

“Fragments”



“Psychological story-based 2D-platformer placed in distant universe, where you meet the memories of your past”

Written By: Tuomas Ahola
Team: Mountaineers
Brief Game Design Document

This game design document presents a design plan for Fragments game, created during Game Project course in University of Tampere. The aim of this document is to compress key ideas of psychological *Fragments* game to support design process of the game, including descriptions of the game world, rules of the game, goals of the player, game mechanics and background story of the game.

1 Description of the Game

Fragments is a one player 2D platformer, placed on a distant universe, utilizing psychological elements and player’s choices, which have impact on the storyline. As a player, you examine, how you have ended up to distant planets by collecting memories of your past. The levels of the game are visual representations of different feelings, such as happiness, sorrow and anger, which are related to key events in the past related to car crash, where your daughter disappeared. As you progress through the game, you will find items belonging to your daughter and you will open “fragments of your past” as times with your daughter.

As a player, you will have to do moral and thoughtful decisions to progress on the story and to survive challenges of the different planets, such as dangerous obstacles and altering gravities, to find the fragments of your past.

2 Philosophy

The main themes describing and guiding the project, are the following:

- How different emotions can be shown as platformer levels, located in the space?
- What is the past of the main character, how s/he has ended up to space and how the player can open the memories of the past by progressing in the game?
- How the player can interact with the story by making choices in between the levels of the game?

3 Why create this game?

Choices of the player and interactive storytelling have been rarely used in platformer games. Furthermore, the psychological theme of the game and the game levels representing different feelings, make the game stand out from different platformers. As the player gets information about the main character's past in the choice scenes by interacting with the story in between the levels, this raises interest to progress in the game. Besides, as the levels of the game are based on different emotions, they differ significantly of each other and raise different emotions on the players.

Our vision is to develop thoughtful and personal game experience by player's own choices. Our target is still to allow the player to conclude partly the meaning of the story – as the scenes in the game happen in the main character's memories are represented as subtle hints with the details in the game world, objects collected in the end of the levels and clues in the story. During the course, we developed a prototype, including four different levels representing different emotions. Our aim was to develop a prototype of the game, giving outlook of the game's level design, background story and key themes.

4 Target Audience

The target audience of the game are players interested in story-driven games, interactive storytelling and platformers. The target audience wants interesting and compelling narrative for their games, which raises strong emotions and makes the player thinking about the meaning of the story. These player types want to interact with the game story and think about different decisions, which affect the story, experience various expressions by environmental storytelling and complete classical platformer challenges by surviving obstacles and dangers of the levels.

The target group has been used to playing platformers and they have a good knowledge of mechanics of platformer games. The difficulty of the game is important to be mounting as the player progresses in the game, as the players who are more interested in narrative content, can adapt to game's controls and mechanics. The challenge of the game forms of traps, shafts, fallen objects and varying gravities in the game levels, which the player has to pass with her/his skills. In addition, the story-based choice scenes require thinking and analyzing about different consequences of the choices.

As the target group consists of platformer fans and players of interactive storytelling-based games, the game can reach large player base as Fragments utilizes player's narrative choices, challenging platformer elements and interesting level environments.

5 Treatment

The game is going to be developed using Defold 2D game engine. During the prototyping phase, the game's primary platform is PC, but the game can be extended to browser and mobile platforms in the future. Our team is going to develop audio landscape for the game, using recording tools, such as Audacity. Our team will also utilize royalty free audio effects platforms. The graphics have been done and improved by using graphics tablets, Photoshop, Indesign and Illustrator. The choices scenes and narrative paths can be developed using Quest program.

6 Key Ideas

- 1.) The planet levels of the game represent different feelings, which differ from each other by their visual design and challenges.
- 2.) The challenge of the game consists of classic platformer obstacles, such as long drops, objects, which fall, and varying gravities of the planets. This affects player's movements and height of the jumps in different levels.
- 3.) As the player gets more information about the past of the main character and why the character has ended up in the space, the player stays interested to progress in the game. The player gets the info by reaching the ending of the level, which is a mountain having an item on it, which has belonged for the daughter of the main character.
- 4.) By finding a collectable item between the levels, the player can interact with the game story with her/his choices and get more information about the main character's past and relationship with main character's daughter.

7 Background Story

The game starts with interactive choice scene placed on peaceful and sunny day of spring. For once, the player has time to spend with her/his daughter as counterweight to busy work projects. The player can decide how s/he will spend the day with the daughter. While arriving back to home in the end of the day, the main character and the daughter look to the mountains as a sun shines into their eyes. As you take a short route while driving home, you can decide whether you want to turn to see historical gardens or beautiful river scenes, but the choices have consequences...

As you turn on the crossroads, you hear a strong hit as a car crashes to the side of your car while windows of the car come apart. You wake up from a distant, lonely and rainy planet. By finding your way through different planets and more demanding obstacles, you will find fragments of your memories from the highest mountains of the planets. These fragments of memories are items belonging to the main character's daughter, telling stories about key moments spend with the daughter, but also give the player a possibility to develop the background story before the car crash.

The player can find where the daughter has disappeared and how the player has ended up to unfamiliar and distant universe, if s/he can make it through challenges and obstacles of the planets...

Who is the main character?

The main character is a mystical mountaineer, who has dressed up to space suit, which allows the character to breath on different planets (figure 2). The gender of the character is not told to the player, so the player can identify with the character and empathize with the game's narrative choices by doing the choices based on player's own standpoint. As the story progresses, the relationship to main character's daughter adjusts by making the choices and player gets memories about the past time before the car crash. Simultaneously, the key elements of the game, such as mountains visible on the level backgrounds and different planets, appear in the discussions between the player and the daughter in the past.

The skills of the character are based to climbing and smooth movement on different game environments. The goal of the player is to find her/his daughter by any means but also to solve her/his past with the memories and to find a possible path back from the space.



Figure 2. Visual draft of the "Mountaineer" character.

What is the atmosphere of the game like and how the story evolves?

The atmosphere of the game is thoughtful, psychological and despite of occasional darkness, hopeful. The story consists of environmental storytelling, as the player gets background information of the game world through visual look of the levels, collectable items and background music (for example, as the rain and darkness representing the sadness, read chapter 9). As the player finds items which have belonged to main character's daughter, the player opens a visual novel -like choice scenes between the levels. These narrative scenes include choice options, which build the background of the main character and the events happened in the past. The choice scenes are based on "choose your own story" -like narrative paths, where the choices lead to different outcomes as player select the preferred choice option (1, 2, 3) , (example figures 14 and 15).

In the future versions of the game, the choices of the player can affect the events happening in the levels and the visual look of the levels. In the future versions, the choice scenes are animated, supporting the current situation in the story.

The conflicts of the game are based on obstacles and challenges the player face, but also on the narrative choice scenes, where the player has to do choices based on survival of her daughter and the main character. Still, the choices of the game are thoughtful and need considerations for the player. After the choice scenes, the player wakes up on the next planet, where the reached memory has transported the player.

As the player finds items which have belonged to the her/his daughter and by completing the choices, in the end of the game the player finds out that s/he has departed to a distant galaxy, where s/he has found the fragments of the past and lives in peace with the memories based on the past times with the daughter.

8 Start of the Game

Fragments begins of the scene, where the player discusses with his/her daughter on a peaceful sunny day as the birds are singing in the background. For once, the player has a day to spend with her/his daughter. The player can choose peacefully whether to go to

movies, to a zoo or to natural garden with the daughter. The player can discuss about the meaning of life with the daughter through the choice options, as the mountains pass through from the window. When returning home, the atmosphere turns hectic as the player faces a car crash when turning from the crossroads. The music changes to oppressive, as the player needs to decide does s/he stop cars to help in the situation or does s/he run instantly to help the daughter.

After the choice scene, the player wakes suddenly from a distant and rainy planet, as the style of the game changes to 2D platformer. The player has to solve her/his way through different planets and their dangers, to solve out how s/he has ended up in the space.

9 Game World and Level Design

The prototype of the game consists of four different levels, representing different emotions, based on memories of the main character, and narrative choice scenes with main character's daughter between the levels. The levels begin of different emotion, which is set during a story-based choice scene. The player has to survive the obstacles and dangers on each level, to find a fragment of the memories, which takes the story forward.

Level 1 - Grief.

The player wakes up on the first level after the car crash and is worried about the destiny of the daughter. This is represented as rainy and dark level design, visual game environment representing sorrow, rain drops, humming of the wind and piano-based soundtrack. The obstacles of the level are drowning swamps, sharp spikes, high ledges and endless shafts. To make the controls of the game easy to learn and the game adaptable for new players, the gravity level on the level is "normal", meaning that game mechanics related to the gravity don't affect the player movement, such as jumping to the platform (figure 3).



Figure 3. Early screenshot of the prototype's first level / planet, representing grief.

Level 2 – Happiness.

After the previous level, the next choice scene takes player to a peaceful summer day with the main character's daughter. After the choice scene, the player wakes up from a sunny forest planet, representing happiness. The sun is shining on the sky, the colors are bright and saturated, the background sounds are based on birds singing, blowing wind and acoustic guitar riff is playing on the background. The challenges of the level are based on shafts and ledges, which require more accuracy than in the first level. Also, the gravity of the level brings more challenge for the player, allowing the player jump significantly higher than in other levels of the game (the changed gravity level represents ease and lightness of the feeling of happiness), (figure 4).



Figure 4. Early level design of the prototype's second level, representing happiness.

Level 3 - Anger.

The end scene of the last level takes the player to a memory, where you are hiking in the woods with your daughter. Your flashlight goes out, your daughter disappears, and you hear wolves roaring... With your decisions, you can affect how you act in the situation, but you cannot find your daughter, and the anger takes control of your mind...

After the narrative choice scene, the player wakes up on a glowing lava planet, as a heavy and distorted guitar riff is playing on the background and lava is fountaining under the player. The level is significantly challenging and has "heavier" atmosphere than the previous levels. The obstacles of the level consist of sharp rocks, hot lava and dropping sharp-edged lava stones. The gravity of the level is heavier than before, which affects the player as s/he progresses on the level. As the player progresses, the gravity of the level turns heavier (this is also notified on the background music, which turns more distorted and heavier as the player progresses on the level), (figure 5).



Figure 5. Screenshot of the prototype's lava planet, representing anger.

Level 4 – Loneliness/Abandon

During the narrative choice scene with the main character's daughter, before the fourth level, the discussion goes to possibility to travel to a distant galaxy. The main character wakes up on a cold and lonely ice planet, and cold wind is blowing in the background and the player hears tinkling of the freeze. The level doesn't have a background music, which highlights the feeling of being alone on a frozen planet. The obstacles of the planet consist of falling icy hoarfrosts, freezing volcanic eruptions, piercing icicles, endless shafts and platforms frozen in different angles. The gravity of the level is heavy, which makes the movement more difficult, representing the sad atmosphere. In the end of the last level, the player gets rid of the heavy gravity, which represents leaving the past behind, (figure 6).



Figure 6. The last level of the prototype represents abandon and loneliness.

10 “Look and Feel”

As mentioned previously in this document, the levels of the game represent different emotions, which are different planets having different visual designs, atmosphere and challenges. The graphical style of the game is painting-like, highlighting the feelings of the player and evaluation of the story. Specific attention in the design process is to make the levels differ significantly from each other audiovisually.

The music of the game supports the level themes varying between lighter acoustic guitar music representing happiness to piano music representing sadness and distorted electric guitar riffs highlighting the heavy atmosphere. The soundtrack adapts to situation in the game and based on the progression of the player in the level. The sound effects, such as rain, wind and birds singing, of the game enhance the graphical atmosphere of the levels. Furthermore, the sound effects based on the player movement, such as footsteps, fatigue and walking on the wet ground, are expressed to player.

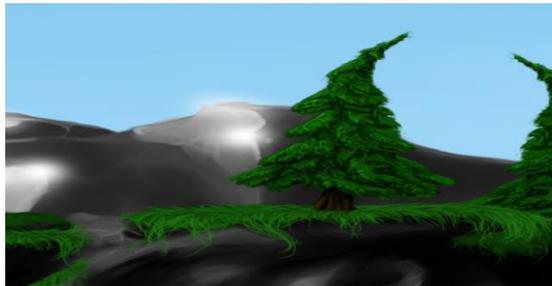
The audiovisual plan for the prototype’s four levels is introduced in the next figures. Figures 1-2 are based on the already developed prototype version of the game. Figures 3-4 explain the art illustrations based on visual look and structure of the levels.

Level 1: Grief



- *Visual look of the level: The atmosphere/landscape is dark, endless rain, trees without leaves and with long branches, moss loitering of the ledges, bubbling and drowning swamps, mountains in the background.*
- *Soundscape: Dark and looping piano melody, raindrops, washing trees, heavy blowing wind.*
- *Obstacles: Endless shafts, drowning swamps, sharp spikes, moving branches, which can catch the player.*
- *Collectable "fragment of the past" : A violet backpack, which has belonged for the player's daughter. As the player opens the backup, s/he finds a picture of the daughter and the main character, which opens up a background story (narrative choice scene).*

Level 2: Happiness



- *Visual look of the level: Sunny and positive, dense spruces, mountains shining on the sun, verdant mosses.*
- *Soundscape: Looping acoustic indie-style guitar riff, singing birds, sounds of animals in the forest, subtle blowing of the wind.*
- *Obstacles: Shafts, high drops, branches dropping from the trees*
- *Collectable "fragment of the past": Red scarf belonging to the daughter. Finding the item opens a narrative scene as the main character remembers that the daughter has used the scarf as they were travelling on the forest last autumn.*

Level 3: Anger



- *Visual look of the level: The landscape is aggressive and attacking, volcanos with lava flowing down, the sky has blacked because of the smoke coming from the volcanos, but there is still the sun bringing light to the level*
- *Soundscape: Bubbling and flowing of the lava, heavy and distorted electric guitar riff, which turns more distorted and heavier as player progresses in the level and gravity gets heavier sticking the player on the ground*
- *Obstacles: Endless shafts, flowing lava, sharp-edged rocks, sharp lava stones dropping from the volcanos.*
- *Collectable "fragment of the past": Binoculars belonging for the main character's daughter. The player remembers the night, when s/he was watching stars with the daughter. The narrative choice scene begins.*

Level 4: Loneliness and Abandon



- *Visual look of the level: The landscape is desolate, lonely and cold, icy mountains, snowy and icy platforms, clouds moving over the mountains with blink of the sun showing on horizon.*
- *Soundscape: Freezing frost, frigid blowing of the wind, lack of music representing the emptiness and abandon*
- *Obstacles: Freezing steam coming from small volcanos, icy platforms stuck in different angles, breaking icy platforms, endless shafts, falling sharp icy stones, icy spikes on the platforms.*
- *Collectable "fragment of the past": The car broken down in the car crash on the start of the game, the daughter of the main character next to it. An ambulance driver is comforting the daughter. This is the last fragment of the memories in the prototype; The player finds out that*

s/he has ended up to distant galaxy consisting of beloved memories because of the car accident. As the player assembles all the fragments of the past, her/his goal is achieved.



Figure 11. Illustration of the fifth level of the game, representing fear (for the next versions of the game).

11 Gameplay, Experience and Game Mechanics

Levels of the Game:

The player has to survive to the end of 2D platformer-based levels by avoiding different obstacles and dangers and by jumping over dangerous drops. To survive the obstacles and dangers the player can utilize opened gadgets, such as throwable rope and pickaxe to climb on high ledges (in future version, not included in developed prototype). The gameplay is based on levels consisting of different challenges and on thought of the events of the levels happening on player's mind. Because of this, the levels do not include fighting or enemies, which could change the style and atmosphere of the game from thoughtful to more tense.

If the player "dies" on the level, for example by hitting a dropping object or falling to a shaft, s/he returns to the start of the level or to a checkpoint, saving the progression on the level. The player dies on a single hit to game's obstacles (falling stones, dropping objects etc.). The player has countless amount of "lives", so as the player returns to start of the level or to the checkpoint, s/he can retry the level limitlessly. In addition, the player can save her/his progression between the levels. The altering gravity between the levels affect

the main character's movement speed and height of the jumps, which brings more difficulty to the levels.

Based on the player testing with the prototype of the game, the completion of the prototype takes approximately half an hour. In the next versions of the game, our goal is to increase the length and amount of the levels, and realistic goal for the length of the final game is about 2-3 hours.

As the player completes the level, s/he will find a story-based item, which opens a memory of the main character's past and her/his daughter (figure 12).



Figure 12. Items belonging to the main character's daughter are placed on the end of each level. These items mark the ending of the level and open story-based events as choice scenes.

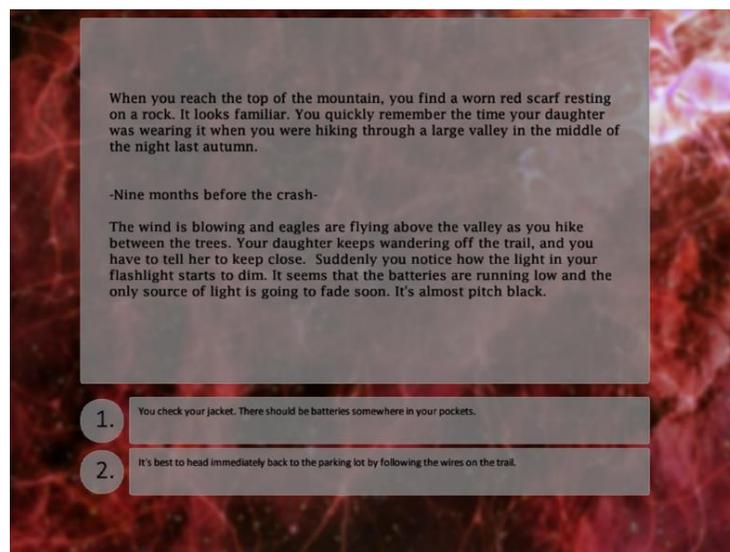
Narrative choice scenes taking place between the levels:

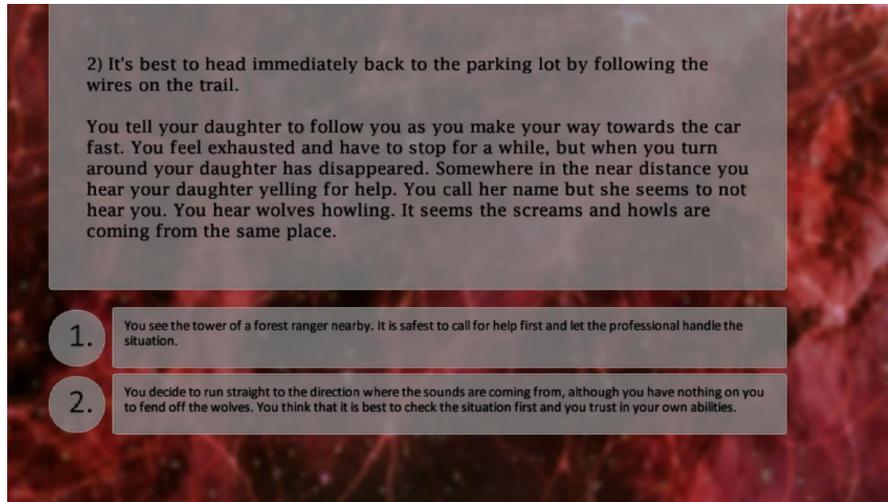
The items the player reaches in the end of each level are belongings of the main character's daughter. This items progress the story by text-based dialogue and decision scenes (the prototype includes text-based presentation of the choices, but in later phases of the game, our aim is to utilize cut-scenes and graphical animations supporting the text-based dialogue, example figure 13).



Figure 13. Example of the style how *Wolf Among Us* game (Telltale 2013-2014) represents the choices affecting the story. In the future versions of the game, it is possible to use changing graphical pictures to represent the phase of the story and to support the atmosphere of the situation in the game.

The story-based choice scenes are based on following the narrative and choices of the player on the selected scenes. These choice scenes take place in the past and define the past of the main character and her/his relationship with the daughter, who disappeared during the car crash. Despite of the different choices of the player, s/he cannot fail these scenes (“game over”), but the choices done by the player affect the shaping of the story and the events the player sees in the future versions of the game. Depending on the phase of the story, the choice scenes consist of two or three choice alternatives, where the player can select preferred option by pressing one of the keypad options (in future versions, this can also be done by clicking the preferred choice option with the mouse). As the player selects preferred choice, the story moves to next storypath, which are text-based on the prototype version (figure 14 and 15).





Figures 14 ja 15. The player opens story-based flashbacks as s/he gets to the end of each level. In these scenes, the player can affect the story by selecting one of the choice options (in the figures, choice options 1 and 2. After the selected choice, the story goes to different story branch.

After the choice scenes, the player wakes up on the next level (planet) and tries to survive her/his way to the end of the level, as described before.

12 User Interface

The user interface of the game has a simplified style and includes only a little HUD-styled information. The atmosphere is based on events on the game world and story-based experience, which the HUD-styled user interface elements could interrupt.

The players controls the main character filmed from 2D-perspective on 2D-levels, by surviving the obstacles by avoiding them and jumping over the obstacles in right time and with accuracy. The commands are done by WASD-controls (or alternatively with arrow keys). Furthermore, in future development versions the player can select the pickaxe or throwable rope for climbing and reaching high platforms by pressing the 1 and 2 buttons and use the selected gadget by R button.

The controls for platformer scenes (levels) are the following:

W: Jump

A: Move to the left

D: Move to the right

(1, 2: Selecting the gadget (selecting the pickaxe and rope, in the future version double click can deactivate the gadget)

(R: Hitting/climbing with the pickaxe, throwing the rope, in future version of the game)

The player gets graphical feedback if s/he dies on the levels by graphical animations (death scene) and by auditive information (splashing to the water, breaking bones when falling) and when s/he respawns to the start of the level.

Between the platformer scenes, the choice options are shown for the player as boxed text-based stories. As the player presses one of the shown numbers from the keypad, s/he can progress in the story, as the story goes to alternative storypath (figure 16).

The controls of the story-based choice scenes:

1,2,3: The player selects the preferred choice alternative of the given choice alternatives (in the future versions of the game, the player can also click the preferred option).

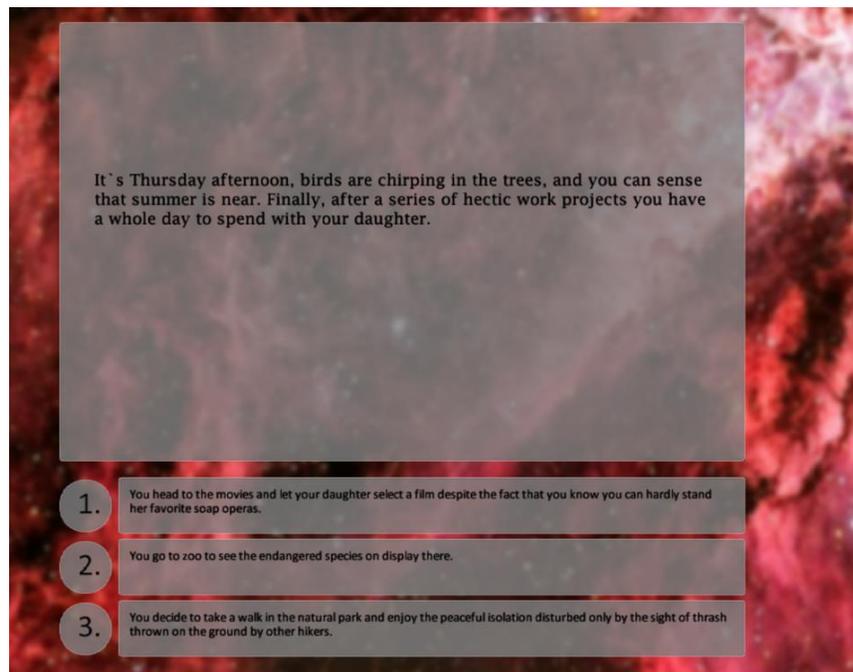


Figure 16. Example figure of the user interface based on the prototype's choice scene and choice options.

The player gets visual hint of the progression as the selected choice option is highlighted and the story goes to the next text-based box. If the player is not interested about following the story, s/he can pass the content by pressing enter-key.

13 Objectives

The main objective of the game is to survive from the levels full of different dangers and obstacles and to find the fragment of memory in each level (item belonging to the daughter of main character). The gameplay is based on the mechanics introduced earlier in this document, such as moving in the levels, jumping over and avoiding obstacle and utilizing the found gadgets (in the future versions of the game). The item found in the end of each level acts as a “finish” of each level. After finding the item, the player moves to next story-based choice scene, followed by the next level (figure 17).



Figure 17. The "finish"/ending of the last level of the prototype. The item found by the player is the broken car from the start of the game. The player finds her/his daughter near the car comforted by a medic.

As an indirect reward for completing each level, the player can fill her/his feeling of curiosity, as s/he gets more background details of the story and by being able to interact with the story.

14 Rules

The main rules of the game are the following:

- 1.) The player has to reach out the end of each level by combining her/his skills on moving on the levels, right-timed jumps and avoiding the obstacles. To complete the level, the player has to collect an item waiting in the end of each level (item belonging for the daughter).

- 2.) If the player drops into the shaft or hits hurting object (visually informed for the player, for example by sharp spikes, falling rocks with sharp edges etc.), the player returns to the start of the level or to a checkpoint, set on the level.
- 3.) The 2D engine/design of the game, narrows movement of the character to the left and right. The visual edges of the level design inform the player about the areas, where s/he cannot go.
- 4.) The player can interact with the story in text-based choice scenes between the levels. In this scenes, the player has to select one of the given story-based choice options to progress to the next story branch and to progress to the next level of the game.
- 5.) The player learns the rules of the game through graded difficulty, as the first levels of the game are more peaceful and forgiving by their design and difficulty, than the levels the player face when progressing further.

15 Feature List

Key features of the game:

The player faces challenging platformer levels, by passing the obstacles and dangers of each level and finding fragments of the past on different planets, representing different emotions. As the player finds about her/his past, the player shapes the history by selecting choices, taking the story to different paths.

The future features of the game:

As the player progresses, s/he finds gadgets from the levels, which are pickaxe and throwable rope. By using these gadgets, the player can reach higher platforms. To add more difficulty to using the gadgets and to decrease the repetition of the game, these climbing sections include avoiding falling objects and right timing, such as volcanic explosions from the climbable walls and burning steams.

To make the levels of the game challenging also for the experienced players and to add re-playability, the levels include additional collectable story-based items in the future. By collecting these items, the player can get optional information about the story of the game. These collectable objects can be cartoony photographs of the main character's past with her/his daughter.

16 Entities/ Objects

Interactive objects of the games are:

- The main character (“mountaineer”), the player controls, dressed up to a spacesuit.
- Obstacles of the levels, which respawn the player to the start of the level or to nearest checkpoint: Falling sharp rocks and icicles, sharp spikes, moving and dropping branches of the trees, drowning swamps, volcanoes with freezing steam, hot lava... (figure 18):
- Different platforms placed on different angles, which the player moves on.
- An item, ”fragment of a memory”, belonging to the daughter of the main character in the end of the each level. Finding the item ends the level and progresses the story forward.
- Story-based interactive text-scenes, where the player has to select a choice to interact with the story and to progress in the story between the levels of the game.



Figure 18. Interactive objects from the last level of the prototype: Icy and spiky rock, dropping sharp-edged icicle, which hurt the player.

17 Marketing

One sentence introduction text for the game (describing also the game project):

”Fragments is a psychological story-based 2D-platformer placed in distant universe, where you meet the memories of your past”

”Unique Selling Points”:

- Mixing the platformer with interactive story -based experience, where the player can interact with the story, is unique and special combination with video games. With the combination, the game can get interest from two different target group players.
- The psychological and thoughtful atmosphere and level design representing different emotions creates unique and different game experience, differing from the competitors.
- Because the story of the game, opens slowly for the player and the player can interact with the story and affect the background of the main character, the interest of the player keeps active while progressing in the game.
- The “classical” mechanics of the game are easy to learn and please the fans of the platformer games.

Target group of the game:

- Friends of platformer games.
- Players of interactive story -based games and players, who want to interact with the stories of the games.
- The players who like the game experiences including thinking and waking up thoughts.
- Players of indie games, who want unique game experiences, differing from the mainstream games.

The competitors of the game (for detailed competitor analysis in the future):

- Game experiences utilizing interactive (such as games by TellTale, visual novels, interactive movies).
- 2D-platformers, which include elements differing from the mainstream (such as Inside)

- Indie-platformers waking up thoughts (for example, Unravel, Limbo).

18 Technical information and future plans

The prototype of the game has been developed during Game Project course in the University of Tampere for PC platform and with Defold game engine. The used game engine enables to develop the game also for Android and iOS platforms in the future. The backgrounds of the game are done by utilizing painting-like graphical backgrounds and assets developed by the team.

Our team developed three prototype versions of the Fragments game within one month and the game was iterated based on the feedback. The next development plans based on the future development versions are the following:

- Ideation, designing and development of the next game levels (planets), based on different emotions. Fine-tuning and further development of the game mechanics.
- Ideation, designing and development of puzzles, traps and gameplay mechanics for the next levels of the game.
- Graphical backgrounds and animations for text-based choice scenes, supporting the atmosphere of the scenes (in the next versions, the choice scenes are represented as graphical and drawn pictures and supposedly as animations in the future).
- Iterative testing and fine-tuning of the existing levels, finding and minimizing the bugs and usability problems of the levels.

This brief design document of the *Fragments* game is extendable to larger design document based on the future design and development of the game, iteration and continuous user testing. The future document can include vision document, time framing of the development progress and technical plan, which are not presented in this brief design document of the *Fragments* game.