

*Traces of Alvilda*  
*final report*



## Project Definition

This project is about designing and coding a bitmap game with an original plot and characters.

## Conceptual Description

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.

The game is visually designed as a bitmap game. Different levels display visually different landscapes.

The design of the game environment, characters and other sprites, and the design of the gameplay system in addition to the programming and music have been done.

## Objectives and Goals

1. The main goal of this project was to create a fully functioning game
2. Another goal of this project was learning to design the visual elements in bitmap.
3. A personal goal of this project was to obtain knowledge of coding enough to program different games, and do it as fluently as possible in order to design and shape the content according to my ideas.

## Target Audience

The target audience is 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.

### Background Information

The origin of the project developed mostly because I wanted to make a game since I want to work in the gaming industry but I didn't have any experience whatsoever. For the visual elements of the game, I was inspired by nitrome's games and older games like Monkey Island and Final Fantasy. The visuals of the game were designed and drawn in the style of pixel art (which basically means every animation frame was drawn pixel by pixel). This helps because working with lower resolution enables the file size become smaller and is an advantage for certain issues such as the resources available to work with, the time schedule (because rendering larger images takes much more longer time) and compatibility with different monitors or operating systems.

The game itself consists of tile based graphics and 2D sprite images which combines to form the environment and other visual elements.

I have used ActionScript 3 and coded in Flash Builder because it is compatible to programming bitmap games.

The color scale of the game contains colors like brown and dark red and colors close to bronze because the setting is a 19th century alternative world where there are steampunk elements.

### Detailed Description

This project is about a game that has different characters that move in different levels in different mazes.

An example for the visual language of the game could be the pixel art that Kai Vermehr, Steffen Sauerteig and Svend Smital

make. More commonly known as the design group eBoy, create re-usable pixel objects and take them to build complex and extensible artwork. The group eBoy mostly does work with commissions, and pixel art posters. On the other hand, the art they make look a bit cramped because they work very detailed, and therefore their art is to stop and look at, but the style of the game will resemble eBoy's artwork style.

Another more closer example for the visual language and style of the game will be nitrome's games. Nitrome makes original flash games in pixel art format that is open to public and could be played online. In an interview made in 2006 (which at the time nitrome had only produced 3 games) with one of the founders of the game design group, Matthew Annal stated that the group developed their "games are made using Flash 8 Professional. Some of them use the Flash 7 Player and some use the Flash 8 Player depending on what we are trying to make." Therefore I think using Flash to design the game was a good choice.

A good example for well-known bitmap games will be Monkey Island produced by LucasArts. In Monkey Island, the main character Guybrush Threepwood collects certain items and walks to different places along the map in order to obtain objects that makes him advance through the game.

The environment is constructed of tiles specifically designed for levels.

The game story is roughly as following: 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 talks with other characters she encounters or remembers something. The story pieces together as the game progresses.

#### Scope of the Project

The scope of the project contains everything from the art to the music to programming.

#### Used Resources

Used ActionScript 3 to program, mainly in Flash Builder, with the help of the flixel library. Flash Player and Flash Player debugger version was also used in testing. Pixen was used for drawing the sprites and Photoshop and Illustrator was used for minor corrections. DAME (deadly alien map editor) was used to see how the tiles would look like in the end. For the music, musagi music editor and synthesizer was used and for the sound effects, sfxr sound generator was used. Adobe SoundBooth was also used for minor corrections and cuts. iTunes was used for conversions.

#### Difficulties and Risks

The project required advanced coding in ActionScript therefore learning that was a major difficulty, and therefore making a good and acceptable quality game was difficult. The risks included time limits and other constraints that affected the project.

## References

<http://www.actionscript.org/>  
<http://flixel.org/>  
<http://dambots.com/dame-editor/>  
<http://www.adobe.com/>  
<http://www.nitrome.com/>  
[http://www.drpetter.se/project\\_musagi.html](http://www.drpetter.se/project_musagi.html)  
[http://www.drpetter.se/project\\_sfxr.html](http://www.drpetter.se/project_sfxr.html)  
<http://www.lucasarts.com/games/monkeyisland/>  
<http://pixen.en.softonic.com/mac>  
<http://www.apple.com/itunes/>  
<http://www.square-enix.com/na/title/finalfantasy/>

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