the player actions of 'Backup File' and 'Trust Fund' where players can protect either there money or their grade from events or attacks which helps counter the power of targeting that can happen in the game. Originally these abilities were not super expensive, and it was too easy for players to get both kinds of protection which resulted in less attacks from other players. So we increased the price of these abilities which helped balance out that protection versus attacking. And opponents are far more comfortable with attacking a player with this protection as they no longer feel overpowered.
- The rest of our critiques was mostly about tweaking some of the values in our event cards and player actions to limit the power of events or limit players' ability to target one specific player.
- We also sometimes received some ideas about how to better word our descriptions so that they would be more easily comprehensible.

#### **Iterating**

- The most important changes in the different iterations of our game were changes in values of the game. Each card and action changes either a players grade, cash-value or both. So every iteration offered tweaked resource values in order to find the level of balance that doesn't make cards or abilities feel to over or underpowered.
- Every iteration, our solid pieces often changed. We consistently updated the wording of our rules, player actions and event cards so that we could make descriptions as explicit as possible so that players don't have any sense of confusion about how different elements of the game function.

# Appendix A: Affinity diagram

[Images below]

