New technologies, leisure and health:
Proposal for an app to promote physical activity
and exploration through gamification: Exflora

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Abstract

27.5% of the world's adult population does not get enough physical activity, which has several negative health consequences. However, most people are unable to meet the 2 to 3 hours of daily exercise recommended by the WHO.

In order to get closer to the recommendations, NEAT (Non-exercise activity thermogenesis), which takes into account all non-sport related energy expenditures, such as walking to work or housework, must be taken into account.

It has been shown that receiving extrinsic motivations helps people to maintain an exercise routine, and Health & Fitness apps contribute to this. There are two types: monitoring apps and entertainment apps, but it has been observed that no app manages to offer both.

The application developed, Exflora, has features of both types of Health & Fitness apps, being able to monitor physical activity while experiencing daily playtime that encourages users to explore their cities while receiving rewards.

The objective and main differentiating element of the app is to reveal the map of the city in which the user is located while planting vegetation and creating a virtual garden that expands as the user walks around the map. Each day the user is given a goal where they have to walk a certain number of steps, a certain time or a certain number of streets, and during the goal the user can reveal the map. Once the objective has been completed, it can no longer be completed until the next day.

This application seeks to demonstrate that there are alternatives to conventional physical training, and that a healthy lifestyle can be achieved with a simple routine that also helps people to get to know and explore the space where they live.

New Technologies; health; gamification; app design; UX UI; geo-referencing; NEAT; graphic design.

Resumen

El 27.5% de la población mundial adulta no realiza la suficiente actividad física, lo cual trae varias consecuencias negativas a la salud. Sin embargo, la mayoría de las personas no pueden cumplir con las 2 o 3 horas de ejercicio diario recomendadas por la OMS.

Para poder acercarse a las recomendaciones hay que tener en cuenta el NEAT (Non-exercise activity thermogenesis), que tiene en cuenta todos los gastos de energía no relacionados al deporte, y donde entran acciones como caminar al trabajo o realizar labores domésticas.

Se ha demostrado que recibir motivaciones de carácter extrínseco ayuda a las personas a mantener una rutina de ejercicio, y las apps Health & Fitness contribuyen a esto. Existen dos tipos: apps de monitorización y apps de entretenimiento, pero se ha observado que ninguna app logra ofrecer ambas cosas.

La aplicación desarrollada, Exflora, cuenta con características de ambos tipos de apps de carácter Health & Fitness, pudiendo monitorizar la actividad física a la vez que experimentar un tiempo de juego diario que fomenta a los usuario a explorar sus ciudades mientras reciben recompensas.

El objetivo y principal elemento diferenciador de la app es el de revelar el mapa de la ciudad en la que el usuario se encuentra mientras planta vegetación y crea un jardín virtual que se expande a medida que recorre el mapa. Cada día el usuario recibe un objetivo donde tiene que caminar un número de pasos, un tiempo determinado o un número de calles, y durante el objetivo el usuario puede revelar el mapa. Una vez completado el objetivo, no se puede seguir completando hasta el día siguiente.

Con esta aplicación se busca demostrar que existen alternativas al entrenamiento físico convencional, y se puede lograr un ritmo de vida saludable con una rutina sencilla que además ayuda a las personas a conocer y explorar el espacio donde viven.

Nuevas Tecnologías; salud; gamificación; diseño de app; UX UI; georreferencia; NEAT; diseño gráfico

1. JUSTIFICATION

1.1. Justification

27.5% of the world's adult population does not do enough physical activity to maintain a healthy life (WHO, 2022). The numbers of sedentary behaviours have increased in the last decades, and little by little we are facing a more inactive society (López-Valenciano, A. et al, 2020).

Lack of physical activity has several negative consequences for our health, and the WHO recommends 2 to 3 hours of non-intensive exercise per day for adults. However, for most people this is a difficult target.

To comply with the recommendations, it is necessary to take into account NEAT (Non-exercise activity thermogenesis), defined as all those energy expenditures that arise from activities not dedicated to voluntary physical exercise (von Loeffelholz C., et al, 2022). One type of NEAT activity is walking or commuting to work or strolling around our neighbourhood, and this is what we will focus on in this project.

In the development of new technologies in recent years we find mobile applications that seek to encourage people to be physically active outdoors, called Health & Fitness apps. These apps use GPS, calorie expenditure tracking, records of the number of steps taken, and other mechanics that seek to motivate users to create a walking routine (Vidal Matzanke, A. et al, 2023).

Within this app sector, there is a more casual physical activity-oriented market that offers users motivation or entertainment through physical exercise, such as Pokemon Go, the most popular app to date (see state of the art).

Despite knowing the benefits of physical exercise, 40% of Europeans agree with the statement 'being physically active does not interest me, I prefer to do other activities in my free time' (European Commission), which leads to physical activity taking a back seat to other aspects of our lives.

One answer can be found in the lack of motivation in relation to physical exercise, which leads to an inability to engage in physical activity on a routine basis, which ends up being abandoned as it is something that the person 'has to do' rather than something they 'want to do' (Teixeira, P.J., et al, 2012).

Therefore, the positive effect of doing physical exercise on one's own may only be temporary, because the intrinsic motivation that leads to doing it cannot be nurtured, and it ends up being seen as an obligation. In these cases, it is necessary to provide external motivation to individuals, and new technologies and their increasing appearance in our lifestyles are the ideal means to do so.

When conducting market research on the most popular Health & Fitness apps, we observed that no app gives importance to both the aspects of measuring personal progress, extrinsic motivations and game mechanics, and exploration of the environment.

The application to be realised in this project, Exflora, consists of creating and expanding a virtual garden on the map of your environment through daily goals that create a walking routine in users and offers data on their progress in moderate physical activity (NEAT).

2. OBJECTIVES

2.1. Objectives

Main goal: To get users to walk and explore their surroundings through the incentives of the app

Secondary goals:
- To design and prototype the app
- To develop a cycle of use that keeps users engaged.
- To encourage physical activity through entertainment
- To design a business model for its development and maintenance

3. CONSULTED SOURCES

3.1. Theoretical Framework

In order to justify with solid and relevant arguments, before making any decision in this project, an investigation is carried out by scaling up from the root of a problem to the field to be touched by this project. With this research work, a justification for the necessity of the creation of this project is consolidated.

Physical activity

First of all, the current situation in the physical activity landscape in our society should be noted. 27.5% of the world's adult population, 1.4 billion people, do not get enough physical activity to maintain a healthy life (WHO, 2022) (FIG 1.). This figure has remained unchanged since 2016 (Guthold, R. et al, 2018), and sedentary behaviours have increased since 2002 (López-Valenciano, A. et al, 2020).

These data reflect the fact that we are facing a more inactive society. We consider a person to be sedentary when they do not make a minimum amount of daily effort (around half an hour) that produces an energy expenditure 10% higher than that carried out in everyday activities (household chores, walking to work, climbing stairs or outdoor games) (Varela, M.T. et al, 2011).
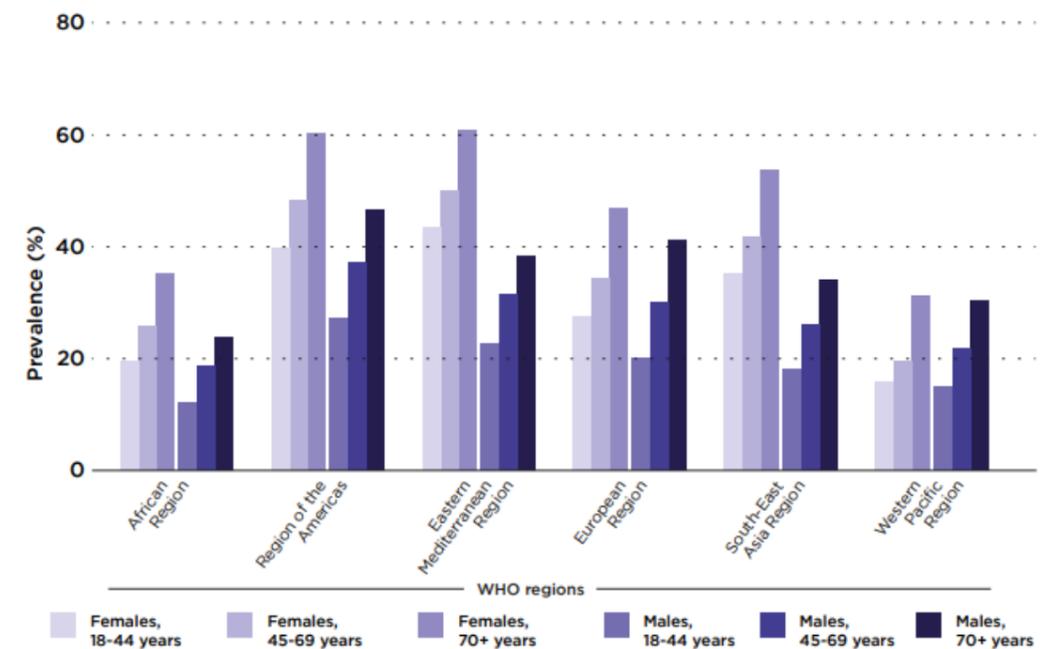

FIG 1. World Health Organization (2022). Prevalence of adults aged 18+ years not meeting WHO physical activity guidelines, by WHO region, 2010 - 2016. Retrieved from Global Status Report on Physical Activity 2022.

A sedentary person engages in most of their time in sedentary behaviours, which are those that we consciously perform while sitting or lying down, and which expend 1.5 METs (Metabolic Equivalent of Task) or less. Examples of these behaviours are watching TV, working on the computer or reading in bed (Park, J. et al, 2020). 1 MET is defined as the amount of oxygen consumed by a person at rest in one minute relative to their body mass (Jetté, M. et al, 1990).

The decline in physical activity is due to inactivity during leisure time and increased sedentary behaviour at work and at home. Increased use of passive means of transport also contributes (WHO).

Lack of physical activity leads to several negative consequences with regard to our health. To combat sedentary lifestyles, the WHO recommends that people aged 18-65 years should engage in moderate aerobic activity for at least 150-300 minutes daily (WHO). However, dedicating 2 to 3 hours a day to physical exercise is a difficult task for most adults.

In order to get closer to the WHO recommendation, it is necessary to take into account the daily activities mentioned above, known as NEAT (Non-exercise activity thermogenesis). The NEAT includes all those daily energy expenditures that arise from activities that are not dedicated to voluntary exercise. NEAT is linked to the individual's physique, but also to interactions with the environment, routines and other biological aspects (von Loeffelholz C., et al, 2022).

Among the different activities listed in the NEAT, for this project we will focus on walking. This activity is aerobic in nature and brings health benefits such as increasing the amount of oxygen carried by the blood, toning muscles and strengthening our pulmonary and arterial capacity, among others (Molina Zúñiga, R. 1998).

The sector of new technologies oriented for physical activity

The entry and development of new technologies in society in recent years, especially mobile technologies, has had a significant impact on the way we relate to our environment and to each other. In 2023, the percentage of people over the age of 10 owning and using a mobile phone in the world exceeded 75%, with an estimated increase in the coming years (UN, 2023), and more than half of all Internet traffic is now carried out via mobile phones (Smart Insights. 2024).

The field of sport and physical activity has also experienced this change through GPS devices, smart watches and mobile apps with functions for exercising, counting steps, tracking calorie expenditure, etc. Technologies within this description are called Health & Fitness (Vidal Matzanke, A. et al, 2023).

Health & Fitness apps usually offer user performance feedback, self-tracking, goal setting, social support and contingent rewards (Byun, H., et al, 2018).

Although the most generalised sector consists of applications dedicated to sport, a second market of more casual physical activity-oriented technologies can be observed, offering other motivations on which the characteristics of Health & Fitness apps are based (read state of the art). The most popular case is Pokemon Go.

Pokemon Go is a video game for Android and iOS launched in 2016 and developed by Niantic. The aim of the game is to capture, train and battle creatures called Pokémon through mechanics linked to the user's location and, as a consequence, their physical activity (more details in state of the art). Users who have played Pokemon Go have shown an increase in the amount of time they walk and a reduction of sedentary behaviours in their routines (Khamzina, M., et al, 2020).

Why use an app when I can exercise on my own?

Despite all the knowledge we have about the benefits of an active lifestyle and the studies that prove it, a large part of society does not comply with the recommendations. 40% of Europeans agree with the statement 'being physically active does not interest me, I prefer to do other activities in my free time' (European Commission). This may be because physical activity takes a back seat to other obligations in their lives, or because of health obstacles or self-perception.

The answer can be found in a lack of motivation in relation to physical exercise, which leads to an inability to engage in physical activity on a routine basis, which ends up being abandoned because it is something that the person 'has to do' rather than something that they 'want to do' (Teixeira, P.J., et al, 2012).

'Playful mobile apps establish new motivational components for doing sport, so that the desire to improve fitness is a secondary consequence of achieving the achievements set out in the game.' (Aznar Díaz, I., et al, 2019)

In conclusion, the positive effect of doing physical exercise on one's own may only be temporary, because the intrinsic motivation to do it cannot be nurtured, and it ends up being seen as an obligation. In these cases, it is necessary to provide external motivation to people, and new technologies and their increasing appearance in our lifestyles may be ideal means to do so.

3.2. State of Art

Before starting to devise the mechanics of the application, a market study is carried out on the most downloaded and best rated apps in the Health & Fitness section in the Play Store and Apple's App Store that are related to physical activity. The apps are classified into two categories:

Data collection apps: their main purpose is to provide the user with data on their progress (number of steps, calories burned, distance travelled). They do not use in-app resources to motivate users to exercise.

Playful apps: their main objective is to motivate the user to exercise through in-app rewards. The type of rewards is calculated using data on the user's progress.

Mi Fitness Xiaomi

This app allows users to track their health and fitness data. It can be linked to a wristband or smartwatch.

Mi Fitness Xiaomi (n.d.). Screenshot example. Retrieved from Google Play
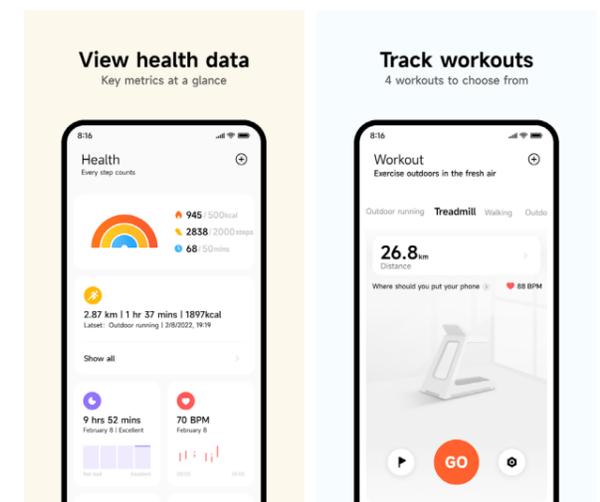
Workoutdoors

App that uses vector maps to show the user's route. It is aimed at managing and measuring hiking, cycling and running routes.

Workoutdoors (n.d.). Screenshot example. Retrieved from Apple Store

Alltrails

It collects cultural, exercise and tourist routes, etc. Users can review and recommend them to each other.

Alltrails (n.d.). Screenshot example. Retrieved from Google Play

It is an application launched by Google dedicated to measuring, monitoring and storing users' physical activity. It allows you to set personal goals, see the types of physical activity you do every day, monitor your progress

Geocaching

It uses a map with various marked targets. Users can go to the marked location and find items left by other users. It is the origin of Pokemon Go.

Geocaching (n.d.). Screenshot example. Retrieved from Google Play

Macadam

Rewards users with money for walking that they can spend on offers or charitable causes. It has an emphasis on getting users to socialise.

Macadam (n.d.). Screenshot example. Retrieved from Google Play

Zombies Run

Users find themselves inside a zombie apocalypse story, and as they walk in the direction of story prompts, they can listen to it as an audiobook during their sessions.

Zombies run (n.d.). Screenshot example. Retrieved from Google Play
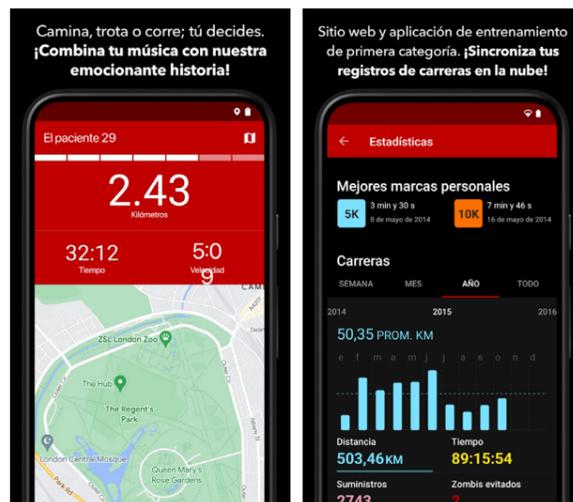
Ingress

Users join teams globally, and must accomplish objectives by walking to designated locations to conquer ground on behalf of their team.

Ingress (n.d.). Screenshot example. Retrieved from Google Play

Two in-depth case studies

In order to better understand the mechanics used in existing apps, one case of each type of Health & Fitness app defined above will be studied in depth.

Google Fit - Launched on 28 October 2014 - +100M downloads on Google Play Store

and link your data to other Health & Fitness apps. The app can be linked to smartwatches, saving the user from having to consult their phone to see their progress.

When launching the app, the user is asked to enter data about themselves, such as their age, weight and height, and set initial daily goals that can be modified.

As the user completes their goals, they earn 'Cardio Points', a unit of measurement established by Google to measure physical activity.
These points are accumulated in the user's profile, along with their total activity and progress.

Google Fit (n.d.).

Screenshot example. Retrieved from Google Play

The app features graphs showing the percentage of the daily target met, maps showing summaries of the routes completed and other data, such as sleep data.

Pokémon Go - Launched on 6 July 2016 - +100M downloads on Google Play Store

Pokémon is a video game franchise based on training, battling and capturing fictional creatures with powers called by the same name. Pokémon GO is a mobile video game developed by Niantic in 2016 that integrates the concept of the original video games with physical activity. Users must walk to get the most out of the game.

When starting the app, the user finds his or her avatar in the centre of the screen on a map. The main actions of the game take place on this map:

Capture pokemon: pokemon appear around the avatar on the map as the user walks. When the user touches the pokémon, they enter a screen where they can throw poké balls at it to catch it. The user can activate an option to display the creatures in augmented reality.
The user can see which pokémon are nearby, and must move to those locations in order to catch them.

Obtaining items: Around the map, there are highlighted points called 'poké stops'. These points relate to actual physical locations, and by interacting with them the user collects items. It takes 5 minutes for the points to become interactive again, so it is necessary for the user to move around to get more items.

Fighting and defending gyms: At the start of their game, users can choose to be part of one of three teams. Gyms are located on the map, where up to 6 members of the same team can leave one of their pokémon to defend it. Users from the other teams can fight with them, and if they manage to defeat them, they win the gym. Upon defeat, each user recei-

ves coins that can be exchanged for items or upgrades. Challenges occur daily at these locations where several users from any team must cooperate in defeating and catching rare or exclusive pokémon in these fights.

Related to these mechanics, there are other aspects that add depth to the game and motivate users to continue playing:

Manage pokémon: the user can sift through the pokémon they catch and keep the most suitable ones. They can transfer repeats for items that strengthen or evolve, so that the user is encouraged to catch multiple pokémon of the same species.

Complete the pokédex: The pokédex is a catalogue of all pokémon species, and every time the user gets a new pokémon it is recorded here. This motivates users to search for the species they need to complete it.

Quests: when interacting with a poké-stop the user receives a simple quest that can be completed in exchange for items. On the other hand, there are special long-term missions that the user can complete in exchange for valuable rewards.

Pokemon GO (n.d.).

Screenshot example.
Author's own
screenshots

The game includes ways to progress passively, so that even if the player does not have the app open they can still earn rewards. This leads to a video game that motivates the user to make the most of their physical activity outdoors and can be consulted at any time, always finding something to do. It offers motivations for both a casual and a more dedicated audience.

Conclusions

We note that there is a market for apps related to outdoor physical activity. However, no app gives importance to both the aspects of measuring personal progress, extrinsic motivations and game mechanics, and exploration of the environment. On the other hand, most applications are free of charge, so a free application is the most ideal on the market.

The application to be developed for this project should offer attractive ways to show users data on their physical activity progress, while offering motivations related to exploring your environment that will encourage users to continue using the application. It should be free to compete in the Health & Fitness app market, but will have microtransactions to support it financially.

	Graphical view of data	Use of maps	Visible progress	Internal app motivations	Social aspects	compatibility with external devices	adaptable objectives/ training	Free
Mi Fitness Xiaomi	✓		✓			✓	✓	✓
Workoutdoors		✓	✓			✓	✓	
Alltrails		✓	✓		✓		✓	✓
Google Fit	✓	✓	✓			✓	✓	✓
Geocaching		✓		✓	✓			✓
Macadam	✓		✓	✓	✓	✓	✓	
Zombies Run	✓	✓	✓	✓	✓			
Ingress		✓	✓	✓	✓			✓
Pokemon GO		✓	✓	✓	✓	✓		✓

(FIG 1.) Relation of apps studied in this State of Art and the most relevant characteristics seen in this type of aplications (2024). Author's own work.

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4. METHODOLOGY

4.1. Briefing

At the start of the project, a briefing is developed that seeks to respond to the main idea of the project and define the main and secondary objectives.

What will be done: an app will be designed to gamify NEAT physical activity based on exploring your environment.

How it will be done: research will be carried out into the reasons why people do not engage in physical activity and the new technologies that have emerged to combat this. A market study will be carried out on the applications that currently exist and the gaps that exist will be observed. The mechanics and user experience and the graphic identity of the application and its advertising will be designed. A prototype of the application will be made.

Why it will be done: currently there is a very high number of sedentary lifestyles. One of the causes is the lack of external motivations for people to maintain their routine, and new technologies are a relevant means of designing stimuli for people to access.

When will it take place: the project will run from 12 February to 20 June.

Who it will be done for: the target group of the application consists of adults aged 25 to 45 who live in urban areas and are looking for an incentive that motivates them to maintain a physical activity routine.

4.2. Design Thinking Methodology

To start the initial development of the project, the Design Thinking methodology is put into practice. This strategy leads the project under user feedback, offering a controlled development. (Design Thinking España)

4.2.1. Empathise - Target

The target group for the app consists of adults aged 25 to 45 who live in urban areas and are looking for an incentive that motivates them to maintain a physical activity routine.

To select the main mechanics of the application, a table has been drawn up with the behaviours that respond to each one and those that provoke the behaviour that the app seeks to create have been chosen (FIG 1.).

To specify the objectives of the application, this section answers HMW (How might we) questions, which help us to brainstorm and put ourselves in our target's shoes.

How might we encourage users to maintain a physical activity routine?

To get users to adapt a routine, they need to have a motivation in the application that gives them a reason to go out every day, such as a daily task system or a social aspect.

How might we get users to use the application instead of other existing applications?

Offering the features of data collection and recreational apps that interest users in a single application in an accessible way and with differential mechanics.

How might we appeal to our target audience?

As an application focused on people living in urban environments, using a nature-related aesthetic can attract users' attention by offering a new approach to the environment around them.

4.2.2. Define - MDA Framework

Once this process has been carried out, an MDA (Mechanics, Dynamics & Aesthetics) framework is created to define the functioning of the application. This technique is used in the design of video games to understand the main concepts of these (Hunicke, R., et al, 2004), but it is also applicable to our recreational application. The main operation of the application will be as follows:

Mechanics

The goal of the app is to gradually build and expand a virtual garden. Upon opening the app, a map of the environment in which the user is located is displayed, similar to other GPS apps. This map is hidden by weeds and tall grasses, and as the user walks in the real world, the map is revealed (FIG 2.). As the user walks through the same area several times, he gradually adds new elements until he builds a garden (FIG 3.).

Goals

The map can only be expanded when the user has an active objective. Once a day, the user receives a type of goal adapted to his physical condition that he enters when registering in the app. When the user completes the objective, they receive a series of rewards such as items and coins, and can no longer continue to expand their map or improve their garden until the next day. The types of goals are:

Walking number of steps: in order to encourage the user to walk at a pace that matches their physical condition, the rewards at the end of the goal will be affected by the time it takes to complete the goal, motivating the user not to complete the goal too quickly and encouraging them to walk at an active pace. The closer the time is to the calculated ideal, the greater the reward.

Mechanic	Behaviour
Hidden map of the area, as you walk around you will discover the map.	The user seeks to complete the map.
Hidden objects on the map that are revealed when you arrive at their location.	The user seeks to get closer to these objects and walks in that direction.
Filters with different types of maps (elevation, concurrency, etc).	It learns about its environment and plans its routes according to the information, a function that will not be used in depth.
At the end of the session, you can see a summary of your data (steps, distance, calories burned, etc.).	Seek to improve your data, try new routes to see the differences.
Receive one objective per day, randomised among 3 types (walk a number of steps, walk a number of streets, walk for a certain amount of time).	Adapt the type of walk according to the objective (diversity within their routine).
To be able to take out another daily target if it is not possible to do the one that has been touched.	Gives the application another chance in case it is unwilling/unable to complete the first objective.
Reward the user for multiple trips on the same street.	The user does not feel that he/she wastes time if he/she does not explore new places / gives replayability.
Receive a score for completing the session.	The user does not know if he/she has done well or badly (scoring needs a metric and to be explained).
To be able to keep yesterday's objective and do it together with today's objective.	A second chance to avoid the frustration of losing the streak. Can produce a 'I'll do it tomorrow' effect.
Being able to choose the type of target and when you receive it.	It has the control to manage itself. Can lose extrinsic stimulus as it is user-driven.
Show your progress data in a graphical and entertaining way.	There is an external motivation to see their progress.
Allow the user to choose a long-term goal to complete.	There is a reason to use the application on a daily and long-term basis.
Local, national, etc. rankings showing user ratings.	Users focus their sessions on climbing the rankings.
The ranking is reset every season.	Users at the top will feel demotivated (they should receive a reward at the end of each cycle) and users at the bottom may have a new opportunity to climb.

(FIG 1.) Table of mechanics and its related behaviours that the users are expected to make (2024). Author's own work.
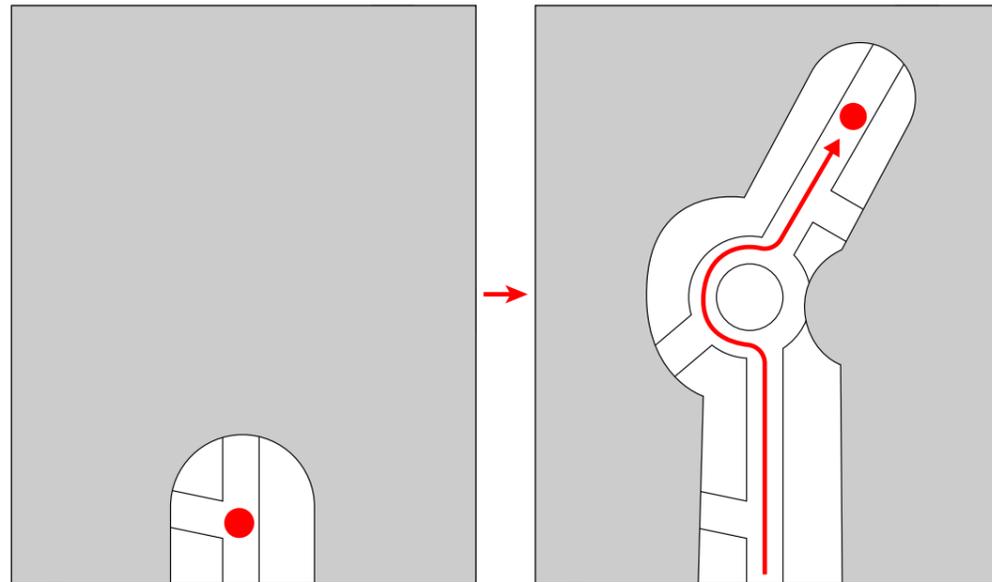
(FIG 2.) Graphic for a hidden map that reveals as the user walks through (2024). Author's own work.
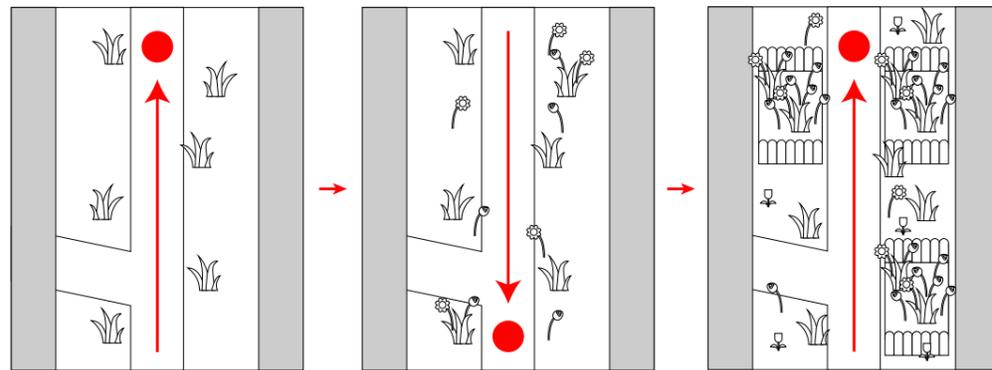
(FIG 3.) Graphic to explain how the map inserts more elements as the users walk repeatedly through the same street (2024). Author's own work.

Walk for a set amount of time: this mission encourages the user to walk through new streets in one session, motivating the user to walk through places they don't usually walk through. The more places the user discovers, the greater the reward.

Explore number of streets: this objective aims to stop the user from walking the shortest streets, and takes into account the number of steps taken. The longer the streets explored, the greater the reward.

When the user receives the daily target, he/she can decide whether to complete it or retake another target. If the user cannot complete an objective one day, they can 'store' it and complete it the next day along with the new daily objective. If they do not complete it that day, the stored objective disappears. Only one objective can be stored, and the oldest objective disappears if the user stores another one.

Places

The user can find shadows hidden in the undergrowth of the map. When the user reaches the shadows, a model of a monument or place of interest in their own city is revealed (FIG 4). These places give additional rewards the first time you discover them and the number of times you pass them while completing an objective. As you improve the street these Locations are on by walking it several times, the number of additional rewards also increases. There are two types of Locations:

Official Places: these sites are created by the developer in conjunction with institutions of each site. They are larger, and represent monuments, tourist sites, historical sites, etc. of the site, such as cathedrals, for example. These places are shown with a larger shadow, and when uncovered they show a 3D model of their own rising above the map. They contain an educational description of the place.

Unofficial Places: these places are created by users who have reached one of the following extraordinary goals: completing the map of the town/city they live in, completing the set long-term goal, reaching the first place in the ranking, buying a pass to create a place in the shop.
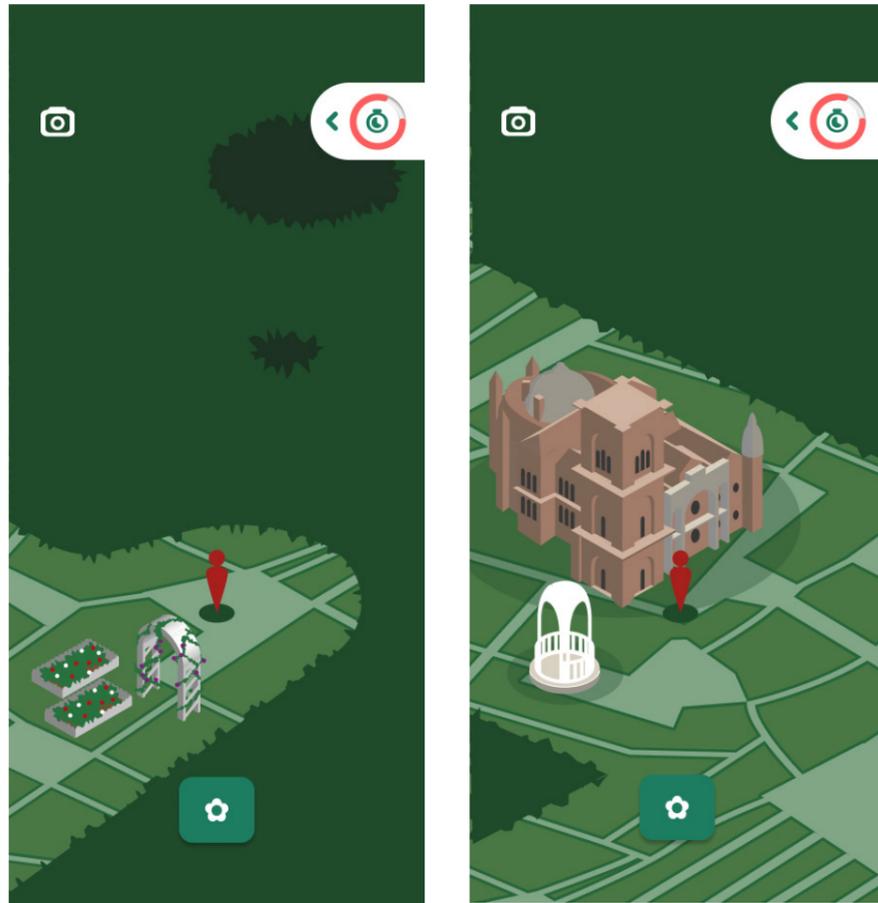
(FIG 4.) Graphic for Places hidden and example of an Official Place once the user gets to its location. (2024). Author's own work.

Unofficial Places use the same 3D model and offer the same functions as official places. The user can give it a title and a description, and once accepted by the developer the place appears on the map for all users (FIG 4).

Rewards

When completing missions, the user receives three types of rewards:

Coins: depending on the result of the objective, the user receives an amount of coins that can be used in the shop to get decoration items, themes that change the appearance of the app and other improvements. These coins can be bought in the shop with real money.

Decorative: Decorative rewards consist of objects or types of plants that the user can place in the uncovered areas. The objects are placed from the inventory by dragging them onto the map where they are to be placed, and the plants come in seeds and are scattered around the map as the user walks.

There are several types of decorative items and plants, and the user is encouraged to get them all. On the other hand, there are items exclusive to seasons or special events.

Scoring: as with coins, the user receives a number of points. These points are accumulated and appear next to the user in a ranking with users in the same area. This ranking is updated once a month, and the top users receive special rewards.

(FIG 5.) Graphic for an Unofficial Location. The Location changes visually as the users visit them, giving more rewards. (2024). Author's own work.

The score is calculated through the basal metabolic rate of each user, so there is no physical advantage and it encourages everyone to participate in achieving the top rankings (FIG 6).

Long-Term Goal

By registering with the app, the user can choose a long-term goal that he or she will gradually achieve. These goals vary from walking the distance from their location to another city, to a natural place such as a mountain peak, or walking the same distance as the characters in a series or movie.

Between the start and the end of the long-term goal, intermediate points are marked that are determined by the goal and are notified to the user each time the goal is met.

The goal can be changed, and its progress is saved but does not advance if you have not selected it. Once completed, the user receives exclusive rewards, including the option to create a place on the map.

Dynamics

The main use of the app is this: the user opens the app for the first time during the day and receives his daily goal, which he can complete or save. Once the goal is completed, the user receives an overview of the steps taken, distance, area covered, calories burned, places covered, and progress towards their long-term goal. You also receive your rewards and your ranking update.

On the other hand, the user can continue to use the app without his daily goal to place and modify decorative objects.

These two cycles of use in the app take and gamify concepts such as exploration, progress and customisation in the same way as conventional video games.

The mechanic of a hidden map that is revealed as the user traverses it takes inspiration from the 'Fog of War', used in strategy games (FIG 7.).

0   100   0

Objective puntuation calculated by how
near the user has achieved to the ideal
result, influenced by the user's basal
metabolic rate.

×

Basal Metabolic Rate
This number is calculated when the user
registers for the first time.

= nº pts received

= rate of rewards

the higher the number, the higher the number
of rewards

(FIG 6.) Formula for calculating the score and number of rewards. (2024). Author's own work.

Unkown Area

Foggy Area

Fully Visible Area

(FIG 7.) Age of Empires IV. Example of the Fog of War mechanic. (2021). Age of Empires Forum.

(FIG 8.) Animal Crossing New Horizons. Decoration. (2021). Architectural Digest España.

On the other hand, in simulation video games it is common to have a decoration section that allows players to modify the aesthetic aspect of a space or a character to their liking (FIG 8.). This mechanic has been adapted to the app to create a second mobile attraction for the target.

Aesthetics

"When deciding whether Google should spend millions or even billions of dollars in acquiring a new company, its chief executive, Larry Page, asks whether the acquisition passes the toothbrush test: Is it something you will use once or twice a day, and does it make your life better?"

(Gelles, D., 2014).

By offering a limited amount of 'play' per day, users return to the app daily to complete the incentives offered by the app's mechanics and create a routine of active physical activity where they find reasons to explore new places in their environment.

The decorative and competitive aspect of the app provides opportunities for a community of users to show off their gardens or compete with each other on social media or in person.

Mechanic	Behaviour
Hidden map of the area, as you walk around you will discover the map.	The user seeks to complete the map.
Monuments hidden in the map can appear if the user gets near them.	The user adapts their paths to get to these places.
Decorative rewards, such as furniture or other types of plants to put on the map.	The user opens the app for other reason other tan to do their daily goal.
At the end of the session, you can see a summary of your data (steps, distance, calories burned, etc.).	Seek to improve your data, try new routes to see the differences.
Receive one objective per day, randomised among 3 types (walk a number of steps, walk a number of streets, walk for a certain amount of time).	Adapt the type of walk according to the objective (diversity within their routine).
To be able to take out another daily target if it is not possible to do the one that has been touched.	Gives the application another chance in case it is unwilling/unable to complete the first objective.
Reward the user for multiple trips on the same street.	The user does not feel that he/she wastes time if he/she does not explore new places / gives replayability.
Receive a score for completing the session.	The user does not know if he/she has done well or badly (scoring needs a metric and to be explained).
To be able to keep yesterday's objective and do it together with today's objective.	A second chance to avoid the frustration of losing the streak. Can produce a 'I'll do it tomorrow' effect.
Show your progress data in a graphical and entertaining way.	There is an external motivation to see their progress.
Allow the user to choose a long-term goal to complete.	There is a reason to use the application on a daily and long-term basis.
Local rankings showing user ratings.	Users focus their sessions on climbing the rankings.
The ranking is reset every season.	Users at the top will feel demotivated (they should receive a reward at the end of each cycle) and users at the bottom may have a new opportunity to climb.

Summary of the final mechanics in the app. (2024). Author's own work

4.2.3. Ideate - SWOT & CAME

Once the ideas for the application have been defined, its own characteristics and those of the market are studied using the SWOT and CAME tables.

WEAKNESSES	THREATS
- The app can only be used for a short period of time per day. - The natural look and feel of the app does not interest people living in rural settings. - The app can be forgotten or not opened more than once.	- Pokemon Go and Google Fit meet most demand for Health & Fitness apps. - People can't make time to explore because of obligations.
STRENGTHS	**OPPORTUNITIES**
- The differentiating element of the fog map is not in other applications. - The application will be free of charge. - Mixing gamification with cultural aspect. - Users can add content to the app.	- There is a growing awareness of physical activity and sedentary lifestyles. - Rebuilding cities in a more walk-friendly way. - Growing digitalisation in the field of sport and physical exercise.

CORRECT	CHALLENGE
- Offer quality content in the app's usage cycle that attracts the user to open the app the next day. - Target the app to people living in urban areas far away from nature. - Reward users for consistent daily usage.	- Targeting people who are not attracted to these apps / making it more adult. - Adapt to users themselves by offering content even if they cannot browse, such as rewarding only steps taken.
MAINTAIN	**EXPLOIT**
- Emphasise the differentiator to make the app stand out from the competition. - Put the most used features for free and include extras with micropayments. - Link the educational aspect to the reward aspect of the game process so that learning about our environment is rewarding. - Add achievable challenges for users to add content to the app and encourage feedback.	- Emphasise the benefits of physical activity in the app's advertising. - Offer new and emerging routes in the app. - Adapt the app to these new technologies, such as smartwatches.

4.2.4. Prototype - Methodology

Once the objective and mechanics of the application have been fully defined, the graphic and technical aspects will be developed:

Graphic aspect: the graphic image of the brand and the universe of the identity will be designed. Sketches and outlines of the values to be conveyed will be drawn up and then digitised using programmes such as Clip Studio Paint, Photoshop and Illustrator.

The brand identity manual will be written and laid out in Indesign, where the uses of the brand and the visual universe will be included. Using the identity manual, several advertising pieces will be created for the application.

Technical aspect: the development of the application will begin with the sketching of the frameworks and the map of the app. Once this is established, it will be digitised and low fidelity prototypes will be created in Figma to test the user experience.

At the end of the user experience testing and corrections, a final prototype will be designed with the identity implementation. Finally, if implemented, the prototype will be handed over to an app developer for final development and market launch.

4.2.5. Test

Once development was completed, the app would be released as a minimum viable product for the first time as a closed beta, where a limited number of interested users would test the app and the developers would receive feedback.

The closed beta stage would last for a number of months, fixing bugs and optimising mechanics until a satisfactory product was achieved.

The next step would be an open beta launched regionally, until a bug-free 1.0 version is released globally.

Throughout the process, programmers work on the app through telemetry, following an iterative development process.

4.3. Resource Estimation

A licence fee is needed for app shops such as the Google Play Store and the Apple App Store. For the Apple shop, another extra payment is required to obtain a positioning.

It will be necessary to hire programmers for the development of the application, the necessary material for telemetry updates, and the necessary advertising costs.

4.4. Chronogram

The development dates of the project are listed in the calendar on the right (FIG 1.), and the following phases are listed in order and colour.

February 2024

M	T	W	T	F	S	S
			1	2	3	4
5	6	7	8	9	10	1
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29			

March 2024

M	T	W	T	F	S	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

April 2024

M	T	W	T	F	S	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

May 2024

M	T	W	T	F	S	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

June 2024

M	T	W	T	F	S	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

- Initial research and development of justification
- Drafting of the state of the art
- Drawing up the technical details of the project
- Design of the graphic elements of the project
- Prototyping of the app
- Revision of the texts and layout of the report
- Preparation of the presentation

(FIG 1.) Calendar segmented in different phases of the project. (2024). Author's own work.

5. DEVELOPMENT

5.1. Brand

For the naming of the brand we are looking for a term that can summarise the concept of the project in a concise, literal way, and as it is an application that will be launched all over the world, that can be easily read in other languages.

The naming chosen is 'Exflora', a mixture of the words 'explora' and 'flora', which is concise as it is a single term, summarises the concept of the app (expand your garden by exploring your environment) and its phonetics do not cause problems in Spanish or English.

For the brand logo, an iconographic logo is sought before a typographic one, as long as it can be used in the app icon and can be read correctly in this square format. We started by sketching different stylised concepts related to the themes of nature, urbanism and exploration, in some cases mixing ideas.

The final logo of the brand uses a rounded typography that together with the naming composed of rounded letters gives a friendly and organic appearance. A floral detail is used to contextualise the logo, which can be used as an independent icon without the naming.

The brand universe and the app interface uses stylised and textured elements, opacities and shading that adapt to the new design trends that are making a comeback (FIG 1.1. to FIG 1.4.), leaving behind the flat design that has existed in mobile technology in recent years (Karunaratne, C., 2023).

(FIG 1.1.) Colored, typographic logotype. (2024). Author's own work.

(FIG 1.2.) Iconographic logotype, mainly used for the app icon. (2024). Author's own work.

Quicksand semibold

Rubik Light
Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam

R:29 G:125 B:97
C:100 M:24 Y:73 K:12
#1d7d61

(FIG 1.3.) Typographies for the titles and text used in the brand universe, color code of the main tone used. (2024). Author's own work.

(FIG 1.4.) Area of respect for the logotypes. (2024). Author's own work.

(FIG 1.5.) Iconography used in the app. (2024). Author's own work.

5.2. App

This is the map of app usage (FIG 2.). The following is an example of the use of the application where the mechanics developed previously in the methodology section are applied.

When installing and starting the app for the first time on the mobile phone, the user must follow an initial process where they must accept the necessary permissions for correct operation, and register or log in with an email address (FIG 3).

In order to save resources, the app's map is separated into a series of quadrants, the app detects the city in which he/she resides by using GPS in order to load only that quadrant.

On the first screen the user must enter the name under which they want to appear in the app and a previously unregistered email address. They must then enter a series of information about their physical condition that will affect the parameters of the missions and rewards.

The user can link the app to a smartwatch or similar device to get more accurate ride information. This step is optional. Finally, the user must choose a long-term goal, which will appear on the user's profile and progress secondarily as the user uses the app.

The user will be shown a slideshow explaining the main mechanics of the application, and is taken to the home screen, where they will be directed the next time they open the application (FIG 4).

On arriving at the home screen, a pop-up appears with information about the daily target assigned and calculated in relation to the physical data previously entered. The user has the option to accept it, to store it for the next day or to take another different target. In this case, the target is accepted and the user appears on the home screen (FIG 5.).

The following graphics (FIG 6.) explain the elements of the interface.
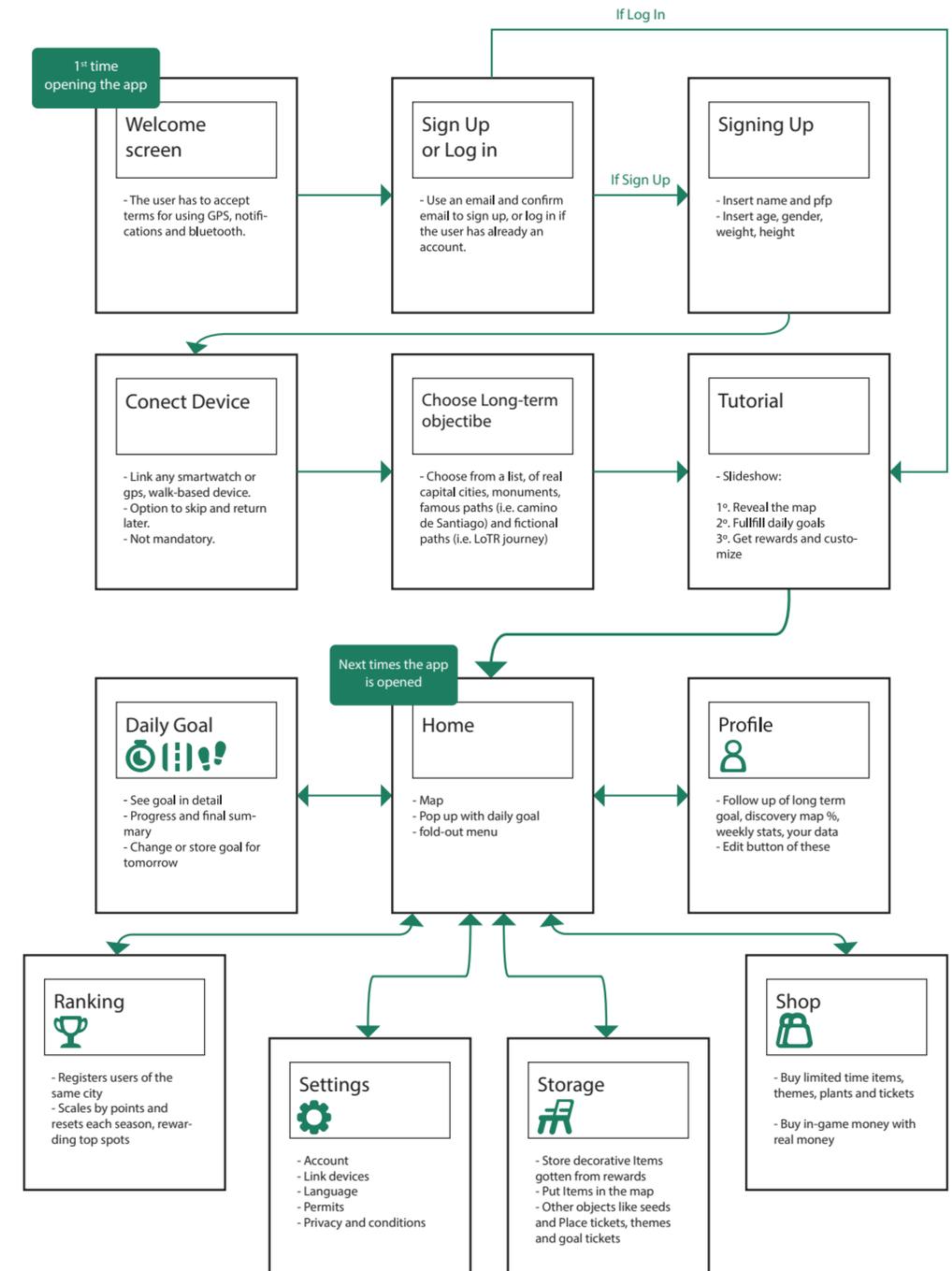
(FIG 2.) Schematic map of the app. (2024). Author's own work.

Create your account

● ● ● ●

Name

Email Address

Repeat Email Address

Continue

Return

Personal information

●——● ● ●

This information is private and only you will be able to see it. Be as approximate as possible for a better user experience.

Date of Birth / DD/MM/YYYY

Height / cm

Weight / kg

Terms & Privacy

Use of personal information

Continue

Return

Link a device

●——●——● ○

Link any smartwatch or device to count your steps more precisely.

🕐 Smartwatch 1   ○

🕐 Smartwatch 1   ○

🕐 Smartwatch 1   ○

🕐 Smartwatch 1   ○

Continue

Skip

Return

Choose your Long-Term Goal

●——●——●——●

Every time you use the app, you will walk a long-term goal. Complete it to earn rewards.

Goal types are distance-based and range from walking from your city to another city, to famous hiking or climbing routes, to popular series and book tours. Try searching for your favourite!

From Granada to:

🔍 Paris, France

Finish

Return

Explore your city and create a routine

Earn rewards by completing tailored objectives

Create and personalise your garden

(FIG 3.) LEFT. In order, from left to right and up to down, signing up process. (2024). Author's own work.

(FIG 4.) RIGHT. Slideshow showcasing the main mechanics of the app. (2024). Author's own work.
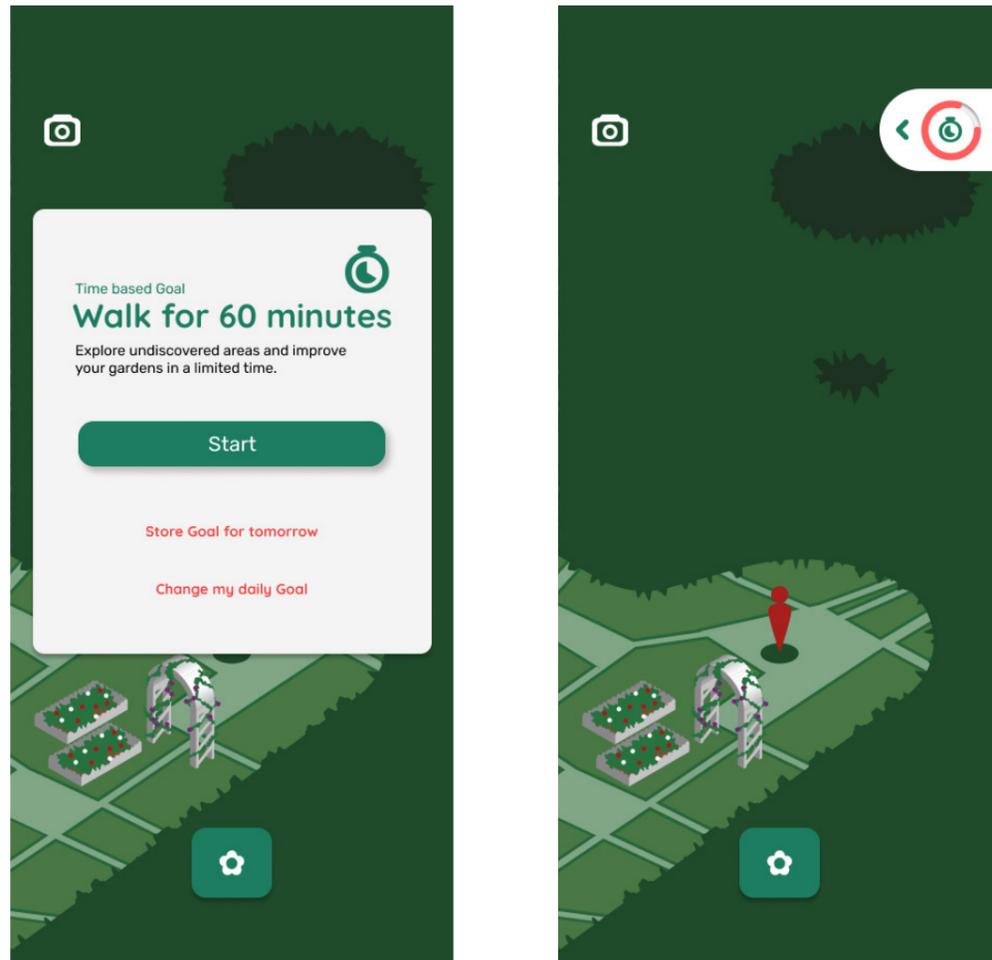
(FIG 5.) Pop up of daily goal in home screen and regular home screen. (2024). Author's own work.

Camera. Hides the UI and lets you adjust the perspective and use filters.

Tab of the daily goal. Swipe left to reveal a screen with information about the daily goal.

Big shadow of an Official Place

Small shadow of an Unofficial Place

User's avatar

Inventory. Stores all your items and lets you use them

Profile. Check and edit your progress, your long term goal and information.

Settings. About language, permits, terms of privacy, account and graphical settings.

Ranking of people at the same city. Resets each season rewarding top spots with items.

Shop. Items that change each season. Uses in-app currency that can be bought with real money.

(FIG 6.1.) Guide of the elements shown in the main screen. (2024). Author's own work.

Time based Goal
Walk for 60 minutes
Explore undiscovered areas and improve your gardens in a limited time.

Map shows path taken during the goal

Pause and unpause the goal. The user has control at all times.

Left
13:06

See how much is left. Can be time, steps or surface explored.

Store Goal for tomorrow

Store for tomorrow the goal. Will lose all the progress done during the goal.

Change my daily Goal

Change the goal for one of the other two types left. Will lose all the progress done during the goal.

(FIG 6.2.) Guide of the elements shown in the daily goal screen. (2024). Author's own work.

Ranking

Granada, Andalusia
Summer season
3 months, 29 days, 4 hours left

City, name of the season and time left for the next

Name **XXXX pts**
Season Steps: XXXX
Discovered: XXX %

Name **XXXX pts**
Season Steps: XXXX
Discovered: XXX %

Name **XXXX pts**
Season Steps: XXXX
Discovered: XXX %

Three first users are shown in more detail. Will receive rewards at the end of the season

4th **Name** **XXXX pts**

5th **Name** **XXXX pts**

6th **Name** **XXXX pts**

7th **Name** **XXXX pts**

8th **Name** **XXXX pts**

Other users are shown in a more simple way

Your Name **XXXX pts**
Season Steps: XXXX
Discovered: XXX %

Your spot is highlighted and allways visible

(FIG 6.3.) Guide of the elements shown in the ranking screen. (2024). Author's own work.

Edit any information in the profile

Name, email and total data since the creation of the account

Personal information and BMR

Long term goal. Shown progress through a map and a filling bar indicating rewards and how long has the user made it so far

Changing a goal stores your progress until the last reward gained. Can be changed anytime

Profile

User0077668
correoelectronico@gmail.com

Granada, Andalusia, Spain
Ranked 10th - 18.375 pts
Discovered: 30%

Total steps: 50.679
Total distance: 895 Km
Calories burned: 3000 cal

ⓘ **My Information**

Gender: M
Birthday: XX/XX/XXXX
Weight: XX kg
Height: XXX cm

Nº
Your Basal
Metabolic Rate

▷ **Long-Term Goal**

From Granada, Spain to Paris, France

You are more than halfway there!

Change my Long-Term Goal

(FIG 6.4.) Guide of the elements shown in the profile screen. (2024). Author's own work.

50

Map progress shown through map and filling bar indicating rewards

Weekly stats shown by graphics. Can check past weeks

Change the information shown. Can overlap two or more graphics

📍 **Map** ⌃

Granada, Andalusia

You have explored 30% of the city

📈 **Weekly Stats** ⌃

D L M X J V S D L

Steps | Km | Hm^2 | Cal

(FIG 6.4.) Guide of the elements shown in the profile screen. (2024). Author's own work.

51

Shop — XXXX

Summer season
Limited items for this season
Ends in **3 months, 29 days, 4 hours**

Summer Season

Summer chair — XXX
Summer table — XXX
Tulips x 5 seeds — XXX
buy / buy / buy

Blue chair — XXX
Blue table — XXX
Delphinium x 5 seeds — XXX
buy / buy / buy

Special Items

Daily goal ticket — XXX
Place ticket — XXX
Flower boost ticket — XXX
buy / buy / buy

500 — $XXX
2500 — $XXX
50000 — $XXX
buy / buy / buy

Season and time left. Same as shown on ranking

Items change depending on the season

In-game currency owned by the user

In-game currency can be bought with real money

Tickets add goals and boosts to the user. They only affect individual progress, the ranking and points are not affected by them

(FIG 6.5.) Guide of the elements shown in the shop screen. (2024). Author's own work.

Inventory

Last Used

Blue table — x 1
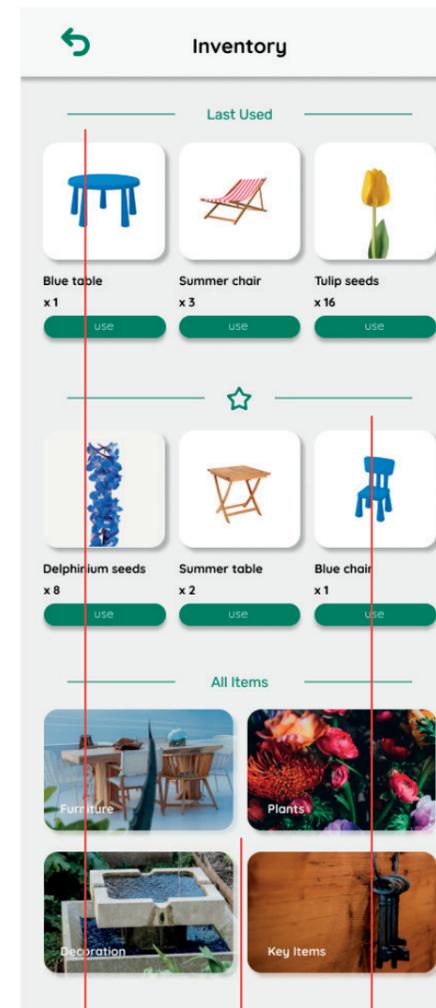Summer chair — x 3
Tulip seeds — x 16
use / use / use

Delphirium seeds — x 8
Summer table — x 2
Blue chair — x 1
use / use / use

All Items

Furniture
Plants
Decoration
Key Items

Three last used items

All favorited items. Scroll side to side to see all of them

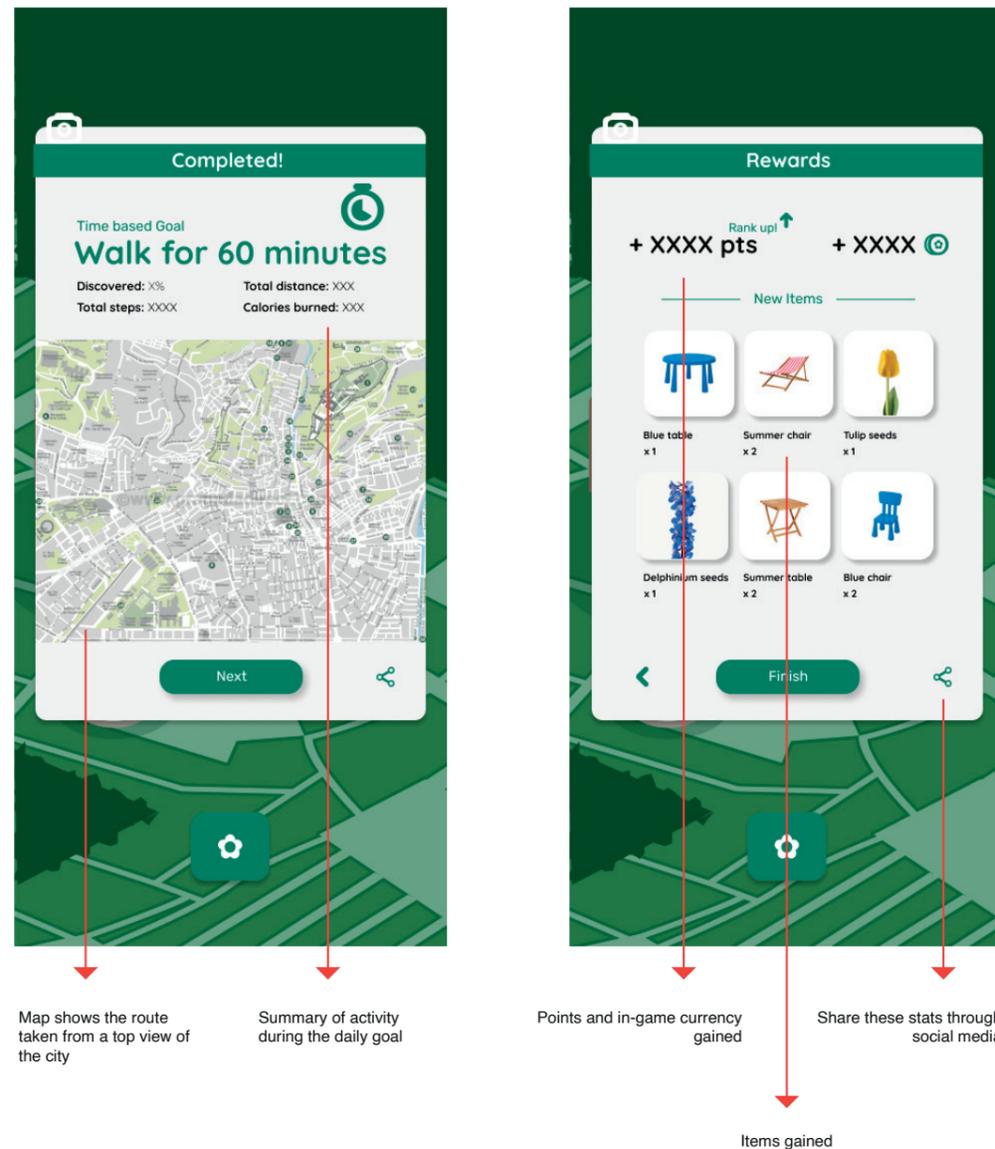Rest of items are separated in categories. Key items contains tickets and themes

Item selected. The user drags it from this icon

Area where the item can be put

(FIG 6.6.) Guide of the elements shown in the inventory screen. (2024). Author's own work.

Map shows the route taken from a top view of the city

Summary of activity during the daily goal

Points and in-game currency gained

Share these stats through social media

Items gained

(FIG 6.7.) Guide of the elements shown in the main screen after completing a daily goal. (2024). Author's own work.

5.3. Prototypes

The prototype example of the application has been made with figma, and shows how the registration process in the application would look like, as well as the graphical result and the application of the app map in it.

It can be accessed via the following link: https://www.figma.com/design/Lu8qvCCiPobBAkbWuboT3d/TFG---EXFLORA?node-id=0-1&t=tgyLLGD-Vaw2Prtdq-1

In this document, screenshots have been placed in section *9.1. App screenshots* in point **9. Annexes**.

5.4. Income

The app will be free in app shops such as the Google Play Store or Apple Store, and its revenue stream comes from the in-app shop. In this shop, users can buy different exclusive decoration objects that rotate throughout the seasons, as well as limited event objects, themes that change the visual appearance, etc.

They can also purchase other more special items that are far from the intended use of the application and would cost more, such as buying a pass to receive a second daily objective (which will not count for extra points in order to maintain the balance in the rankings) or to place an unofficial Place without the need to complete an extraordinary task.

Shop spending is done with the app's own coins, which can be earned as normal rewards when using the app in the normal way. Within the shop there will be an option to purchase in-app coins using real money.

The app can be fully utilised without resorting to making actual expenditures, placing them as fully aesthetic expenditures or for the user's individual progress.

5.5. Advertising

The brand is promoted through digital media such as social networks, especially instagram (FIG 1.), where the brand's account interacts with users with interactive posts or by sharing tagged posts. It is also the main medium through which updates, corrections, seasonal changes and events are communicated.

In physical media, the app is promoted in large cities with customised campaigns on billboards and street posters, using images of the cities themselves to interest viewers. The campaign uses the claim "¿Te suena?" (sounds familiar?) on images of places in the city itself that are not so known (FIG 2.), seeking to generate curiosity in the viewer and make them wonder where they are, encouraging them to explore their city and discover places they have not visited before.
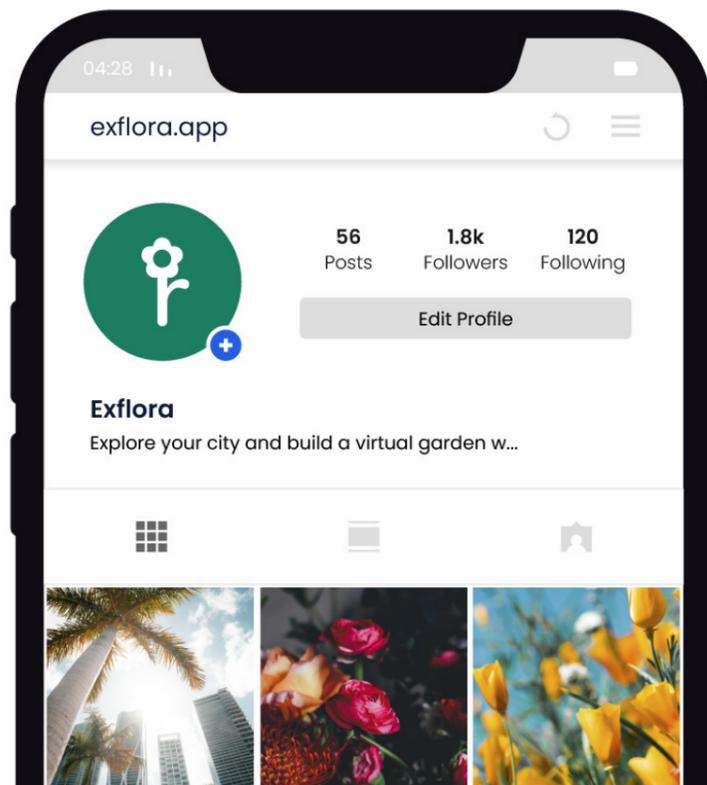
(FIG 1.) Mockup for Exlora's Instagram account. (2024). Author's own work.

(FIG 2.) Visual material of the advertising campaign. (2024). Author's own work.

(FIG 2.) Visual material of the advertising campaign. (2024). Author's own work.

(FIG 2.) Visual material of the advertising campaign. (2024). Author's own work.

6. FINAL RESULTS

7. CONCLUSIONS

The main objective of this project is to motivate users to explore their environment through the extrinsic motivations encouraged by the app developed. It can be said that this has been achieved, having carried out a study on the origin of the problem and its main reasons, which have been taken into account throughout the design of the app.

As for the secondary objectives, the first objective, to design and prototype the app, has been successfully achieved, carrying out a previous study and an MDA framework, developing the mechanics and functioning of the application and its prototype in Figma.

The second objective, to develop a usage cycle that keeps users engaged, has been successfully achieved. A cycle of the app has been designed in which users use the app on a daily basis to create their exercise and exploration routine.

The third objective, to encourage physical activity through entertainment, has been achieved. Users exercise through NEAT spending through goals and rewards that generate external motivations for the user and push them to continue leading a healthy lifestyle.

Finally, a model for the development and maintenance of the app has been designed, listing the main elements necessary to develop the app in a realistic way, and through a system of aesthetic micro-payments its economic maintenance is achieved.

In conclusion, the project has successfully met all of its objectives, creating an app with a fully functional user experience and supported by a study that justifies its mechanics. It has been shown that in the face of conventional options for physical exercise, there are alternatives that, in addition to good health, provide people with ways of entertainment and ways of exploring the environments around them.

Critical appraisal

During the development of the project I have been able to apply all the knowledge acquired throughout the degree, and although the project is complete, I consider that there have been some unforeseen events with the pace of work, which I believe have affected the final volume of research and aesthetics of the project, and if they had not been there, the project would have been better defined.

Despite this, the final result of the project is satisfactory and any content that could not have been added is of a secondary nature.

This project is open to revisions and interpretations by other students or people interested in the subject matter, and they are invited to expand this concept freely.

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9. ANNEXES

9.1. App screenshots

exflora

Sign Up

Log In

Create your account

● ● ● ●

Name

Email Address

Repeat Email Address

Continue

Return

Personal information

● ─── ● ● ●

This information is private and only you will be able to see it. Be as approximate as possible for a better user experience.

Date of Birth / DD/MM/YYYY

Height / cm

Weight / kg

Terms & Privacy

Use of personal information

Continue

Return

Choose your Long-Term Goal

● ── ● ── ● ── ●

Every time you use the app, you will walk a long-term goal. Complete it to earn rewards.

Goal types are distance-based and range from walking from your city to another city, to famous hiking or climbing routes, to popular series and book tours. Try searching for your favourite!

From Granada to:

🔍 Paris, France

Finish

Return

70   71

Link a device

Link any smartwatch or device to count your steps more precisely.

- ⌚ Smartwatch 1 ○
- ⌚ Smartwatch 1 ○
- ⌚ Smartwatch 1 ○
- ⌚ Smartwatch 1

Continue

Skip

Return

Explore your city and create a routine

Earn rewards by completing tailored objectives

Create and personalise your garden

Time based Goal
Walk for 60 minutes
Explore undiscovered areas and improve your gardens in a limited time.

Start

Store Goal for tomorrow

Change my daily Goal

Time based Goal
Walk for 60 minutes
Explore undiscovered areas and improve your gardens in a limited time.

Left
13:06

Store Goal for tomorrow

Change my daily Goal

Profile

User0077668

correoelectronico@gmail.com

Granada, Andalusia, Spain	Total steps: 50.679
Ranked 10th - 18.375 pts	Total distance: 895 Km
Discovered: 30%	Calories burned: 3000 cal

ⓘ **My Information** ⌄

▷ **Long-Term Goal** ⌄

📍 **Map** ⌄

📈 **Weekly Stats** ⌄

Profile

User0077668

correoelectronico@gmail.com

Granada, Andalusia, Spain	Total steps: 50.679
Ranked 10th - 18.375 pts	Total distance: 895 Km
Discovered: 30%	Calories burned: 3000 cal

ⓘ **My Information** ⌃

Gender: M
Birthday: XX/XX/XXXX
Weight: XX kg
Height: XXX cm

N°
Your Basal
Metabolic Rate

▷ **Long-Term Goal** ⌃

From Granada, Spain to Paris, France
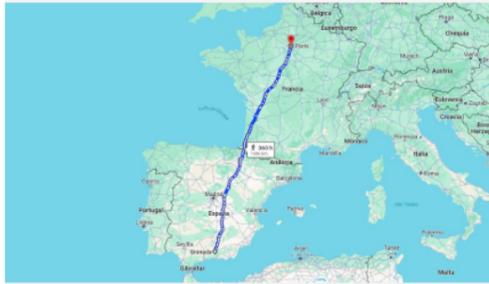
You are more than halfway there!

Change my Long-Term Goal

📍 **Map** ⌃

Granada, Andalusia

You have explored 30% of the city

📈 **Weekly Stats** ⌃

| D | L | M | X | J | V | S | D | L |

[Steps] [Km] [Hm^2] [Cal]

Ranking

Granada, Andalusia
Summer season
3 months, 29 days, 4 hours left

	Name	XXXX pts
	Season Steps: XXXX / Discovered: XXX %	

	Name	XXXX pts
	Season Steps: XXXX / Discovered: XXX %	

	Name	XXXX pts
	Season Steps: XXXX / Discovered: XXX %	

4th	Name	XXXX pts
5th	Name	XXXX pts
6th	Name	XXXX pts
7th	Name	XXXX pts
8th	Name	XXXX pts

	Your Name	XXXX pts
	Season Steps: XXXX / Discovered: XXX %	

Shop XXXX ⊙

![Summer season banner]

Summer season
Limited items for this season
Ends in **3 months, 29 days, 4 hours**

Summer Season

Summer chair	Summer table	Tulips x 5 seeds
XXX ⊙	XXX ⊙	XXX ⊙
buy	buy	buy

Blue chair	Blue table	Delphinium x 5 seeds
XXX ⊙	XXX ⊙	XXX ⊙
buy	buy	buy

XXX ⊙   XXX ⊙   XXX ⊙
buy   buy   buy

Special Items

Daily goal ticket	Place ticket	Flower boost ticket
XXX ⊙	XXX ⊙	XXX ⊙
buy	buy	buy

⊙

500 ⊙	2500 ⊙	50000 ⊙
$XXX	$XXX	$XXX
buy	buy	buy

↰ Inventory

Last Used

Blue table	Summer chair	Tulip seeds
x 1	x 3	x 16
use	use	use

☆

Delphinium seeds	Summer table	Blue chair
x 8	x 2	x 1
use	use	use

All Items

Furniture	Plants
Decoration	Key Items

![Castle scene with chair icon]

Completed!

Time based Goal

Walk for 60 minutes

Discovered: X%   Total distance: XXX
Total steps: XXXX   Calories burned: XXX

Next

Rewards

Rank up!
+ XXXX pts   + XXXX

New Items

Blue table
x 1

Summer chair
x 2

Tulip seeds
x 1

Delphinium seeds
x 1

Summer table
x 2

Blue chair
x 2

Finish