Game Design Document

🎮 **Name of the game: Lilly's Adventure**

- Developer: Natalia Palej
- Design: Natalia Palej

Overview

📐 Project scope

- **Timeline: Two weeks**

🗣 Elevator Pitch

In this 2D platform game we are in control of character "Lilly", who is fighting various enemies and gathering collectibles for higher score.

Story

The main character that the player gets control of is Princess Lilly. Her village and surroundings got attacked by mutated animals and undead, as well as witches. Her mission is to wipe away invaders and free the city and its citizens. The bad guys have taken small dogs from their families, Lilly has reassured them that she will find and bring them back. She needs to make sure they stay alive.

Gameplay

Core Game Mechanic #1

- Details: Walking
- How it works: Player can move main character by pressing left arrow key to move left or right arrow key to move right.

Core Game Mechanic #2

- Details: Jumping/Climbing
- How it works: Player can jump from a platform to a platform by clicking up-arrow-key or climb by pressing up arrow key using the ladder.

Core Game Mechanic #3

- Details: Killing enemies
- How it works: Player can kill ground enemies by jumping on top of them. Player can shoot enemies only once the gun/arrow has been picked up by clicking space on keyboard. If player is unsure whether ammo has been picked up, the icon will show up beside lives on left top corner in the game screen.

Game elements

👤 Characters

- **Lilly** - main character that the player is in control of. She is a princess in her village, she has long blonde hair and red/maroon dress. Lilly has special ability to kill invaders by jumping on top of them or picking up ammunition that is lying around to shoot enemies. Be careful, Lilly cannot jump onto flying objects!

🗺 Locations

- **Old Town Level 1**

  The story starts in the village. In "Tutorial level" it is more crucial to demonstrate the puzzle aspect of the game more than combat enemies. It is achieved by the fact that the player can't see the whole level when dropped into it. It becomes meaningful to explore and observe the elements that may be useful for the player. It will be possible to fail on first try, so that the player know to be more attentive in subsequent play-throughs.

- **Cave Level 2**

  In second level, Lilly enters the cave. It is important to note, that if ammo has been picked in previous level, it does not transfer to the next one. She will need to make her way though the map to find it again. The cave introduces higher difficulty by added flames/lava and spikes. If the player jumps on them, Lilly will die.

- **Rainy Mountains Level 3**

  Third level introduces new weapon - bow. Player has to collect arrow ammunition to be able to shoot from it and kill flying enemies. The level is more maze-alike, which should encourage the player to discover and wander around the map to find more collectibles and fight new enemies.

- **Night Town / Grave Level 4**

  Forth level has significantly increased difficulty as well as expanded map size. It is twice bigger in width and consists of two different backgrounds. The player is brought from night town that is occupied by witches into graveyard full of zombies. As player should have better idea about the gameplay by now, a new object "dog" has been introduced to the map. As the map starts, player will hear dog cries that indicates it is nearby and needs to be rescued. Lilly has to be very careful not to kill the dog accidentally as she will loose a lot of points! In the second part of the level, main character has to fight multiple undead enemies. Player should be wary of surroundings as the graveyard is full of spikes that could potentially kill Lilly.

- **Cliffs / Mountains Level 5**

  Level five is the final level in the game "Lilly's Adventure". It is twice bigger in height and consists of two different backgrounds. Player wanders through cliffs and then ends up in a sunny mountains where the mission finishes. In fifth level Lilly will encounter all previously introduced enemies and a puppy to be saved towards the end. As this is the last level, it is harder in difficulty by increased amount of enemies, maze-like map and less ammo. It is also more complicated to rescue the dog. Towards the end, player will need to avoid lava and kill multiple flying objects to reach Finish Line.

🏆 Levels / missions

- 5 levels with arising difficulty
- Rescue a dog

🧱 Objects

Enemies:

- Flying
  1. Wasp - *added animation to represent flying*

  2. Bird

  3. Fly

  4. Toucan

  5. Witch - *added animation to represent flying*

  6. Witch 2 - *added animation to represent flying*

- Ground
  1. Rat

  2. Rabbit

  3. Snake

  4. Worm

  5. Wolf Spider

  6. Tarantella

7. Scorpion

8. Zombie - *added animation to represent walking*

9. Zombie 2 - *added animation to represent walking*

10. Skeleton - *added animation to represent walking and added sprite that represents dead skeleton*

11. Path Finder

12. Girl - *added animation to represent walking*

13. Red Head - *created sprite that represents dead body for human-like enemies*

Collectibles:

- **Bonus Life** - *adds +1 live. Added animation to object that grows in size*

- **Coin** - *gives +30 points. Added animation to object that makes it spin*

- **Dog** - *can be killed by main character by shooting it. This action will reduce significant amount of points (-1500). When rescued, adds +1000 points.*

- **Banana** - *gives +10 points. Added animation to object that gives effect of growing/jumping*

- **Apple** - *gives +15 points. Added animation to object that gives effect of growing/jumping*

- **Grape** - *gives +20 points*

- **Cherry** - *gives +20 points. Added animation to object that gives effect of growing/jumping*

- **Amulet 1, 2, 3, 4** - *gives +20 points. Some amulets have colorization animation added*

- **Armor** - *gives +20 points*

- **Boots** - *gives +20 points*

- **Robe** - *gives +10 points. Added colorization animation effect*

- **Ring** - *gives +25 points. Added colorization and glow animation*

- **Potion Ammo** - *when picked up, it adds +10 ammo, +5 points. Added colorization and glow animation*

- **Potion Life** - *when picked up, adds +1 live. Added colorization animation*

- **Books 1, 2, 3, 4** - *gives +20 points*

- **Chest** - *gives +15 points*

Weapons

- **Gun** - *once collected, player will be able to shoot with animated bullets that change colors. Added glow animation so it is more visible on the maps*

- **Bow** - *once collected, player will be able to shoot with arrows*

Finish level objects:

- **Doors** - *gives +250 points*

- **Exit sign** - *gives +300 points*

- **Portal** - *gives +400 points. Added spinning animation*
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  Rock doors - *gives +500 points*

- **Prize Cup** - *gives +800 points*

Blocks:

- **Block** - *solid blocks that are creating walls and floor*
- **Breakable Block** - *once collided with main character, it breaks and allows to access path*
- **Lava** - *animated image that will kill main character once in collision*
- **Spikes** - *animated image that will kill main character once in collision*
- **Ladder** - *allows to climb up or down*

Other:

- **Game Logo** - *visible at the beginning in the menu room. Designed by myself using GIMP.*
- **Congratulations** - *visible at the end of the game once all levels completed. Designed by myself using GIMP.*

Assets

🎨 Art

9 Background images:

- **Main Menu** - *this includes Logo Object that I have designed and created using GIMP and objects that will be present in the game*

Congratulations - *this room is completely designed and created by myself, using GIMP and objects that were included in the game*

- 7 different backgrounds
- Tile sets

Object Lilly - *object has been edited by myself using GameMaker Studio editor, which changed the look of main character*

Object Rabbit - *object has been edited by myself using GameMaker Studio editor, which changed the look of enemy*

Sign UP - *object created by myself using GameMaker Studio editor to hint player where to go*

🔊 Sound

7 different music's for each room:

- Menu Music
- Town Music
- Cave Music
- Forest Music
- Magic Music
- Cyberpunk Music
- Congratulations Music

Each background music complements the theme of the current level as well as the enemies to be encountered.

Effect sounds:

- Various effects for different types of dead enemies
- Main character dead
- Gun/arrow shooting
- Various effects for different types of collectibles pick-up
- Dog cry/rescued/killed
- Moving to the next level - *door closing effect*
- Finished game

Each sound effect is picked carefully to complement its sprite design

🚶 Animation

Blocks:

- Expanding: lava, spikes
- Breakable block once collided with main character

Ammunition:

- Colorize: bullet

Collectibles:

- Spinning: coin, fruits
- Colorize: eq, potions, ring
- Expanding: bonus life, ring