Click Byte

Game Design Document

Sushi's byte
Adrian Nunyez, Miquel Rodriguez and Josep Mora

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Game Design

Game purpose

The game creates a feeling in us that we are progressing and reaching higher and higher levels, as we get more and more income from virtual goods, and generally at a higher speed.

Analysis

Game Description	
Género	Clicker RPG
Habilidades del juego	Clicar
Placeres del juego	Nice progression, unique skins for completing achievements
Tema	Hacking theme
Estilo	Pixel Art 2D
Secuencia de juego	Linear
Jugadores	1

Game Reference	
Taxonomía del juego	Clicker Game, casual
Inmersión del jugador	Interaction tapping the screen
Referencias	Cookie clicker, Tap Heroes

Game Technical	
Técnica de desarrollo	Graphics 2D
Tecnología de desarrollo	Unity3D (C#)
Dispositivos	Android

Summary

The project will be a game for Android, called Clickbyte, which consists of getting bits by clicking on the screen (a clicker). These bits can be spent in upgrading the components of the current pc or to perform hacking missions, this will give you another currency to buy new components. Better components will give players more bits per click and more energy.

Gameplay

The main mechanic is to click the screen to gain the principal currency of the game, bits. These bits can be spend in two ways:

1. Upgrade the main components.
2. Complete hacking mission to earn dollars, a currency to spend in the shop.

The new currency you earn beating the hacking minigames is used to buy in the shop different things, like gacha tickets.

There are 2 game modes, Offline Mode and Online Mode.

The main objective in Offline Mode is to become the best hacker in the universe by completing all the hacking missions.

Online mode consists in completing a challenge faster than the other players around the world to earn an unique achievement and skin.

Desglose literario

Story

You are a hacker in your mother's basement. Your main objective is to be the best hacker in the universe, completing different hack missions. These mission will grant you the game the hacker is looking for.

Characters

Main Character: Hacker(player).

Objectives and motivations

The main character want to become the best hacker in the world because, he is a student of DAMv and a big fan of science fiction films, like Hackerman. Also completing hacking missions, he will earn money to leave his parents basement and be a real man.

Locations and maps

The hacker is always in his mother's basement. In this location we can see, the hacker setup with a pc screen, mouse and keyboard. The hacker will receive missions from all around the world, from anonymous people in the internet, for example the incognito guy from google.

Gameplay and levels

Gameplay

The player begins clicking the main screen to gain bits. These clicks generate bits and spend energy depending on the current processor. When you run out of energy, you cannot keep clicking until you have the necessary amount of energy. Depending on the power source, you will have more power and it will recharge faster.

With bits you can enhance components internally. They can also be used to access hacking missions and thus earn dollars.

The dollars are used to buy multiple things in the shop, like gacha tickets or unique skins. The new components will give access to new missions and 5 more improvements.

By completing achievements and other missions you will be able to earn tickets to make a gacha roll. There are several types of gacha: skin gacha, upgrade gacha, and a daily gacha to get temporary upgrades or in-game coins.

Gamemodes

1 gamemode:
- Story mode, standard mode where you can access all the upgrades and gacha and your objective is to complete all the hacking missions.

Game's economy

3 soft currency:
- Bits, earn by clicking, spend to upgrade components and complete hacking missions.
- "Dollars": earn by completing hacking missions, spend to buy new components for the pc.
- Gacha tickets, spend in the gacha.

1 hard currency, used to buy gacha tickets and it can be converted in soft currency.

Achievement system

1. Tapping beginner, tap the computer 10 times, 500 google play's xp
2. Shopping, Visit the shop, 500 google play's xp

Flow of levels or game zones

The main location is the mother's hacker's basement, where you will complete different hacking missions from different users from around the world. These missions will arrive in TIER, making each tier difficulter than other tiers.
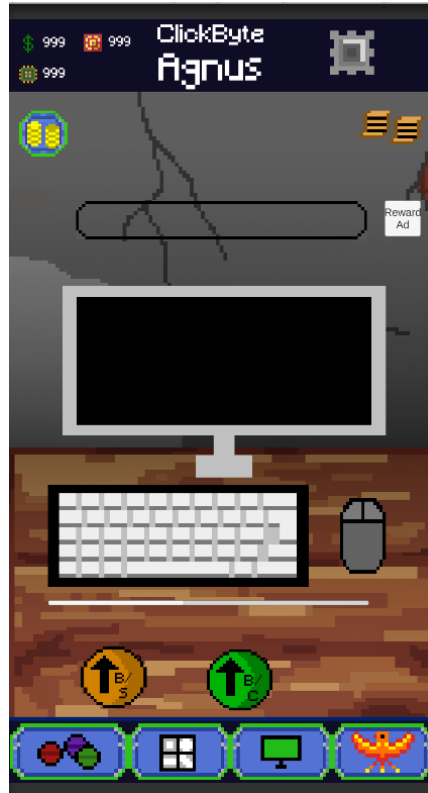
Technical appointment

User interface

- Splash screen with the our company logo

● Click Screen

This is the main screen of the game, where you will earn bits by clicking the pc. In the top you will see the shop button, to access the shop, the mission button, to access the mission screen and the options screen. If you are log in Google play, the username will be displayed in the top app bar, where Agnus is written. Also, you can use the different power-ups (more bits/click and no consumption of energy/time) clicking the spheres at the bottom.

- Shop Screen

In this screen, you will spend the three types of currency to obtain different things like, 3 types of gacha tickets and power ups. You can also buy hard currency with real money, for example, 100 dogecoins for 5.99€.

- Pc Screen

In this screen, you can enhance your components with bits, getting different attributes (more bits/click, bits/time, less energy consumption/click and more storage) and change the skins of the components.

- Gacha screen
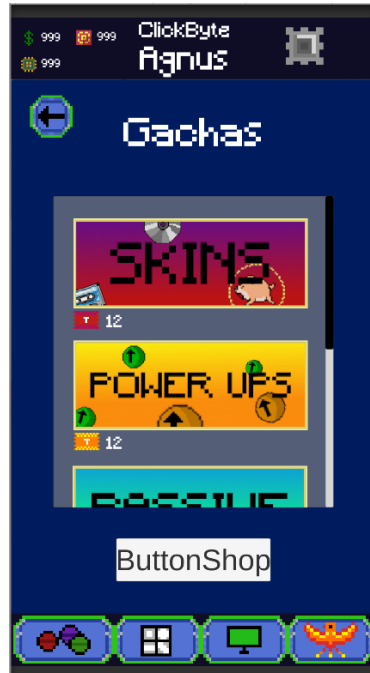
In this screen, you can see the three types of gacha that can be accessed in the game. You have to spend one gacha ticket per roll.
3 types of gacha:
- Skins
- Power Ups
- Passive

- Options Screen
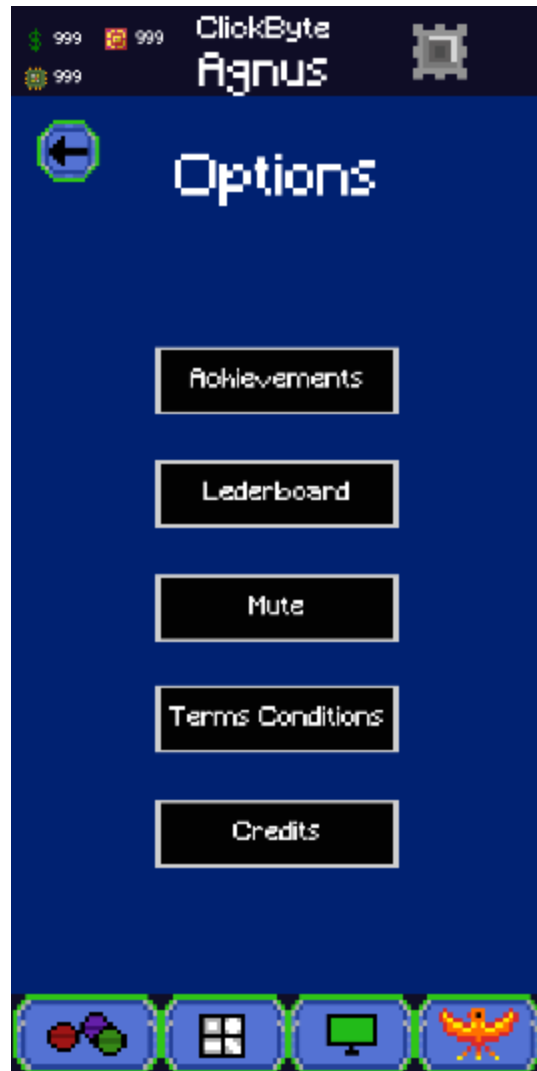
In this screen you can see all the achievements, the leaderboard that shows the bits of all the players that play the game, you can view the credits, the terms conditions and mute the sound.

● Mission screen
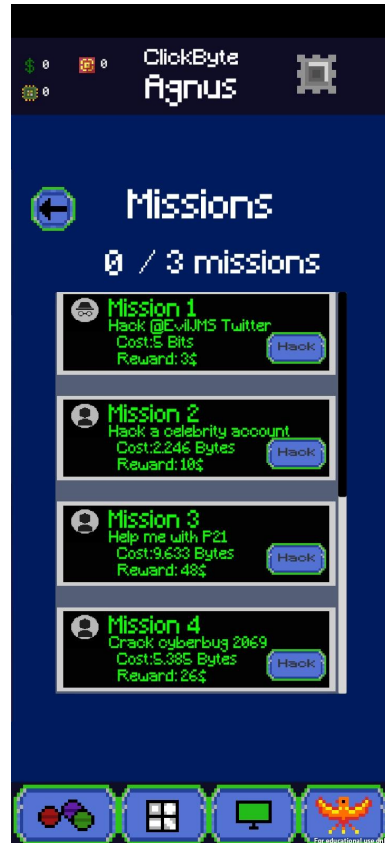
In this screen, you will access the 5 missions. These missions require bits for completing them and will grant you dollars to spend in the shop. Every 3 missions, will spawn 5 new missions and remove the other 2 not completed.

● Prize screen
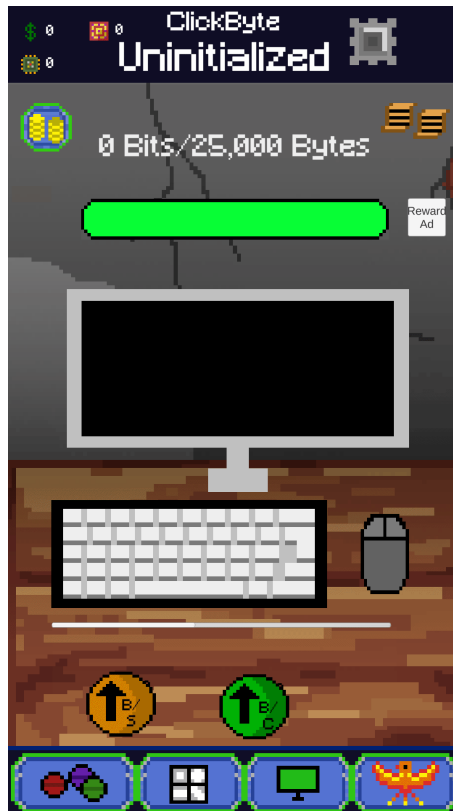
Is the animation used at the three gachas in the game.

Controls

As the game is designed for android devices, all controls will be touch controls. For example, the main mechanic of the game is to click on the screen to get bits.

Game Mechanics

- Upgrade components:
  - This mechanic is related to the different components of the game. By spending a number of bits, you can upgrade each component. This upgrades are infinite and boost you component's stats. For more information about components, consult the next segment.

Components

In the game, there are 4 types of components:

- Source energy
  - This component less the energy you need to generate bites per click
  - Upgrade: each level, makes the energy per click reduce one per level
- Processador
  - This component generates the bits per click
  - Upgrade: gives more bits per click
- Storage
  - Quantity of bits you can save in your current pc
  - Upgrade: More bits can be stored.
- Graphic card
  - This will grant you bits per second, when upgraded for first time
  - Upgrade, more bits per second

Interactive elements

Stage elements with mechanics::

- Hacker's pc: screen, keyboard and mouse. By clicking on it, you will gain bits and make a random animation and sound.
  - Animations:
    - Idle: static image.
    - Click/touch: multiple animations:
      - Random text writes in the screen.
      - Keyboard keys being pressed.
      - Mouse being click.
  - Interactions
    - Gain bits.

NPC's (non player characters):

- Neutral NPC's: Shop IA, Master Hacker: npc who offers hacking mission to player.

Power-Ups:

- Gain 2x bits for x seconds
- Infinite energy for x seconds

Accesorios:
- Skins for every component or part of the pc

Class diagram
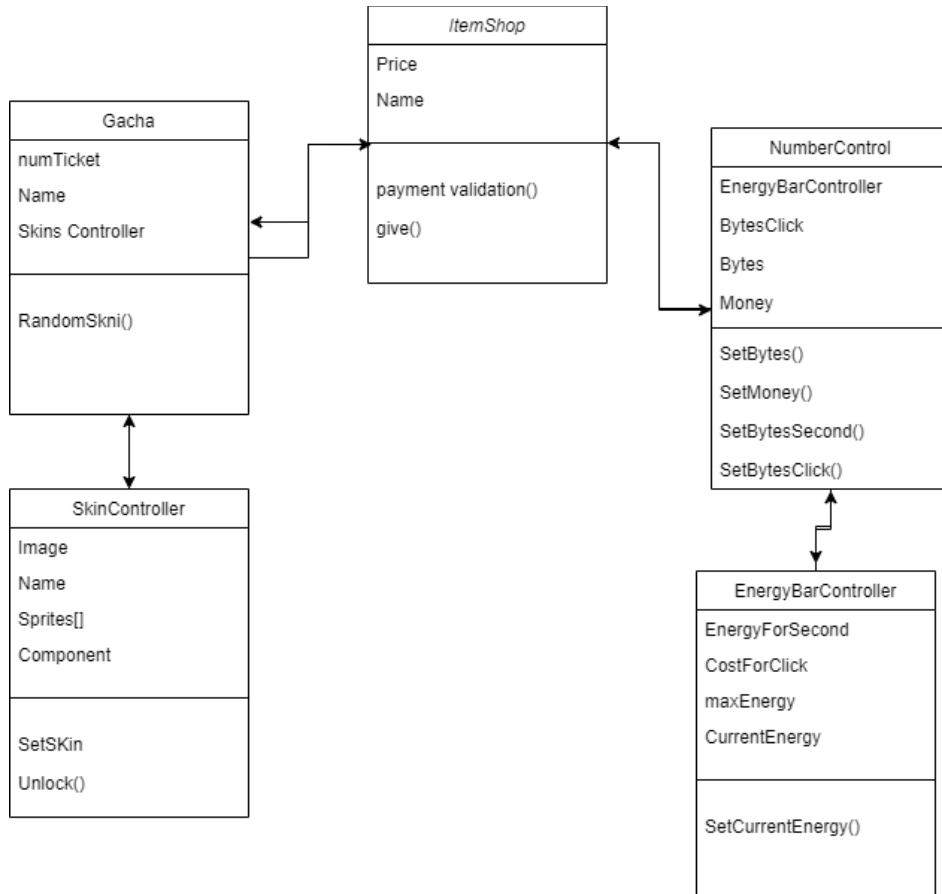
Data to save and structure

We will save the data in the cloud with google services and offline with PlayerPrefs.

Technical requirements

Enumeración de las herramientas necesarias para la realización del juego. Se incluyen plugins, assets, add-ons, etc.
So hay más de una posibilidad para la misma función también se ha de anotar. Se aprovecha

este apartado para listar, también, necesidades que se desconoce el recurso en concreto.

Design

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Visual references

Proposed sketches

Monedas de Pago:4 → Ticket de mejoras especiales
→ Ticket de skins
↳ convertir a dolares

gacha diario 1
↳ resetelanes = 1
ver
video

Bytes: → Hackear = cumplir misiones
↳ Mejoras internas

$: → Mejoras de componentes

Fuente de alimentación
- Patatas - Pila   - molino
- Hámster - batería - central
              nuclear
Gráfica
- Gráfica vieja - Gráfica luces led - Gráfica animada horas
- Gráfica nueva - Gráfica linea
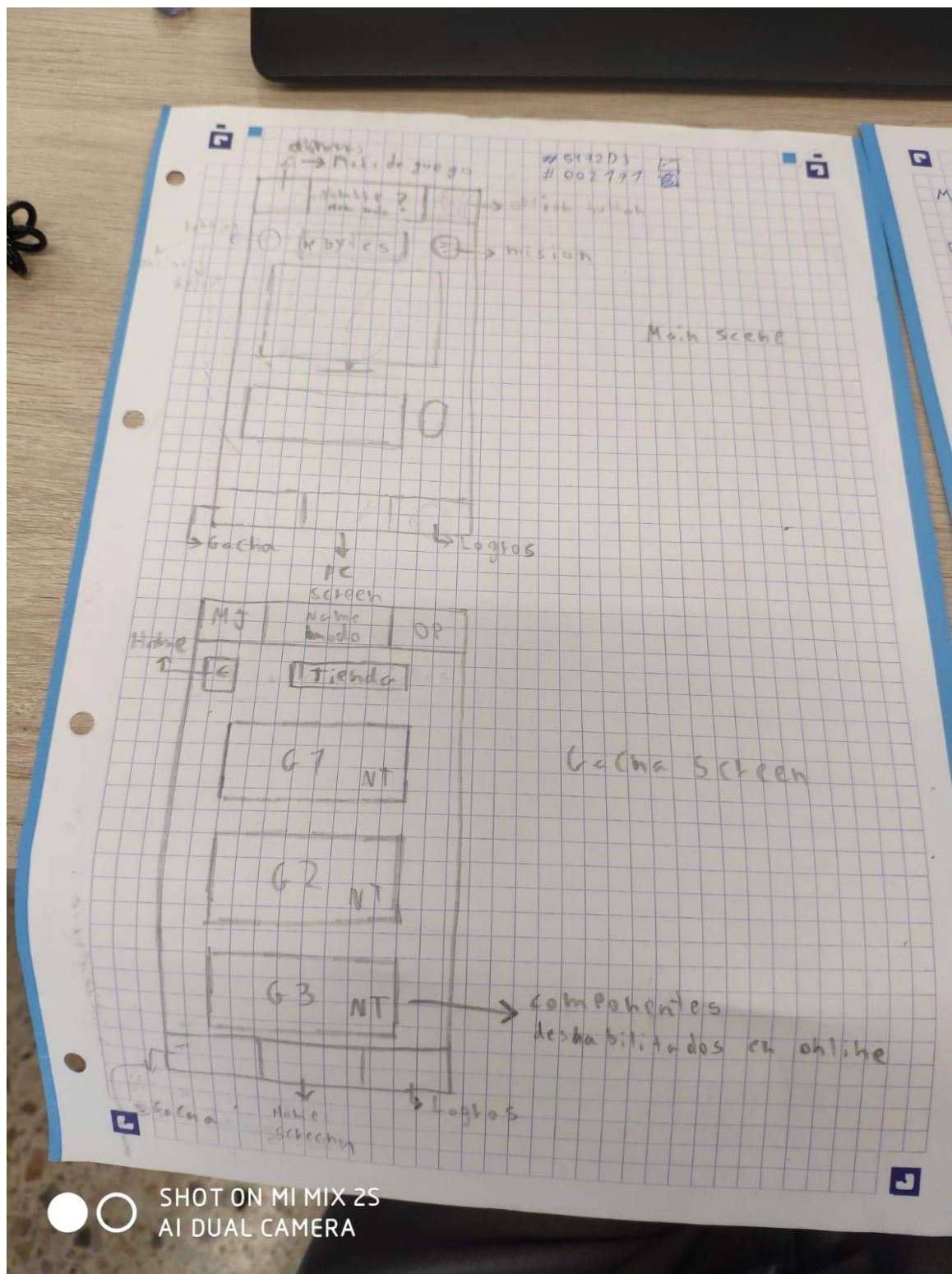Espacio
- diskete   - USB   - Armario
- CD   - Cassete
Procesador
- Procesador viejo - calculadora - SuperPC
- Cerebro   - Einstein

(Cada componente semejante única
tiene skins que solo se pueden
comprar si el componente tiene X
Nivel)

Data, Google services

Gachas:

Gacha de skins: ~~skinsraro~~

Gacha de mejoras simples

Gacha de componentes externos

Economia:

- La moneda base más de Bit
a Geobyte.
- Tienes que reiniciar el progreso
para que en la segunda partida puedas
llegar más lejos.
- Recompensas en dólares al reiniciar.

- Mantienes algunas de tus mejoras.

PowerUpps

- doble bytes ~~aumenta~~ por click (x segundos)
- doble bytes por segundo (x s)
- doble bytes clicks/por segundo (x s)
- energía infita (x s) ≥3

Project planning

Project duration

- Initial date: 03/05/2021
- Release date: 28/05/2021
- Prototype reviews:
  - 14/05/2021 - First Prototype
  - 21/05/2021 - Second Prototype
- List of sprints:
  - Sprint 1: 03/05/2021 - 07/05/2021
  - Sprint 2: 10/05/2021 - 14/05/2021
  - Sprint 3: 17/05/2021 - 21/05/2021
  - Sprint 4: 23/05/2021 - 28/05/2021
- 3 members
- Total sum of working days. Sum by roles. Average per person.
  20 business days per person. 60 business days per team.

- Total sum of working hours. Sum by roles. Average per person.
  100h per person. 300h per team.
- Total sum of working hours of a sprint. Sum by roles. Hours for 1 person.
  25h/sprint per person and 75h/sprint per team.

Prototypes and deliverables

- List of sprints:
    - Sprint 1: 03/05/2021 - 07/05/2021
        - GDD
        - Proofhub
        - Scheme of the ui and functionalities
    - Sprint 2: 10/05/2021 - 14/05/2021
        - Main mechanic done
        - Basic ui
        - First prototype for android
    - Sprint 3: 17/05/2021 - 21/05/2021
        - UI with more sprites implemented
        - Mission mechanic implemented
        - Basic shop
    - Sprint 4: 23/05/2021 - 28/05/2021

Summary budget estimate

Monthly salary:

- Scrum manager: 2.900 €/month
- QMA manager: 2.200 €/month
- QMA minion: 1.600 €/month

Average: 2.233,33 €/month

Weekly salary:

- Scrum manager: 725 €/week
- QMA manager: 550 €/week
- QMA minion: 400 €/week

Average: 558,33 €/week

Dealy salary:

- Scrum manager: 145 €/day
- QMA manager: 110 €/day
- QMA minion: 80 €/day

Average: 111,66 €/day

Total:

- Scrum manager: 2900 + 30% = 3.770 €
- QMA manager: 2.200 + 30% = 2.860 €

- QMA minion: 1.600 + 30% = 2.080 €
Average: 2.903,33 €

Total Absolut: 8.640€

Role sharing

Sprint 1 - 03/05/2021 - 07/05/2021:
- **Scrum manager:** Adrián Núñez Martín
- **QA manager:**
  - **QAM master:** Miquel Rodríguez González
  - **QAM minion:** Josep Mora Saurí
Sprint 2 - 10/05/2021 - 14/05/2021:
- **Scrum manager:** Miquel Rodríguez González
- **QA manager:**
  - **QAM master:** Josep Mora Saurí
  - **QAM minion:** Adrián Núñez Martín
Sprint 3 - 17/05/2021 - 21/05/2021:
- **Scrum manager:** Josep Mora Saurí
- **QA manager:**
  - **QAM master:** Adrián Núñez Martín
  - **QAM minion:** Miquel Rodríguez González
Sprint 4 - 24/05/2021 - 28/05/2021:
- **Scrum manager:** Adrián Núñez Martín
- **QA manager:**
  - **QAM master:** Miquel Rodríguez González
  - **QAM minion:** Josep Mora Saurí

Annex

Google Play

For this project, we have used Google play services for all kinds of utilities:

- We have implemented a total of 17 achievements that can be completed in the game, from secret achievements to incremental achievements, some easy and others more difficult, but you can see yours and those of your friends and know the% of completion they have.

- We have also implemented a global ranking, where you can compare your score with all the other people who play the game.

- In-game purchases, thanks to Google IAP we have been able to make easy purchases with real money through Google as an intermediary.

- Thanks to AdMob, a corporation that collaborates with Google, we have been able to implement in-game ads, both banners and video ads that give you a reward when you finish watching them.

- Some more details that we have been able to implement thanks to Google are to obtain the user's name to put it in the application and record the screen thanks also to an extra add-on from Google.

  And last but not least, we have uploaded the game to the play store so that anyone who downloads it can enjoy it.