Traces of Alvilda game design document booklet

Version 1.2 June 4, 2011 by Berrin Sun

- o. Title Page
- 0.1. Game Name: Traces of Alvilda
- o.2. Copyright Information: All rights of art, music and code belong to Berrin Sun.
- 0.3. Version Number, author, date Version 1.0, by Berrin Sun, June 2011
- 1. Section I Game Overview
- 1.1. Game Concept

Traces of Alvilda is an action - adventure game where the player is expected to solve puzzles in a maze based setting while passing through sets of environments by controlling the players. The objective of each level is to pass the maze. The objective of the game is to retrieve the main character Alvilda's memory by finding objects that have a special meaning for her. Whenever Alvilda hears a part of a tune that feels familiar, she will regain part of her memory.

1.2. Feature Set

Flash game to be uploaded online.

1.3. Genre

Adventure-puzzle

1.4. Target Audience

For gamers between the age of 17-30 who prefer puzzle games with adventure and like the 19th century steam-punk and pirate adventure setting with a nostalgic pixel art touch.

1.5. Game Flow Summary

The player navigates with the left and right arrow keys and jumps with the X key, and presses the spacebar to pass the text-based narrative scenes, P to pause and escape button to restart the level or go back during a

narrative cutscene. Additionally, the player could mute by pressing 0, turn the volume up by pressing + and turn the volume down by pressing -.

1.6. Look and Feel

The visual style of the game is a steam punk world in an alternative 19th century setting where pirates roam, in pixel art, with animated sprites, and basic tiles.

1.7. Project t

The game is a basic game where the objective is to solve the exit from the maze in each level. The project scope is everything from the art to the music to required programming.

1.7.1. Number of locations

There are five locations, each for every level.

- 1. The sand pit
- 2. Aged Tim's gadget galore
- 3. Doubloon island
- 4. The ocean
- 5. Volcano island.
- 1.7.2. Number of levels There are five levels in the game.
- 1. Duckie's escape
- 2. Search for the music box
- 3. Duckie is lost
- 4. Finding volcano island
- 5. Find the oracle.
- 2. Section II Gameplay and Mechanics
- 2.1. Gameplay

The game consists of five mazes and the player advances levels by passing these mazes until the end of the game. There are narrative cutscenes between levels which can be passed after reading with the spacebar.

2.1.1. Game Progression

The game starts with our main character Alvilda waking up and discovering that a song is stuck in his head, but she has no memory whatsoever about anything, and following clues from the song that is stuck in her head, she travels with her steed to retrieve her memories.

2.1.2. Mission/challenge Structure

The challenge in each level is to solve the maze to reach an object important to Alvilda and enable her to remember a part of her memory.

2.1.3. Puzzle Structure

The puzzle structure is in the form of a labyrinth, and escaping this labyrinth is by finding an object, which changes in each level. When the player collides with said object, the game advances to the next narrative sequence. If the player gets stuck in a maze, the player could press escape to return to the beginning of the level.

2.1.4. Objectives

The objective of the game are solving puzzles in the shape of mazes in order to retrieve the main character's memory.

2.1.5. Play Flow

The game advances on its own during the process. The player only has to navigate through the mazes through the gameplay. The player will be asked to "help" the main character somehow by solving the maze. During cutscenes, the player will press the spacebar to pass the text-based cutscene.

2.2. Mechanics

The player could only navigate through the level maze or reset the level by pressing the escape button on the keyboard. After pass-

ing a level the player cannot go back to the previous level. During narrative scenes, the player could go to the first narrative scene after the previous level by pressing escape. Once the player is in the new level, going back to the previous narrative scene is not possible.

2.2.1. Physics

The environment is a scrolling universe, where the background tiles have a parallax scrolling effect. When the player moves, the tiles that the player collides with and the background tiles move too.

2.2.2. Movement

2.2.2.1.General Movement

The player collides with the tiles and could jump, fall, and go left and right. The tiles colliding with the player moves according to the players' accelaration.

2.2.2.2.Other Movement

The background tiles also move but in a slower speed and accelaration rate (which is called parallax effect)

2.2.3. Objects

There are objects which the player has to reach to finish the level on each level. The level ends when the player collides with said object.

2.2.3.1. Talking

There are short narratives between levels where dialogues take place. There are no options the player could choose, and the narratives' purpose is to advance the plot.

2.2.3.2.Reading

Reading is only mentioned during dialogues, where Alvilda the main character reads an inscription on her necklace and the duck's saddle.

2.3. Screen Flow

2.3.1. Main Menu Screen

The main menu screen is only for displaying the title.

2.3.2. Options Screen

The options screen displays volume options while the game is paused.

2.4. Game Options

The game options are pausing by pressing P, muting by pressing o, turning up the volume by pressing + and turning down the volume by pressing -. While the game is paused, pressing the screen enables resuming the game.

2.5. Replaying and Saving

Changes cannot be saved during the game, but after the game is entirely finished, the game restarts from the title scene.

3. Section III – Story, Setting and Character3.1. Story and Narrative

The story is Alvilda Jones losing her memory and chasing the traces of memory she finds along the way when she hears a part of a tune playing which matches the song stuck in her head that she doesn't remember clearly. The narrative is in the shape of snippets of dialogues when she talkes with other characters she encounters or remembers something. The story pieces together as the game progresses.

3.1.1. Back story

Alvilda Jones is actually a crafter that makes gadgets and gizmos, selling them to make money. She has a lovely oversized duck named Zanzibar that she hides from the evil people who make animals work as slaves, and the duck is her best friend. She has been

working on a hat for the past seven years, that plays music when wound with the key on her necklace. While she was returning from a particularly harsh journey with Zanzibar, the hat was blown away by the wind from airship she was riding on. She saw it crashing on the roof of her house just before the small airship fell down. She must have had a concussion that made her lose her memory, and the song stuck in her head is the tune her hat plays. Zanzibar had been blown away by the wind into a sand pit under her house.

3.1.2. Game Progression

After an introduction about Alvilda losing her memory and a song being stuck in her head, the game focuses on Zanzibar trying to escape the sand pit he is stuck in. After Zanzibar escapes and comes to Alvilda's house Alvilda sees the AJ inscription on Zanzibar's saddle and her own necklace. Thinking this "AJ" person could help her, she goes on a quest to find AJ and regain her memory. She first arrives on an island with gadget stores on it, and meets Aged Tim who tells her that she had previously left a music box. After Aged Tim brings her back her music box and listening to another part of the tune that is stuck inside her head, she remembers being a crafter who makes things. After this, she and Zanzibar go to Blubber Island, where she momentarily leaves the duck alone to pursue a part of the melody she hears around the island. Being shooed away by a mechanic who tells her the tune was none of her business, she realizes that the duck is gone. After her search for the duck, she remembers his name is Zanzibar, remembers how she rescued him from smugglers and that he is her best friend. After this, they meet an airship captain who is initially the mechanic who shooed her away in Blubber island. He agrees to help them in their quest, and takes her to an animal protector crowd, where they find out that they must search for the treasure, where Alvilda replies that she is searching for her memory, and is not treasure hunting. They tell her that the treasure is actually the oracle who remembers everything and that they must go to Volcano Island. With the airship, they find Volcano Island and after searching for the oracle, the oracle asks Alvilda where her hat is, and Alvilda remembers how everything happened. 3.2. Game World

3.2.1. General look and feel of world The world is an alternative 19th century steam-punk world where pirates roam. There are original inventions and machinery in fantastical environments, and every level contains unique graphical settings and a specific atmosphere. Colors like brown and bronze are very common in the game design.

3.2.2. Area #1 The sand pit

3.2.2.1.General Description

A sand pit that is dark where the duck is trapped.

3.2.2.2.Physical Characteristics Sand and earth colored.

3.2.2.3.Levels that use area

Level 1

3.2.2.4. Connections to other areas Connected with Alvilda's house. Not connected to any other levels. 3.2.3. Area #2

Aged Tim's Gadget Galore

3.2.3.1.General Description

The interior of an old building where Aged Tim keeps the things he sells. He often gets lost in it and bumps himself into walls, it's a wonder he hasn't broken down yet.

3.2.3.2. Physical Characteristics

Old, worn down stone building full of ivy.

6.2.3.3.Levels that use area Level 2.

3.2.3.4. Connections to other areas No connection to other area since it's on another island.

3.2.4. Area #3

Blubber Island

3.2.4.1.General Description

Blubber Island consists of a town built on the island. It looks darker than other islands and the grey stones don't help its apperance.

3.2.4.2. Physical Characteristics

Grey, dark, feels like something is looming.

3.2.4.3.Levels that use area

Level 3

3.2.4.4.Connections to other areas

No connection to other areas since it's on another island

3.2.5. Area #4

The ocean

3.2.5.1.General Description

The ocean is vast. If you don't know how to navigate your airship you will get lost easily.

3.2.5.2. Physical Characteristics

Blue, wavy. Large body of water.

3.2.5.3.Levels that use area

Level 4

3.2.5.4. Connections to other areas

Although the ocean is physically connected to the other islands, in Level 4 the sprite that the player controls which is the airship, is looking for Volcano Island which is the area of Level 5.

3.2.6. Area #5

Volcano Island

3.2.6.1.General Description

Because the island consists of a volcano and the oracle is located inside said volcano, our heroes are inside the volcanic caves looking for the oracle.

3.2.6.2. Physical Characteristics

Red hot lava.

3.2.6.3. Levels that use area

Level 5

3.2.6.4. Connections to other areas

Area #4 which is the ocean includes volcano island

3.3. Characters

3.3.1. Character #1

Alvilda

3.3.1.1.Back story

Alvilda Jones is a crafter who makes machines, mainly gadgets that are related to music. Her house has a harp on its side which plays with the wind, she has been working on her hat for the past seven years which can also play music, and she composes melodies. She has rescued her trusted steed and friend Zanzibar the duck when he was an egg, while the egg was being smuggled away. She has also lost her memory and cannot remember any of it.

3.3.1.2. Personality

Bright, cheerful, intelligent, outspoken and gentle.

3.3.1.3.Look

Young pirate girl.

3.3.1.3.1. Physical characteristics

Tan female with long and wavy red hair, wearing a cream blouse and grey skirt with matching boots.

3.3.1.3.2. Animations

She has animations for herself and her riding on Zanzibar the duck. Both sequences include walking, falling, jumping and staying idle.

3.3.1.4. Special Abilities

Bright mechanic, able to fix gadgets very quickly, good composer.

3.3.1.5 Relevance to game story

Main character.

3.3.1.6.Relationship to other characters Owner and friend of Zanzibar the duck, sells merchandise to Aged Tim.

3.3.2. Character #2

Zanzibar

3.3.2.1.Back story

Zanzibar is a duck that has been rescued and raised by Alvilda since he was an egg being smuggled by animal-slave traders. He has been seperated by his family whose fate is unknown

3.3.2.2.Personality

Loyal, persistant

3.3.2.3.Look

Young oversized duck

3.3.2.4.1.Physical characteristics Large enough for Alvilda to ride on, brown

feathers, reddish orange beak.

3.3.2.4.2. Animations

He has animations for himself and Alvilda riding him. Both sequences include walking, falling, jumping and staying idle. Zanzibar flaps his wings while falling and jumping.

3.3.3. Character #3 Aged Tim

3.3.3.1.Back story

Aged Tim is a machine that is sentient but is quite battered. Nobody knows how old he is, or his maker, but everybody who knows him doesn't know him without his gadget galore. He also has a weird accent, and incorrect grammar that nobody knows where he got it from.

3.3.3.2.Personality

Helpful, dauntless, tactless.

3.3.3.3.Look

Very, very old and battered.

3.3.3.4.1. Physical characteristics

Aged Tim looks like he was once yellowish. He has rotating wings on top of his head which helps him fly around, although he bobs up and down frequently while he's hovering. His arms are like claws, but are in contrast to each other, since he has probably lost one of his arms and replaced it with another scrap he found.

3.3.4. Character #4

Jack Libra

3.3.4.1.Back story

Jack Libra is an airship captain who tries to protect animals against cruelty. He secretly makes flying machines that house and keep birds safe, away from the pirates that have a high possibility to enslave them. He works as a mechanic in the funfair at Blubber Island when he isn't flying.

3.3.4.2.Personality

Helpful, gentle, caring, brave

3.3.4.3.Look

Forty-something aged, sports a pipe and a fedora with feathers in the band.

3.3.4.4.1. Physicals characteristics
Jack Libra has a relatively triangular face with
a triangular beard, he wears a fedora with a
few feathers in the band and has a pipe in

his mouth at all times.

4. Section IV - Levels

4.1. Level #1

Duckie's Escape

4.1.1. Synopsis

Duckie is stuck! help him escape from the sand pit.

4.1.2. Introductory Material

Text based cutscene "help me get out of here, Quack!"

4.1.3. Objectives

To get out of the sand pit labyrinth.

4.1.4. Physical Description

A level map where all you could see is sand, both in the foreground and the background tiles.

4.1.5. Map

The map is the easiest in the game, since it's the first level.

4.1.6. Level Walkthrough

Go towards the far right from the bottom and upwards from there. Alvilda's house is at the top left.

4.1.7. Closing Material

Alvilda greets the duck with surprise. "A duck? It's huge!" is the first line of the narrative sequence after finishing the level.

4.2. Level #2

Search for the music box.

4.2.1. Synopsis

Help Aged Tim find the music box that Alvilda left there.

4.2.2.Introductory Material

Text based cutscene from Aged Tim's mouth: "Oi! Ain't ye gunna get yer box back? Hold on ye lass, I go get it fer ye. Ah... Where did I threw it now. eh?"

4.2.3.Objectives

To find the music box

4.2.4. Physical description

A map where the tiles are yellow stones with ivy on them in some places.

4.2.5. Map

The map is relatively harder than the first level map, and some places are narrower so there are delays when Aged Tim is passing through.

4.2.6. Level Walkthrough

The box will be visible after going a bit to the right. Go towards a cluster of tiles in the middle and pass to the right. After going upwards and a bit left, you will come to a loop shaped road inside, the music box is at the bottom of this loop.

4.2.7. Closing Material

Aged Tim gives Alvilda the music box and warns her of the hunters. "I am too old fer this... Ye be careful, there be hunters lurkin". There ye go, yer music box. Git on with it you"

4.3. Level #3

Duckie is lost

4.3.1.Synopsis

Alvilda lost duckie when she was distracted by the melody she heard, and now she's searching for him.

4.3.2.Introductory Material

Text based cutscene "What is that sound? I must listen... Hi! Where is this melogy coming from?" "None of your business, missy. Git on with it ye!" "Where is the duck? He

was here a minute ago!"

4.3.3. Objectives

Find the duck!

4.3.4. Physical Description

A large level map which has lots of stairs and dead-ends. It's also dark and grey.

4.3.5. Map

The map is full of stairs and dead-ends and is relatively larger and harder than the previous two levels.

4.3.6. Level Walkthrough

Going right and upwards help a bit.

4.3.7. Closing Material

Alvilda finds the duck chained to a fountain.

4.4. Level #4

Finding Volcano Island

4.4.1. Synopsis

Alvilda and Zanzibar find the airship captain to help them find the volcano island.

4.4.2. Introductory Material

Text based cutscene "I found an airship captain. I remembered him as a member of the Critter Crew. They said we should look for the treasure. I told them I lost my memory. I was told this treasure was the oracle who remembers everything."

4.4.3. Objectives

Find the Volcano Island

4.4.4. Physical Description

An airship navigating through the ocean.

4.4.5. Map

The map is larger than the others because the airship sprite is large and needs more space. Sharp drops.

4.4.6. Level Walkthrough

Figure it out yourself. This level is hard.

4.4.7. Closing Material

Text based cutscene. "We found the island"

4.5. Level #5

Find the oracle

4.5.1. Synopsis

Find the oracle inside the volcanic caves.

4.5.2. Introductory Material

Text based cutscene. "We found the island. Now let's find the oracle! Come on Zanzibar! Quack!"

4.5.3. Objectives

Find the oracle

4.5.4. Physical Description Volcanic rocks that are red hot.

4.5.5. Map

The map is large and the hardest in the game. It is also the last one. A lot of deadends to confuse the player.

4.5.6. Level Walkthrough

Again, I will not provide a walkthrough for this level, but it is hard. Good luck!

4.5.7. Closing Material

Text based cutscene where the oracle asks Alvilda where her hat is which triggers her memory and makes her remember everything that is left.

5. Section V - Interface

5.1. Visual System

Text-based in cutscenes. Menus are in a pixel font that flixel the game engine supplies.

5.1.1. HUD - What controls

While the game is paused, volume controls could be reached. There are no bars in the visual interface during the gameplay, since the characters could not die but could be stuck inside the maze.

5.1.2. Menus

Game Paused Menu.

Introduction Scene where the controls are

introduced to the player.

5.2. Control System – How does the game player control the game? What are the specific commands?

The player controls the character with the right and left arrow keys and X to jump.

5.3. Audio

The audio volume could be changed or muted.

5.4. Music

The music is unique for each level and was composed in musagi.

5.5. Sound Effects

The jumping sound effect was generated in sfxr sound editor.

5.6. Help System

If the player is stuck in a level, the level could be restarted by pressing the escape key on the keyboard.

- 6. Section VI Artificial Intelligence
- 6.1. Support Al
- 6.1.1. Player and Collision Detection The player collides with the main tiles and the level finishing sprite.
- 7. Section VII Technical
- 7.1. Target Hardware

Online (PC, Mac, Linux)

7.2. Development hardware and software Adobe Flash Builder using Flex SDK, Adobe Flash, Adobe Flash Player, Adobe Flash Player debugger, Adobe Photoshop, Adobe Illustrator, Adobe Soundbooth, iTunes, on Mac OSX 10.6.7.

musagi sound editor and the sfxr sound generator on Windows 7.

7.3. Game Engine

Flixel 7.4. Scripting Language ActionScript3