Diagram

Description automatically generated––



**Index**

* Title Page [1]
* Executive Summary [3-10]
  + Genre, Target audience and Target platform [3]
  + Game concept, Themes and Design Goals [3-4]
  + Unique selling points and Highlights [4-5]
  + Core gameplay loop, Hooks, and Key Features [5-7]
  + Player motivation, Experience and Progression [7-8]
  + Player control, Interaction metaphor and Interface [9-10]
  + Fictional setting, Map and Art direction [10]
* Game Overview [11-13]
  + Vision of game production [11]
  + Game components [11-13]
    - Main menu [11]
    - Game [11-12]
    - User interface [12-13]



**Executive Summary**

1. **Genre, Target audience and Target platform**

* Genre:

Fish-Kaboom! is inserted in the game genres of ***Puzzle***, ***Casual***, ***Cooperative*** and ***Multiplayer*** games. It’s a *Puzzle* since players will have to use their problem-solving skills to understand which tiles might have bombs and which tiles are safe to click on. It’s inserted in the *Casual* genre since it can appeal to a mass market audience since our game has minimal set of rules that are very easy to learn even for people not really familiarized into games. *Cooperative* game because players work together to common objective. Finally, it’s a *Multiplayer* game since you play with other people and not against the machine or with the machine.

* Target Audience:

Being a *Casual* game, our target audience is very broad, most types of players like to play casual games every now and then, but since it is also a *Puzzle* game, we can specify to say they our target audience would most likely be people that enjoy using **problem-solving skills**, like our game wants them to. Our game is also good for those who like parallel play.

* Target Platform:

Currently our game is played only with the mouse and therefore we only have in mind distributing our game to **computer**. Right now, we will only distribute our game to the ***Windows*** operating system but in the future, we aim to distribute to other operating systems, mainly *MacOS* and *Linux*. Our ambition is that our game can also be part of Facebook Gaming.

As for looking into the future, we would also like to port our game to mobile, Android and iOS.

**2. Game concept, Theme and Design goals.**

* Game Concept:

Players will see a [16 by 30] grid and will want to click on the tiles to find every tile that once revealed **doesn’t** have a bomb underneath. To achieve this, players with work together by clicking on tiles that will give them information on how many bombs are surrounding that same tile. With that new information they will be able to choose the next tile they will click on based on the knowledge earned with said information.

The players will have joint number of tiles with bombs underneath they can click on, once that threshold is reached the game is over. If all tiles without a bomb underneath are discovered without reaching the threshold, the players win.

* Theme:

The theme of the game is fishing on a post-war environment. We are playing on the perspective of a fisherman catching fish on a lake. Being a post-war game, our fisherman knows that the lake is dangerous and full of bombs. Us as the fisherman also know that we are fishing in those hazardous lakes because we must feed our starving village with the help of the other players (the other fishermen). All fishermen work on the expectation and objective to gather as much fish as possible to feed their families and will do their best to succeed on their task.

* Design Goals:

As for Design Goals we don’t want to change the focus of the original Minesweeper to the point of it feeling like it’s not Minesweeper. If we are creating a *Multiplayer Cooperative* version of Minesweeper, there’s no point in introducing various features that will make the game feel like something that just wants to resemble Minesweeper. Our priority is the *Multiplayer Cooperative* aspect of Minesweeper and not introducing features on top that would make the game feel less like the original.

Other thing we want to make sure our game is: fun and balanced. Fun is an essential part of a good game, if a game is not fun, people will play it once or twice to never touch it again, of course we don’t want that. Minesweeper was a very successful game, but many people seen it as a very monotone and even irritating game (one mistake and you lose, even bad luck sometimes makes you lose, that can be very frustrating for some types of players). Being *Multiplayer*, making you not explode on the first bomb gives the game longer but the margin for errors makes it more relaxed and even a little bit more fast-paced than regular Minesweeper. Whereas in classic Minesweeper we have time that we really have to final the perfect play not to lose, in Fish-Kaboom! we can fail a bit more, encouraging taking the risk. About balancing we want to make the game fun for both new and experienced players, since it’s a *Cooperative* game, experienced players can show-off their skills and new players have the error margin to make mistakes and learning from them, making both types of players happy.

Finally, we find that the classic Minesweeper lacked a storyline, in the future we would like to create our own storyline by trying to create some lore to what the original Minesweeper could’ve had as a story. Fishing and trying not to explode is a very peculiar (and even dark) scenario so on the future of our game we would like to have fiction that depicts that side of Minesweeper but giving with some humor, so it doesn’t just become borderline morbid. For this iteration of the project, we won’t be focusing on this aspect.

**3. Unique selling points and Highlights.**

* Unique Selling Points:

Our game has some selling points that puts as on the map for games seen as our competitors.

Most *Puzzle* games are *single-player* games where the player uses puzzle-solving skills alone and plays alone. The market for *Multiplayer Puzzle* games has way less competition and, therefore, our game comes to fill a place in the market being a game that you are required to use your puzzle solving skills alongside other players.

Other factor that benefits our game is the relation with the classic *Minesweeper,* we aren’t reinventing the wheel, we don’t market ourselves as Minesweeper inspired game and then fill the game with features that make the game feel less Minesweeper-y. Our game plays on nostalgia, doesn’t change the core gameplay of the original Minesweeper and just puts a simple, yet innovative, twist on it: an once solitaire classic game becomes a game that anyone can enjoy with family and friends.

* Highlights:

The highlights of our game are the cooperation aspect among players to one same objective of playing Minesweeper together and not exploding bombs and our game will also sharpen the players strategy and problem-solving skills when understanding the playing field and which tiles are safe to click on and which might be dangerous.

1. **Core gameplay loop, Hooks, and Key features.**

* Core Gameplay Loop:

The core gameplay loop in Fish-Kaboom! is rather small.

Firstly, players will play “blind”, the board doesn’t give any information to which tiles might be dangerous tiles [vamos ter first play is free?]. Therefore, the player will play on any tile to gather information.

Once the player gathers the first of information the player will really enter on the gameplay loop.

If the tile didn’t have any number underneath, the player will know it is secure to click on any tile directly adjacent to the tile it just clicked, since it gives the information of no bombs nearby.

If the tile had a number underneath, the player would have the information that there’s that number of bombs directly adjacent to that tile it just clicked.

If the tile had a bomb underneath, it would add to the bombs exploded counter and the player with gather the information that there’s a bomb there and it counts to the information of tiles surrounding it.

Every time the player reveals a tile and gathers information, it will try to calculate what would be underneath each tile. The player might find information that makes it believe a certain tile might have a bomb underneath, so the player might want to flag it to alert players of that information. Flagging tiles is optional but is also a way to influence players actions by giving information.

The players will repeat the loop of clicking on a tiled based on previous information and gathering said information, while collecting point with it until the end game.

There’s two ways the reach the endgame:

* By finding every tile without a bomb, with no more safe places to click the game ends and the joint score is shown.
* By finding (together) the maximum number of bombs (exploding them). Once this number is reached, the players lose, and the game is also over and joint score will also be shown to players.

Players then might want to play again and the game restarts.

* Hooks:

A hook of Fisk-Kaboom! is that games don’t take much time and, therefore, players can play the number of games they can even if they don’t have much time to play games. On the opposite of other multiplayer games where a single match lasts 20-60 minutes, Fish-Kaboom! games can last around 5 minutes maximum if played on a normal pace.

Another hook is that the game only exists when played, that is, players won’t miss anything by not playing the game besides the experience and learning it gives to the player. Some multiplayer games are always releasing features (like time-sensitive events) and “force” you to play the games to “keep up” with the game itself. This is a positive point for game deemed as *Casual*.

* Key Features:

The game is composed of many features which the key ones are:

* Fish with your family and friends in this twist on the *classic puzzle* game Minesweeper, where everyone fishes on the same board and work together to win the game.
* Searching for fish is very simple, just click on non-revealed tile on the Lake.
* Just like the *classic* Minesweeper, you can’t just play at random! You’ll have to fish with caution, the lake doesn’t only have fish, it also has…bombs, lots of them!
* Bombs explode and will take some of the fish you gather with the explosion, although you don’t immediately lose, you’ll lose some score!
* Brenex people are very strong and durable: they can survive [x] bombs before they know it’s time to return to land, any more time on the lake and the radiation will kill them!
* The numbers on the board not only hint on the number of bombs surrounding a tile but as well the number of fish caught, the more bombs surrounding a fishing spot, the more fish you catch, the more points you earn!
* [isto ainda vai acontecer??] Once the [x] bombs explode, the fishermen will only have some time until the radiation will be enough to kill them.
* Fishermen have flags they can place in fishing spots they find might hide a bomb. However, watch out! Flags are just guesses for where other fishermen **think** there are bombs!
* The more fish you and your fishermen peers catch, the higher the score, the more time Brenex will be fed!
* [a parte do The End já não existe por ser confuso né?]

1. **Player motivation, Experience, and Progression.**

* Player Motivation:

People like to feel part of something bigger. Playing this game in cooperation with others will make the players feel exactly that. Imagining ourselves as a fisherman after a war with other fishermen fishing for their lives and their whole village lives is exactly that. Many people love reading books because they like to imagine the story happening, like to feel like the hero of the book, in our game we are that hero.

Players play *strategy* and *puzzle* games for many reasons but one of them is the joy they receive when looking at a problem, trying to make it work in their heads and finally (and most importantly) when what they thought was the solution really works. Our game not only gives people that sense of achievement but also a sense of progression on their own puzzle-solving and strategy skills. Players will feel the sense of progression making less and less mistakes throughout time.

* Player Experience:

The player experience on our game imperatively must be divided in two groups: the new players that might never played the classic Minesweeper or if they played, never played enough to consider themselves “good Minesweeper players” and the experienced players, people that passed many hours on the classic Minesweeper or on any variation of it and know how to play the game by heart.

The newer players, like in any other game, will face a learning curve, will understand strategies, what works and what doesn’t simply by playing the game. However, there’s a big difference that differentiates our game from the original Minesweeper, our game doesn’t just end on the first mistake. People make mistakes, newer players will make mistakes. Losing a game because you are still new to it is frustrating, eliminating the immediate frustration to a newer player is a positive player experience.

For the experienced players that get the chance to play a game they like with others, experienced or not. When playing with other experienced players, players will naturally thrive for getting collective high scores and even for personal high scores to showoff their skills. When playing alongside less experienced players, they will also find joy in teaching strategies and seeing the progress of their heirs while playing for the common goal.

* Player Progression:

A completely new Player to the idea of Minesweeper will at first explore the game and do multiple mistakes.

At first, it might even play at random to understand what each tile means.

After only one of two games the player will already understand that bombs are a bad thing and that the numbers the tiles show the player have direct correlation to number of bombs around the tile.

With multiple plays, players start to understand patterns in the grid that will make them create strategies to click on tiles. Every new game, players will sharpen those strategies and play with more precision, making less and less mistakes each time. With playtime players will feel the sense of progression: they will understand the game, will have improved their problem-solving and strategy skills, and will essentially felt accomplished by their progress from amateur to experienced player.

1. **Player control, Interaction metaphor and Interface.**

* Player Control:

The Players will control the game only using the mouse.

Moving the mouse will have the player move the cursor to the tile it wants to explore (fish or place a flag).

The left-click will fish on any non-revealed tile, revealing what is underneath it. It can be nothing (representing no bombs in adjacent tiles, adjacent tiles being any tile directly horizontal, vertical, or diagonal to the tile clicked), it can also be a number representing the number of bombs adjacent to this tile, or a bomb.

The right-click will flag any non-revealed tile, placing a flag symbol on top of the tile. This tile is now flagged warning players on the belief of that tile having a bomb underneath.

* Interaction Metaphor:

As for interaction metaphors our game has the fish symbol to represent what is the action of fishing, fishing itself won’t give fish, the tile you fish on might even have a bomb underneath, it just correlates to the action, not the possible product of the action.

* Interface:

[MULTIPLAYER CONNECTION?]

Initially the player will be presented with a Main Menu where the player can input a username that will represent it in-game with a “Login” button to confirm the name and start the game. The Main Menu has a background image of the bottom of the lake, with some multi-colored fish and the name of the game in center.

A picture containing text, television, monitor, screen

Description automatically generated

Figure 1- Main Menu Screen

In the game window, the player will be presented with a rectangular grid with fish in every tile where the player can click to try to fish some fish or be presented with a bomb explosion. The player can also right-click to place a flag in any non-revealed tile.

Table

Description automatically generated

Figure 2 - Game Grid

Also, in the game window we can see the names of all players and their respective scores, and the number of bombs already exploded by players and how many they can still explode and finally the joint score of the players.

[IMG FOCUS ON scoreboard]

Finally, when the game is over, there’s going to appear an end game screen mentioning the results of the fishing (the joint score that is)

[IMG OF END SCREEN]

[alterar para estar de acordo com versão final]

1. **Fictional Setting, Map, and Art Direction.**

* Fictional Setting:

The game happens in one of the many lakes near the fictional land of Brenex. Not only Brenex, but also great part of the continent was devasted by a decade-long war that obliterated all sources of food but one. All fields are completely unusable to plant anything, the animals that once fed so many families are now dead since there wasn’t food to feed them at all. Only the lakes near Brenex saves the people of this land of starvation. The lakes are still full of fish that have little to no radiation, still completely good for consumption. However, the lakes have one “small” problem: they are very dangerous, they are completely full of bombs that can still explode at any moment and provoke serious hazard to the health of any fisherman fishing for their own, their family and their whole community’s survival. These fishermen know the danger of fishing in the lakes of Brenex, but they also know their village depend on them to survive.

* Map:

The game is played in one screen. The game consists of a [16 by 30] board where players will fish clicking on tiles for, well, fish while trying to avoid bombs. Once a player clicks on a tile it reveals a new image according to what the tile was hiding underneath, either a number representing the number of bombs around that tile, or a bomb representing that a player clicked on a tile with a bomb.

* Art Direction:

The game has a very simple and intuitive art style, so that players don’t have much trouble understanding what anything is. Since the game follows the principles of the classic Minesweeper game, we didn’t want to change the aspect to the point it would be unrecognizable when comparing to it. To please the theme and fiction of the game we decided to have the background of our minefield be sea-like with fish with a very simple look so that it goes with the simplicity we never want to diverge from.

Table

Description automatically generated

Figure 3 - Original Minesweeper Game



**Game Overview**

1. **Vision of Game Production**

As for a vision of Game Production (how we would like to see our game in its final version), a *Multiplayer* *Casual Cooperative* version of Minesweeper, never diverting from the core concept of Minesweeper. For a final version, we would have way to customize not only the board (lake) size, but as well the number of bombs inside the lake and the threshold of bombs that can be exploded in each game by the players. One of the things we wanted to touch on but won’t in this version is the comical and dark-humor aspect of the storyline. Besides the game itself, we would like to port the game to the principal computer Operating Systems besides Windows and to mobile (Android and iOS).

1. **Design Components**

[GAME IMAGES]

Our game is composed of some components we will describe with some detail:

* Main Menu:

Our Main Menu is straightforward, but it still has some components:

* + Username Input: Here our player can input the name it wants to be called in game, this will be the name of the player’s fisherman.
  + Login Button: This button starts the game and confirms the input of username made by the player.
  + Title Screen: The title screen shows (besides the two components mentioned above) an image of the bottom of the lake near Brenex where our players will fish, some of those fish and the title name of the game “Fish-Kaboom” with the two O’s replaced by two bombs, representing the bombs our players can find in the bottom of the lake.

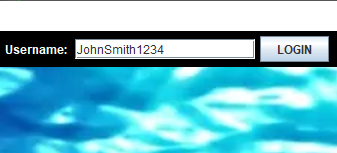


Figure 4 - Username Input and Login Button

* Game:

In the game screen we will a couple of components throughout our gameplay:

* + Board: The board is the main component of the game, it shows a [16 by 30] grid, and each tile is a place for players to click (if non-revealed) to either fish for fish or flag a tile. The board starts with all tiles non-revealed.
  + Tile: The tile is the unit of our board and starts as non-revealed. Once a player clicks on it with the left button it reveals what lays underneath it and makes it revealed, this action is called fishing (to fish). Once revealed, tiles can be Blank, Numbered or Bombs. However, if the players click on a non-revealed tile with the right-button it places a flag, making the tile still non-revealed but a flag on top of it. Non-revealed tiles are grey squares with a blue fish.

Figure 5 - Non-revealed TIle

* + Blank Tile: Blank tiles are revealed tiles with no bombs adjacent, they give x points to the player and mean that are no bombs directly horizontal, vertical, or diagonal to it. It is a safe tile, so it doesn’t add to the number of bombs exploded by the players. This tile is just a gray square.

Figure 6 - Blank Tile

* + Numbered Tile: Numbered tiles are revealed tiles with some bombs adjacent to it, the number on the tile represents the number of bombs adjacent directly horizontal, vertical, or diagonal to that tile. It is a safe tile, so it doesn’t add to the number of bombs exploded by the players. This tile is a gray square with a number from 1 to 8 on top of it. Once clicked, it becomes revealed and gives the number of points it says times x to the player that clicked on it.

Figure 7 - Numbered Tile (2-tile)

* + Bomb Tile: Bomb tiles are revealed tiles with a bomb. The bomb adds to the number of bombs exploded by the players and removes x from the score of the players that clicked on it. This is an unsafe tile and should be avoided at all costs. Once clicked it becomes a revealed time and can’t be clicked anymore. Games have 50 Bomb Tiles. Bomb tiles are gray squares with a mine/bomb on top of it

Figure 8 - Bomb Tile

* + Flag Tile: Flagging is an optional action players can do by clicking on a tile with the right-button. Flagging places a flag of the players color on top a non-revealed tile, keeping it non-revealed. Flagging is used to warn any player of the belief of a tile being a bomb tile once revealed. Flag tiles are gray squares with a flag of the color of the player that flagged the tile on top of it.
* User Interface:

In the game screen we also have a User Interface that has some components giving information on the current game:

* + Players: It shows the player the usernames of all players playing the current game.
  + Player Character: Shows a representation of an image of a fisherman that lets the player know which color it is represented by in game.
  + Player Score: It shows the player the scores of each of the players playing the current game.
  + Combined Score: Shows the player the combined score of all players playing the current game
  + Bombs Exploded: Indicative of the combined number of bombs exploded between all players, once it reaches the maximum number of bombs that can be exploded, the game ends.
  + Bombs Left: Remembers the players the number of bombs that haven’t exploded yet, it’s the initial number of bombs minus the number of bombs already exploded between all players.

Falta: Hyperlinked and pink