Pac-boy
Game Design Document

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Theme

The themes of this game are survival and science fiction. In this modern take on Pac-Man the user must evade approaching enemies and make difficult decisions on the Fly. the user is expected to learn from previous experiences in order to solve problems and apply information picked up to formulate solutions to the levels. The Survivor theme is most core to the game play as there is a very real chance of death should the enemies come in contact with the user. Science fiction themes are brought into play with the futuristic design of the levels as well as the different power-ups which may be used to empower the user which would defy the laws of known science. These themes come together to perform to provide a one of a kind experience which is nostalgic of the Original Pac-Man but provides a different feeling altogether.

Narratives

The game follows the adventures of Pac-boy the son of Pac-Man. He finds himself trying to survive in a world which his father could not and as such the narrative of outgrowing his father's shadow looms heavy over his head and therefore over the game itself. He finds himself having to deal with problems his father had and countered and having to find Solutions which were not possible for his time.Therefore there is a lot of time devoted to him finding his own path rather than following in the footsteps of his father. This is also the story of a young man attempting to come of age.

Pac-Boy has lost his father but now he has moved out of his mom's house and must become his own man. This narrative pushes him to grow and solve issues independently as he seeks to become independent of those around him. There is also The Narrative of overcoming the grief that his father has left him with through solving these puzzles which had defeated him. even though Pac-Boy is finding his own way he is proud of his heritage and feels closer to his father every time he solves a problem and this is a driving factor for why he continues.

Lastly another driving theme of the story is leaving the past behind. the world has changed significantly and so too has gaming. This game attempts to thrust the user straight into the future with music and gameplay which may be unfamiliar to traditional

gamers. Pac-Boy knows this as well and he is keen to overcome these new challenges in order to keep up with the world around him.

Player Controls

The player uses the arrow keys, directional pads or keyboard to maneuver pac boy.

Sound and Music

The music of this game was selected to reflect the modern nature of its setting. music that utilizes tracks from the current day and time and sets the tone by letting the user know that this is now. the genres of the tracks so as to ensure that almost everyone could find representation. In terms of score and Temple we decided to go with high beat and up-tempo music to create feelings of excitement and energy within the user. We do however switch to more somber music when the story calls for it. The soundtrack for this game was crafted very carefully to evoke feelings which entice the user to continue to play and also to create an experience which is unique to the game itself. Through this we are creating a community within our game Community which is linked by music.

Level design

Levels of this game were designed First and foremost to create a challenge for the user. The challenge is from The Maze design of the levels this is naturally meant to confuse the user however there is a clear solution should they pay close enough attention. In terms of the look of the level we aim for a futuristic style ones Which would create a feeling of a within the user. We wanted to ensure that the user felt as if this game was as futuristic as we intended through the colors and items present within the level design.

Characters

The character is present in the game are Pac-Boy son of pac-man and the various enemies he faces.

Development

This game was developed using Unreal Engine 4. Utilizing the information provided to us throughout this class about story development and the features of Unreal Engine such as blueprints, actors and event graphs. In addition to the built in features of unreal engine some aspects of the game were coded in c++ and included in the game through this way.

Monetization

The monetization of this game will be through initial sales as well as through custom skins for Pac-Boy. We intend to include an online feature at some point in the future which would drive up demand for the skins as players seek individuality.

Game Testing

This game was tested firstly using C++ unit testing. This was to ensure that they were no major issues with the code as it existed that could lead to crashing. These tests included an input test to see the reaction that the game has two different user choices. The unit testing also covered the results produced from different actions throughout the game to ensure that all eventualities and possible issues were handled as it relates to the different kinds of data which are necessary for the game to run.

The game was also tested using a focus group with a sample size of 15. Different people of different backgrounds and different gaming propensities were selected and made to play through the levels from start to finish. We asked them to note any bugs observed and rate their experience on different aspects of the game such as soundtrack and level design on a scale of 1-10. The focus group was also asked to make recommendations for improvements to the game. They were presented with the survey at the beginning of the game and filled out each section when they felt comfortable to do so, submitting at the end of their play time. The results were, however, kept anonymous to maintain the integrity of the feedback and to ensure that play testers would be as unfiltered as possible.
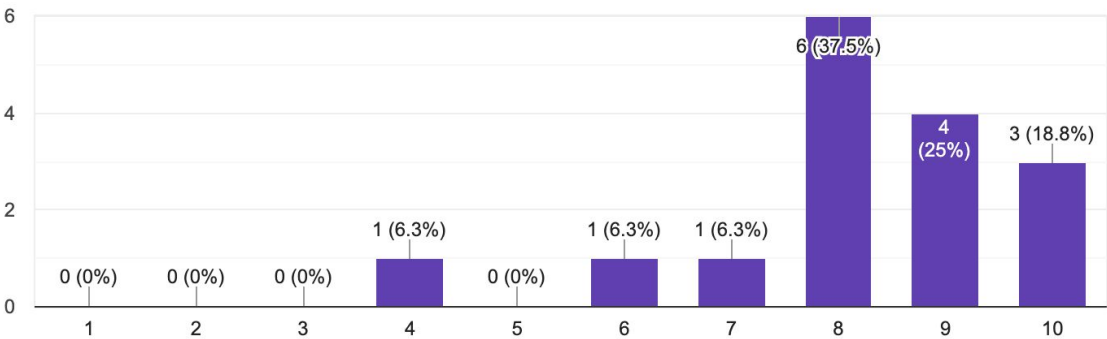
Play Testing Results

For our play testing results we wanted to be able to get information which would help us to make the user experience more enjoyable. In order to do this we selected a focus group of only 15 people who would be asked extensively about their experience playing the game. I've mentioned earlier in order to maintain Integrity we kept the responses anonymous. the questions we asked we're geared towards key components of the game such as level design, character design and the soundtrack. we made sure that we gave users a large amount of leeway to express exactly how they're feeling so that we were able to make more actionable decisions. For this reason we strayed away from yes or no questions where possible and sought responses which could be expressed on a linear scale. We anticipated the long form questions would not receive as much responses or as detailed responses as we had hoped so we ensure that most questions were able to be responded to in the form of clicks.

The play testing was conducted in one sitting where each user was able to play through all three levels and make notes of any issues which they may have encountered. the users were encouraged to take detailed notes and they were presented to us through conversation. While we did value these long form results we knew they would be harder to present. For this reason we ensured to collect as much empirical data as possible so as to keep a concise and actionable plan of development. included below you may see a few of the questions which we have asked and their results. each level had their own specific questions as well as the game itself having questions geared towards the overall feel.

How do you feel about the character design of Pac-boy.

16 responses

Bar chart showing responses on a scale of 1 to 10:
- 1: 0 (0%)
- 2: 0 (0%)
- 3: 0 (0%)
- 4: 1 (6.3%)
- 5: 0 (0%)
- 6: 1 (6.3%)
- 7: 1 (6.3%)
- 8: 6 (37.5%)
- 9: 4 (25%)
- 10: 3 (18.8%)

## What aspects of Pac-boys design do you think could have been different?

10 responses

the eyes

Colour

I would like to see more detail

Eyes could be more prominent

Colors could be different

play speed

N/A

I think it could be flashier and more vibrant

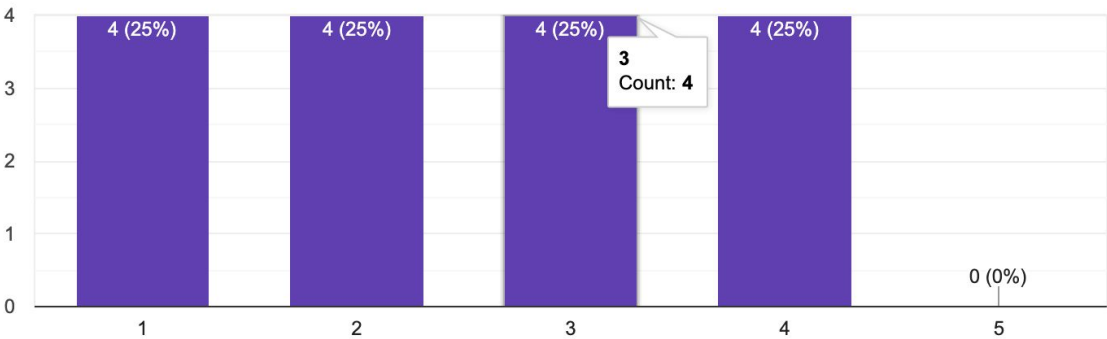The shape

Rate the design of Level 1 (the new frontier)

16 responses

Rating	Count
1	0 (0%)
2	0 (0%)
3	0 (0%)
4	0 (0%)
5	2 (12.5%)
6	2 (12.5%)
7	3 (18.8%)
8	4 (25%)
9	2 (12.5%)
10	3 (18.8%)
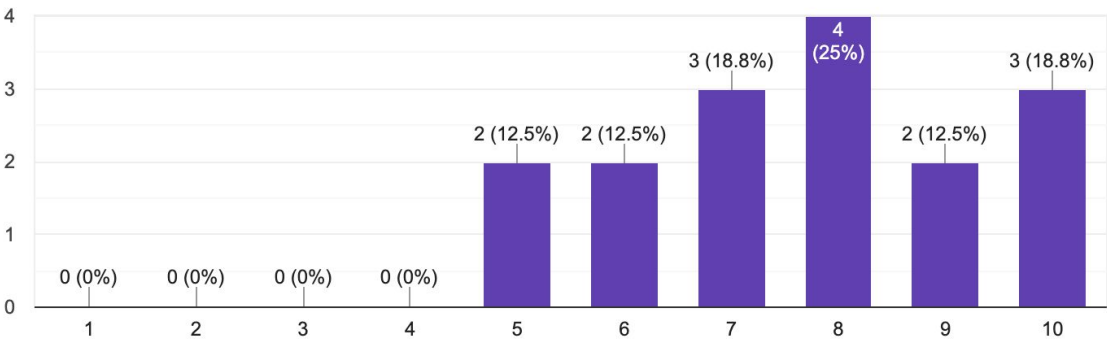
What level of challenge would you say you encountered at level 1

16 responses

Rating	Count
1	4 (25%)
2	4 (25%)
3	4 (25%)
4	4 (25%)
5	0 (0%)

3
Count: 4

What aspects of Level 1 do you think could have been changed

5 responses

Make it shorter
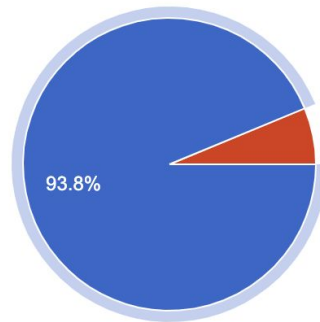
Nothing in particular

It was done well

The length could be changed

Nothing

Do you think the story of Pac-Boy fits the gameplay

16 responses

- Yes
- No

93.8%

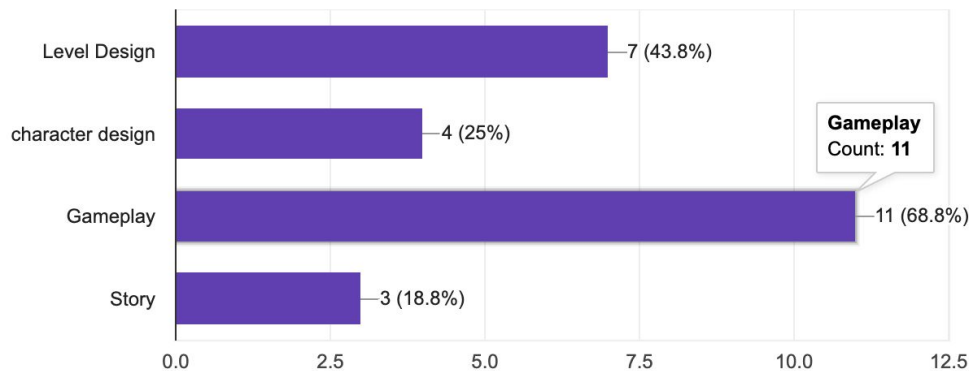Did you notice any bugs during gameplay (if so specify where)

9 responses

No
fell through map on level 1
None to report
No I didn't

Which areas of Pac-boy would you say were your favorite.

16 responses

Gameplay
Count: 11

Level Design — 7 (43.8%)
character design — 4 (25%)
Gameplay — 11 (68.8%)
Story — 3 (18.8%)

Relevant links