
Wireless Networks for Mobile Applications 2023/2024

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Flowalk

Mobile application in Flutter

Overview

Flowalk is an application for android smartphones that encourages users to **walk more daily** using gamification. The app suggests a daily minimum number of steps (that can be changed by the user) to be done and, if reached, today's **flower** will grow. The more the user walks, even over the minimum threshold, the prettier the flower will be. The flower is obviously a digital drawing of a flower and, after the day is over, it will be part of **the garden**. The garden is a collection of the daily flowers, there is a garden for each month.

Features

1. Step counter that makes the flower grow.
2. Show the garden of this month.
3. Show past gardens.
4. Show weekly and monthly statistics.
5. Authentication system.

Structure

Homepage

- Show the number of steps walked today so far
- Show the minimum number of steps to walk daily
- Show the current state of today's flower

The garden

- Swipe right to see the garden
- Show a picture with all the flowers of this month
- Show some statistics
- Buttons to see past gardens

Menu

- Swipe left or tap top left to open the menu
- Options
- Detailed statistics page
- Log in / log out

Options

- Set a different amount for daily minimum number of steps
- Set a customized number of steps. For example, on Sunday the user wants to walk more than on other days.

Additional features

These features are considered optional and to be added later, only if there is enough time for the development.

1. Unlock special flowers by visiting (walking to) interesting and cultural places
2. Walking challenges and league for showing the rankings
3. App can suggest different means of public transport
4. Accessibility for blind people
5. Provide a report on the usability of our app

Challenges

These are the challenges we expect to face in the development of the app.

1. Learn Flutter: none of us ever used this framework but we are interested in learning this new skill.
2. Log in system: for this feature we will probably have to use a database.
3. Step counter: we saw there exists a Dart package that allows this feature.
4. Flowers and gardens design: we want the app to look pretty and we'll have to find a way to have good flower drawings that fit in the app. In fact, we would like to have at least 2 or 3 different designs for the flowers and each design should have 3 or more evolutions (the more you walk the prettier it becomes)

Our statement

Thanks to the great development of technology a lot of things have been made easier for human beings. Many daily activities can be done online and as a result people tend to move less! Our goal is to develop an application that encourages people (mostly ourselves) to walk more in everyday life. By doing so we do not want to make people spend more time on the phone. The application design should be a trade off between being captivating enough to make people walk more to grow flowers, but simple and clean enough to avoid excessive use of it. We want to build a streamlined application that makes you spend more time outdoors.