

Game Name

*„Tagline / Slogan“*

TEASER

*@Note: Each member should be assigned one or several roles according to the preferences and skills.*

*Respect these two rules: (1) Everyone is a Game Designer; (2) There is one Producer.*

Simone Guggiari – Producer + Gameplay Programmer + Engine Programmer

Nicolas Huart – Game Designer + Level Designer + Menu Designer

Alexander – Game Designer + Physics Programmer + Procedural Content

Andreas – Game Designer + Effects Programmer +

Xingze – Game Designer + Audio Engineer + Graphics Programmer

Contents

[Chapter 1. Formal Project Proposal 3](#_30j0zll)

[1.1.](#_1fob9te) Game Description 3

[1.1.1.](#_3znysh7) Overview 3

[1.1.2.](#_4bvk7pj) Background Story 4

[1.1.3.](#_3dy6vkm) Design Decisions 4

[1.2.](#_4d34og8) ‚Big Idea‘ Bullseye 4

[1.3.](#_17dp8vu) Technical Achievement 4

[1.4.](#_2r0uhxc) Development Schedule 4

[1.4.1.](#_26in1rg) Layered Task Breakdown 5

[1.4.1.1.](#_lnxbz9) Functional Minimum 5

[1.4.1.2.](#_35nkun2) Low Target 5

[1.4.1.3.](#_1ksv4uv) Desired Target 5

[1.4.1.4.](#_44sinio) High Target 5

[1.4.1.5.](#_z337ya) Extras 5

[1.4.2.](#_1y810tw) Task List 5

[1.4.3.](#_2xcytpi) Timeline 5

[1.5.](#_3whwml4) Assessment 5

[Chapter 2. Prototype 6](#_qsh70q)

[2.1. Prototype Setup 6](#_1pxezwc)

[2.2. Playing Experience 6](#_2p2csry)

[2.3. Findings and Conclusion 6](#_3o7alnk)

[Chapter 3. Interim Report 6](#_ihv636)

[3.1. Progress 6](#_32hioqz)

[3.2. Challenges 6](#_41mghml)

[3.3. Future Work 7](#_vx1227)

[Chapter 4. Alpha Release 7](#_1v1yuxt)

[4.1. Progress 7](#_2u6wntf)

[4.2. Challenges 7](#_3tbugp1)

[4.3. Future Work 7](#_nmf14n)

[Chapter 5. Playtest 7](#_1mrcu09)

[5.1. Playtesting Session 7](#_46r0co2)

[5.2. Questions and Comments 7](#_111kx3o)

[5.3. Design Revisions 7](#_206ipza)

[Chapter 6. Conclusion 8](#_2zbgiuw)

[6.1. Final Results 8](#_1egqt2p)

[6.2. Experience 8](#_2dlolyb)

[6.2. Personal Impressions 8](#_3cqmetx)

Chapter 1. Formal Project Proposal

* 1. Game Description
     1. Overview

XXX is a competitive local multiplayer game in which the goal is to collect the most money. Each player in the game controls a vehicle (or a moving object) and can either collect coins present on the map or stealing his opponent’s coins by attacking them.

* + 1. Guiding Principles

We have three principles we want to base our game around: these are, that our game should be

* fun
* simple
* beautiful

We believe that to have a compelling game that can be enjoyed by players as soon as they jump in, we need to have a strong fun component, the rules should be easy to learn and the user interface is beautiful and attractive.

* + 1. Background Story

Idea: Robbers want to steal money from Credit Suisse and Esher tries to prevent it from happening. Due to bad organization the robbers have drop money in the bank. Esher want to collect it and bring it back to the safe while the robbers want to get out of the bank with it.

* + 1. Design Decisions

***Time and Score***

The goal of each player is to maximize his profit by bringing coins back to his base. The game ends either when a player reaches a specific score or when the time limit is reached.

***Characters***

Each Player in the game controls a vehicle with specific life, speed and capacity and starts at his own base.

Whenever a player goes through a place with a coin, he collects if it is possible. A player can not collect more coins than the capacity of his vehicle. If he manages to go back to his base, his total score get increased by the number of coins he just collected. If on the way, he loses all his life, he has to restart from his base and all his collected coins are lost, which will be scattered around the place where he died.

*@Note: Other features?*

***Control***

Each player can move around the map and interact with it. He cannot go through the obstacles but some of them can be damaged using a bomb (power up). If the damages are enough, the obstacle will get destroyed and this may reveal new coins or power ups. Some obstacles might also be moved with enough force to pass to a new part of the map.

In addition, a player can also attack another, reduce his life and steal some of his coins. The attack is the same for each player.

*@Note: Move Objects?*

*@Note: Attack base?*

***Visual***

The objects and model are 3D but the player can only move in 2D (no jump).

The screen is split into the number of players, each part showing a player’s view (one camera for each player). There is also a small global map, where each player can see where the coins, the obstacles and the power ups are.

The coins are initially randomly placed over the map and if chosen so, a new coin will appear each time a player brings a coin back to his base.

***Power ups***

Power ups change the property of each character and can be either temporary (e.g. speed boost) or permanent (e.g. capacity boost, life potion). There is also a special power up (bombs) that can be used to damage obstacles. Other power ups might be used to improve the defense level of the base.

***Tunnels***

On the maps different tunnels are placed, which might be a shortcut to another place on the map. A further idea is to connect the different maps with these tunnels. If there are different maps, the base of each player will still remain on the first map. Otherwise it might happen that each player is on a different map, resulting in no interaction with the players.

***Vaults***

We will implement sections of the map in which the players can break in after performing some action. This will be a very risky action that a player can choose to undertake, but the potential payoff will also be great.

* 1. ‚Big Idea‘ Bullseye

* *Collect coins on the map*
* *Fight and steal coins from your opponent(s)*
  1. Technical Achievement

***Procedural generation of the map:***

We plan on implementing a procedural generation algorithm that will take care of placing coins, powerups and obstacles. Doing so the map will always be different and thus it should be more fun and variety to play. Things to be procedurally generated include the position of the coins and the power ups and some or all obstacles.

*@Note: More details ?*

***Rigid Body Simulation:***

The attack of the players will be modeled as a rigid body simulation.

* 1. Team

In this section, we present the responsibilities that each member of our team will take upon himself.

* + 1. Simone

Simone will take care of the game engine, as well as the organization of our software structure. He will mainly be involved in programming the gameplay features as well as simple modeling and graphic tasks. He will also make sure that the team is following the project schedule.

* + 1. Nicolas

Nicolas will be in charge of the design of the static part of the map (bases, obstacles, background etc.) as well as the menu design. He will also be involved in the character modelling.

* + 1. Alexander

Alexander is building with Andy the Rigid Body part to handle the physics correctly and still fun to play. He is also in charge of the dynamic part of the map as placing special power ups, coins, tunnels or other dynamic obstacles.

* + 1. Andreas

Andreas and Alexander will implement the Rigid Body part together. This is involving all the preparations, calculations and animations needed for the physically-part of the game (collisions, spinning wheels, …). Additionally Andreas will be contontrolling the visual effects as shaders, lightning, particle effects, etc.

* + 1. Xingze

Xingze will be in charge of the sound effects and sound library. She will also take care of all the models, textures, light maps and other needed assets. In the final steps, she will be creating the trailer of the game and preparing slides with Alexander for the presentation.

* 1. Development Schedule

We will be following an agile schedule, that consists in small sprints of one week in which each team member has one well defined task to complete. We will have weekly meeting to discuss the current achievements and decide the tasks for the following sprint.

* + 1. Layered Task Breakdown

Our high-level view for the layered task breakdown is as follows. In the functional minimum, we plan to work mostly on tools for the engine and gameplay. In the following phase, we extend gameplay functionality and add most of the features we want to have in our finished game. At the end of this stage we plan to have a fully working game that although is very rough, allows us to play. In the next phase (desired goal) we plan to focus mostly on graphics and menu, making the game something pleasant to look at. We include all the polishing in the last phase, such as audio, game balancing, and effects.

* + - 1. Functional Minimum

Our goal for the functional minimum is to have a basic game in which the player can control his avatar, move around in the level while picking up money and bring it to his base, with an isometric camera smoothly following the player. We want to have a simple HUD showing statistics such as time remaining in the round and money collected so far. No physical simulation will be present yet, and the level will just be a simple plane. The goal of this phase is to get everybody accustomed to working in MonoGame and have something we can start experimenting with. We also plan to start experimenting with technical stuff such as physics and rendering, producing a simple 2D rigidbody controller. We plan to be able to deploy this build to the xbox already.

* + - 1. Low Target

Our low target includes extending the game by allowing a second player to compete. This includes the addition of split screen functionality, ability to perform attacks and cause damage and money loss, respawn. We plan to implement a basic primitive level in which collisions work and to improve our player control to work with rigidbodies. We should expand the HUD and start balancing the game to increase the fun factor.

* + - 1. Desired Target

In this phase we start focusing on graphics and menu. We plan to have a working game already, now it’s time to have a level with all graphics assets, menu that allows to select a starting avatar, add advanced gameplay functionalities such as power-ups, crates and vaults. We start distinguishing players by vehicle type with different stats such as speed and capacity. We will have some basic procedural money generation that makes the gameplay more unpredictable and thus fun. We will start having a small library of sounds we want to add as well as implementing most of them in the game.

* + - 1. High Target

For the high target we will mainly focusing in improving the existing game. The game’s graphics will be enhanced with additional work on the visual effects as shaders and particle effects (for example for dust, …). To improve the fun, other levels will be added which differ in the theme of the first level. The rules will be the same, but the obstacles, coins and textures might change its look.

* + - 1. Extras

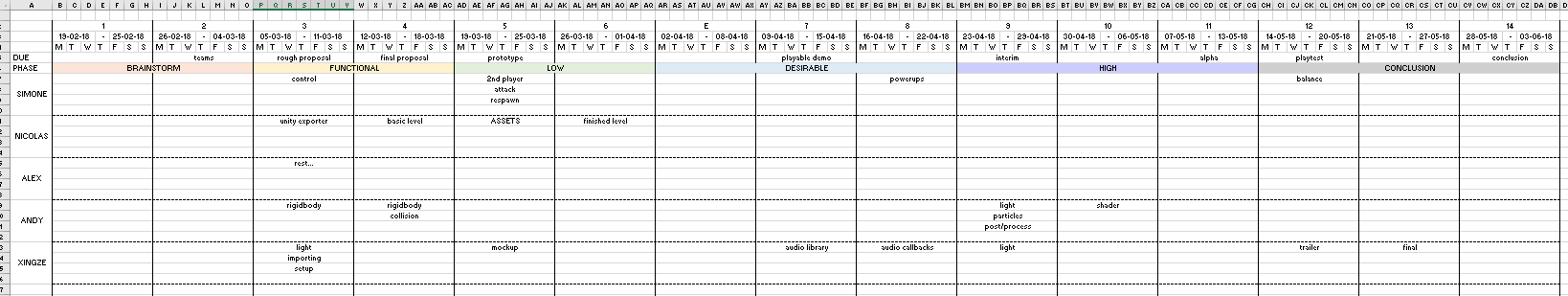
In this phase, the levels will be linked together in one gaming-round by connecting them with the tunnels. We still haven’t discussed much what we will be putting in this section.

* + 1. Task List

*@ Note*

* + 1. Timeline

This is a first draft of how we plan to schedule tasks. It is still a bit rough but should serve as a starting point.



* 1. Assessment

***Strengths***

***For who ?***

*Any person who want a game with simple goal and options but different ways to use them to win.*

***Gameplay***

*Combine different winning strategy for a common goal: collecting coins.*

***Visual***

***Judging Criteria***

The game should be nice to look at, easy enough to let players jump right in and fun enough to keep them coming back, yet have some layers of depth and strategy to keep the player engaged even after playing a few rounds.

Chapter 2. Prototype

*@Note*

2.1. Prototype Setup

*@Note*

2.2. Playing Experience

*@Note*

2.3. Findings and Conclusion

*@Note*

Chapter 3. Interim Report

3.1. Progress

*@Note*

3.2. Challenges

*@Note*

3.3. Future Work

*@Note*

Chapter 4. Alpha Release

*@Note*

4.1. Progress

*@Note*

4.2. Challenges

*@Note*

4.3. Future Work

*@Note*

Chapter 5. Playtest

5.1. Playtesting Session

*@Note*

5.2. Questions and Comments

*@Note*

5.3. Design Revisions

*@Note*

Chapter 6. Conclusion

6.1. Final Results

*@Note*

6.2. Experience

*@Note*

Rough draft of the project proposal

6.2. Personal Impressions

*@Note*