

CS3247 Game Concept Guidelines

The game concept should include the following 3 sections:

1) Title Section:

- This section should include, name of the game, game genre, platform, and team size and members names.

2) Summary Section (max: 1 page):

- You should present a high level description of the theme, goal of the game, the main characters, the flow of the game, what makes the game unique (use the LENSEs to describe), key selling/marketing points and the primary actions the player take.

3) Description Section (max: 3 pages): Detailed description should include some of the following...

- The fictional background of your game (what is the background story)? This includes a brief description of major characters in your game.
- What is the goal of the player of the game (how does the player win?)
- What are the key challenges presented to the player?
- How does the player interact with the game?
- How does the player advance the fictional aspects of the game (if possible)? For example, how do they save the princess, or save the world?
- If the game has levels, a brief description of each of the levels.
- If the game is an educational game/serious, describe how it meets its educational goal or its field specific goals.
- If the game is designed for a specific audience (young kids, middle school girls, absent-minded professors), describe how the game has been specifically designed for this audience.
- The significant scenes in the game
- Some simple sketches to help your description (game map, characters)

3.1) Game Mechanics & Dynamics

- State your draft game rules (methods designed for interaction with the **game** state).
- Illustrate a few possible dynamics.
- State uniqueness of the game mechanics/dynamics in your game.

3.2) State Key technical/content focus of your game [select any one from the following]. [State in 2 lines, no details are required at this stage. You can modify/change and provide details during first progress presentation, after term break]

- Game AI - You should implement your own algorithm (should not use game engine library).
- Game Physics - You should implement your own algorithm (should not use game engine library).
- Game Assets - Modelling of Game Objects, Game Sound/Music
- Innovation in Interface - Use of alternate interfaces other than monitor (eg. HMD), key board and standard controllers (eg. Leap motion, Sensors, Vive trackers, etc).

Take this as a guideline. You can follow any format but try to give the key aspects about your game.

Here is a good example, http://gamecareerguide.com/features/1307/how_to_write_a_game_.php?page=2 [Try to fit it to the sections given above in the guideline].

Hope this helps! Please upload the Game Concept into "**Game Concept**" submission folder in IVLE workbin before the due date.

SAMPLE GAME CONCEPT: -

GAME CONCEPT - POWERBALL! - BEGIN

PowerBall! by Matt Powers

This is a quick concept overview of the mobile, free-to-play game, **PowerBall!**

Quick Overview

- Player has X number of balls
- Goal is to get the ball into the hole/target
- Think - pool table to start
- Player has a "gun" (which is fixed on the table, always in the same spot) that shoots the ball - always same velocity, player controls angle
- Player needs to shoot the ball(s) at the appropriate angle to get it into the hole(s)
- As levels progress there are barriers that come up on play-field to block balls
 - Walls
 - Mud pits that slow ball down
 - Black holes that suck balls in
 - Etc...
- Player gains his own toolset of objects he can put in play-field. These objects he uses to help his ball get to its destination
 - Bounce pads
 - Acceleration pads
 - Etc...
- Player has a set of tools which he can use to modify the play-field to assist the balls to get into the holes - bypassing the barriers presented by the play-field.
- Now think - reverse pinball machine
- Game can become very flashy and noisy (pinball machine) w/ lots of things happening
- Score is tallied by completing play-field objectives, using toolbox items, etc...
- Multiple ways for player to be successful (can use his tools in many different ways)
- When player completes the play-field, a new one is presented with new challenges (and the player gains new tools in his toolset to overcome these challenges)

Kinda similar games:

- Incredible Machine
- Bill Budge's Pinball Construction Set
- Peggle
- Angry Birds
- Star Trux

Example: Progression of Play

1. Aim turret, shoot ball across play-field into hole
2. Play-field puts up a barrier in front of hole
3. Player must use their toolset (probably a bounce-pad) to modify play-field to his benefit
4. Aim turret, shoot ball, ball bounces off bounce-pad into hole
5. Player gains different type of ball - BIG ball - the bigger, slower ball (this ball goes slower but can smash certain objects)
6. To get this BIG ball across the play-field, player needs to place an acceleration pad on play-field so it can make the distance to the hole

7. Aim BIG ball, hit acceleration pad, hit bounce pad, go into hole
8. The hold is now surrounded by barriers (new type of barrier - brick and not steel)
9. Player places two acceleration pads.
10. Aim BIG ball, hit acceleration pad 1, hit acceleration pad 2, smash wall, go into hole.
11. Aim regular ball, hit bounce pad, go through hold in wall, go into hole
12. Etc....

The Play-field and The Toolbox

- Play-field - the area that play occurs. This includes the hole the balls must go in and the obstacles that may present themselves.
- Toolbox - the various objects the player has at their disposal to modify/enhance the play-field. The player uses the items in the toolbox to assist in getting to the goal - balls in the hole.

Example of items:

Toolbox Item	Play-field Item
Bumper	Brick Wall
Accelerator Pad	Steel Wall
Static Field	Slow down pad
Timed actions	Black Hole
Ball Return	Play-field Power-up
Etc...	Etc...

Play-field Power-ups

There are two ways for the player to add items to his Toolbox. One is using his PowerPoints to purchase toolbox items (assuming they have been unlocked and are available). The second is by picking them up from the play-field. On certain levels there will be Toolbox items represented as power-ups on the play-field. The player can pick these up by causing one of his balls to hit/run over the power-up. In addition to being Toolbox items, Power-ups could also be items such as: bonus balls, play again, bonus score, bonus PowerPoints, etc...

Themes

Themes are how the play-field, the play-field items, and the toolbox items all match and have a common look, colour, and styling. Examples of themes include:

- Traditional
- Robotic
- Candyland
- Rainbows and Unicorns
- Elves and Trolls
- Etc...

At a certain point in the game the player unlocks themes. The player gets to pick his first theme for free. Future themes the player can purchase by using his earned PowerPoints.

Commodity / Money System

- To complete a play-field the player must get a certain number of balls (based on play-field specification) into the hole(s).
- The player increases his score on a play-field by using his toolbox, getting balls into holes, hitting point target, picking up power-ups, keeping the ball in play for long period of time.

- Once requirements of the play-field have been met, the player gets a score tally. The score is then converted to PowerPoints.
- PowerPoints are used to purchase items such as: more balls, toolbox items, themes, etc...
- A player can replay a play-field at the cost of a certain number of PowerPoints (but he can only pick up a Power-up once).
- Players can spend real money to purchase PowerPoints.
- Each day the player gets a random allotment of PowerPoints (or other special items) - this is to get him to return to the game on a daily basis.
- As the game becomes more challenging, the player must find ways to use all the Toolbox items to get all balls in the hole(s) in a certain period of time to get the maximum score. If he does not gain maximum score after a certain number of play-fields, he will run out of balls/PowerPoints in which case he will need to replay play-fields (or use real money to purchase PowerPoints).
- If the player is good enough or willing to replay play-fields a number of times, he can continue without spending real money. But to unlock Toolset items and new Play-fields quicker, he can spend real money to purchase PowerPoints which can then be used to unlock or purchase in-game items.

Some More Details

- When player creates his own "pinball machine" to get his balls from start to finish, it can become very complex. He can make it more complex than needed.
- The more of the tools used, the higher score (and hence, more potential PowerPoints).
- Players can save their really cool "machines" and show off or share with friends.
- Players can use themed art to personalize their machines
- Think of players making their own reverse pinball machines to complete challenges.

Play-field Construction Set

- Player can spend PowerPoints to unlock a play-field construction set.
- With the Play-field Construction Set, the player can now create his own Play-fields.
- Play-fields can be shared with friends to challenge them (or just used alone for personal challenges).

Other Details

- **Practice Ball** Player can eventually get a Practice Ball. This ball will automatically be returned to player after it is put in play. It does not count towards target ball count to reach Play-field goal. It is used by player to test out his Play-field solution without threat of using one of his valuable balls. NOTE: the Practice Ball is lost forever if it goes into a Black Hole. More Practice Balls can be acquired by spending PowerPoints.
- **Players can "customise" their ToolSet** As more tools become available, players can pick tools which they prefer or like more. Players at the same "level" of game may have totally different looking ToolSets.
- **Some play-fields may not be solvable with maximum points at current time or with players current toolset** Players can replay play-fields at any time with their current toolset to achieve a higher score. The difference in score from their last play-through counts towards possible more accumulation of PowerPoints. This motivates players to go back and try Play-fields again with their newest ToolSet.
- **Some Play-fields require a certain type of balls or Tools to reach maximum score**
- **Players can share their Play-field Solutions** A player may have worked out a very complicated solution to a Play-field using his massive ToolSet. This may result in a very high score for that play-field. Player can "share" his play-fields with friends. The player can post a short video of his solution showing the tools used and how he acquired such a high score.
- **Prefer to not have time limits for Play-fields** The idea is (especially for the later, more complicated, Play-fields) is for players to try and use all their Tools to realise maximum points for a Play-field. A timer on a Play-field limits the players creativity in finding a personal, creative, solution.

GAME CONCEPT - END