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DESIGNING COMMUNITY THROUGH URBAN GARDENING

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ABSTRACT

Huertos MX is a project that searches all current urban, personal, scholar and institutional gardens in Mexico. To make this possible, technology was the way to go. We use mobile technology and geo localization in our mobile application, which helps our users locate people and institutions that share a common goal: sustainability. By doing this, we are creating a national movement to build a network where people can communicate and share anything they want.

Key Words: urban gardening, mobile application, community, design

1. INTRODUCTION

In an era where sharing information through the Internet is a must and a sustainable life is becoming a global goal, is it possible to integrate technology, design and urban gardening? This is the main question that pushed a thesis work from an academic work into an emerging national social program. Huertos MX was born to create a national state of mind on the importance of a sustainable and cooperative community where people could be able to communicate and share experiences, tips or even to make a business out of their urban garden.

2. CREATION OF THE PROJECT

Huertos MX began as an academic project, which had the initial goal of looking into the soft skills and benefits that a school garden could bring to students. After months of research and local visits to urban gardens through Mexico City, the projects investigation was getting slower by the minute as the research was done by one person and responses from urban gardens where being sent after weeks of initial contact.

In November 2016, the project hit one of its biggest milestones, as Huertos MX's focus changed from the educational benefits of urban gardening in schools to an even bigger subject: the project would focus on the results of unifying urban gardening and technology through design. The tool that was able to marry these two concepts was geo location. Through the utilization of GPS technology, people interested in communicating with other urban gardeners could be able to locate each other in a map built by precisely them. This instant documentation of gardens through the city could only be done through a solid and participative community who shared common interests as well as an organized platform.

3. THE MOBILE APPLICATION

In order to achieve the project's primary goal, an alliance was necessary. A partnership with a mobile application development company was built, in a two-way benefit agreement. MyAction® is a virtual system and platform that can be use to guard and secure pictures, users and real time locations. Through the website and application built by the MyAction® team, HuertosMX could be able to filter information, manage users and consult on the uploaded pictures through their Software As A Service (SAAS) software.

Both teams agreed on the construction of a minimum viable product, which contained the required basic functions needed for the project as well as some specifics. The functionality of the first mobile application build consisted on 3 main items:

User identification.

Users should be able to register themselves and sign in through a valid email account. Validation of identity and password restoration were linked to it.

Garden registration on community map.

The projects essence is the social construction of a communitarian map con constant actualization. Users may register their, or even other gardener's, garden and continue to upload information or consult with it through the "follow up" function. This function provides the opportunity to urban gardeners to create a documentation of their garden through time, as well as third party gardeners to consult on their favorite localization's growth.

Garden categorization

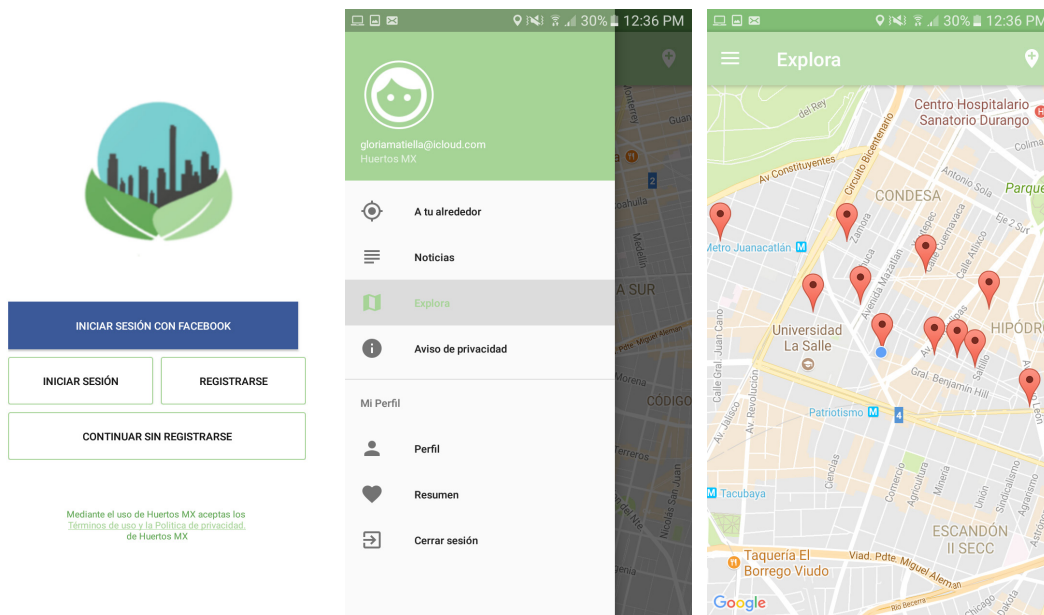
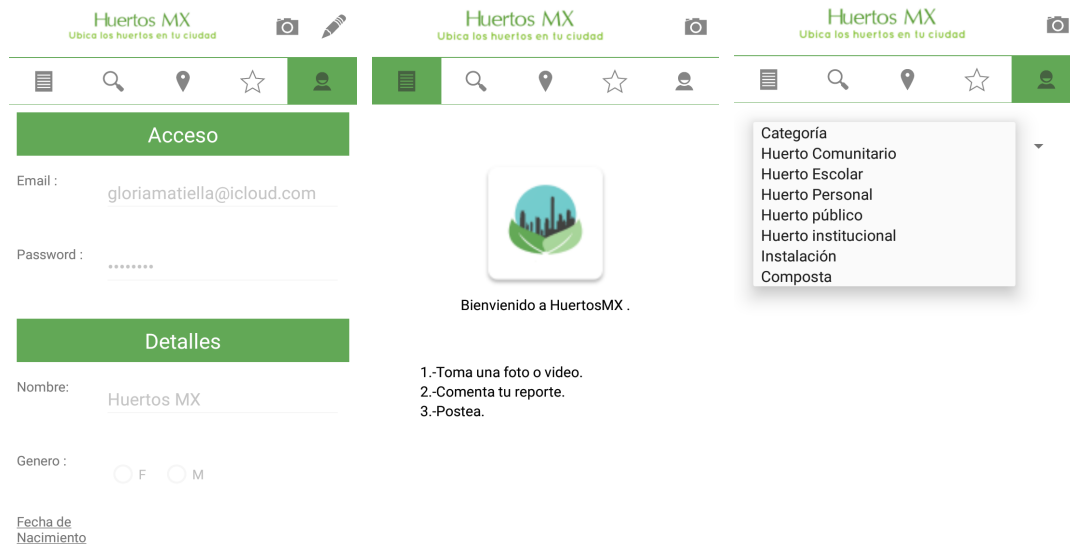
The mobile application needed to be designed in function to the objectives of the project; therefore the classification of urban gardens into specific categories was necessary. Each picture of the urban gardens registered in the mobile application should be integrated into one of the following seven categories:

- House garden: Gardens created and sustained in private households.
- School garden: Gardens installed in academic facilities.
- Public garden: Urban gardens with free entrance to public (generally preserved by government funds)
- Community garden: Gardens sustained by social organizations or NGO's support.
- Institutional garden: Gardening projects installed in private organizations such as hospitals, enterprises, etc.
- Installations: Gardens created and installed in third party locations by local companies.
- Compost: Companies or projects dedicated to the sell of organic waste for gardens.

3.1. Mobile application evolution

The following images illustrate the applications' evolution through time, from 2016 to 2017.

In November 2017 the last and final version of the mobile application was launched, which involved aesthetic changes as well as functionality adjustments. The main new features included a new section in the main menu, which directed users to Huertos MX's blog, Facebook sign in option was included and a friendlier navigation through the map of gardens was implemented.



[Figures 1, 2 and 3]. Sign in page, Landing page and Garden categories for first version of Huertos MX's mobile application
[Figures 4, 5 and 6]. New sign in page, New menu options and Urban gardens registered in map by zone

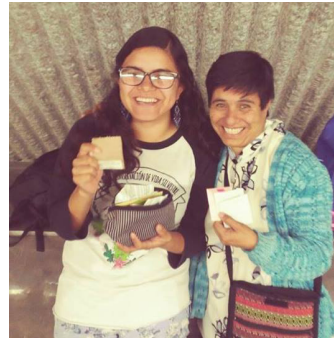
4. THE COMMUNITY

Huertos MX's goal is to create community through a common interest: gardening. Therefore, it was necessary to organize social events that could bring gardeners together and exchange experiences, knowledge, create alliances and more. In March 2017 Huertos MX and three other organizations planned the first local meet up for gardeners. Cultiva Ciudad, Octágono, Olaki and Huertos Mx created an agenda for over 100 urban gardeners who were asked to register their projects in the mobile application in order to assist to the event.

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A second gathering was planned, this time, as an alliance between Centro Uiveristy and Huertos MX. The purpose was to invite urban gardeners from Mexico City into a seed and compost trade. The invitation was sent to

the previous March gathering as well to other members of the mobile application database. The attendance was significantly reduced as it was planned for 50 gardeners at the most. Qualitative results were as positive as expected as



all-25 attendees created a bond and had personal dialogue experience.

[Figure 7]. "Save the date" designed poster for the gathering.

[Figure 8]. Members of Huertos MX community trading seeds.

The principal communication line between gardeners of the newly created community of Huertos MX has been social media, especially Facebook and Instagram. Both platforms were fed with informational content on instructions for user registration, picture upload, map usage and call outs between gardeners for seed trade. Through instant messages in both platforms users were able to direct their questions and get responses about functionality of the application, contact with other gardeners and advice for their garden maintenance. Community members have had private meetings after been contacted through Huertos MX project which has led to friendships, alliances and gardening interaction since its foundation building with time a sustainable network of gardeners who are highly interested in keeping contact and feeding the mapping of urban gardening projects in Mexico.

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