



**REAL ESTATE RISK ANALYSIS MOBILE APP
REAL ESTATE EVALUATOR**



INDEX

1. Project title	3
2. Executive summary	4
3. Statement of the problem and hypothesis	5
4. Project objectives	6
5. Expected impact	7
6. Direct and potential users	8
7. Theoretical framework and state of art	9
8. Methodology	10
9. Workplan	11
10. Budget of the project	13
11. Expected results	14
12. Strategy to be used for the transfer and communication of the results	14
13. Bibliography	15

**REAL ESTATE RISK ANALYSIS MOBILE APP
EVALUATOR REAL ESTATE EVALUATOR**



EXECUTIVE SUMMARY

REAL ESTATE EVALUATOR is a mobile app that has been designed, thought, analyzed and developed thinking about all those people who, for personal or business reasons, are thinking about acquiring or selling a property, whatever it is and they need to be sure that the purchase investment is not only feasible but profitable.

It is about measuring the risks of the investment, to have all the necessary data to make a better decision about the good that you want to acquire.

The mobile app was initially developed for Android operating systems, and was published on Google Play to make it available to users, having two versions available, a free version that provides only a limited number of records and the paid version, which provides unlimited records .

The mobile app **REAL ESTATE EVALUATOR** in main concept was designed to be the main tool for the analysis of everything related to the acquisition of a property, such as bank loans, legal costs, maintenance expenses, basic services expenses, etc. well the application has already been tested in its operation with real data, and works as expected, it is important that it is launched in the Apple App Store, to have greater reach and with users looking for mobile apps that provide them with a solution to your important needs in that Store.

Likewise, an application upgrade must be done using the latest versions of the software with which the mobile app was developed, which provides not only many features that can be exploited as new features of **REAL ESTATE EVALUATOR**, but also technologies such as AR that could give added value to the app.

It was used as a development tool, two years ago, Genexus Evolution 3, because it provides the ease of power with a single code, develop mobile apps for Android and iOS as well as for the Web. Currently Genexus already has version 16 available, which is a huge leap since the X version came out in 2013, since it adapts the development IDE for new technologies such as .NET Core, which offers multi platform development, specifically for applications Web.

The market for this mobile app is all those real estate buyers, as a personal investment or as a business.

APPROACH TO THE PROBLEM AND HYPOTHESIS

Acquiring a property is a subject that, even when generating a diverse mix of sensations, must be done with a cool head and with all the available data to make the best decision, because even if one does not have economic problems to acquire any property , you must be 100% sure that the investment that will be made is a good investment.

In general terms or as usual or normal at the time of acquiring a property, see the offers available in the areas that call our attention, establish a range of search prices, see the properties, talk with the owner or developer. Then see the banks where we will make inquiries about the loans and take the papers.

Given this approach it is not at all difficult to see that, that process that ultimately results in a debt that we will have for a period of 20 to 30 years, must have been well studied to make the best investment.

REAL ESTATE EVALUATOR is a mobile app that allows us to take all the necessary data to evaluate if the investment we make is a good investment or result in a bad investment that will give us more problems than benefits.

REAL ESTATE EVALUATOR analyzes and takes into account mortgage loans, installments, maintenance, services, insurance and even if it is for rent and improvements, and quickly indicates you through values highlighted with colors, if the return on investment is excellent, regular or bad.

OBJECTIVES OF THE PROJECT

GENERAL

1. Develop an application for mobile devices that allows the analysis of real estate risk.
2. Analyze all the elements that influence to acquire a property, in a simple but reliable and precise way.

SPECIFIC

1. Develop an application that considers all the elements and values involved for an accurate and reliable risk analysis.
2. Relate each analysis with a property, for easy reference.
3. Create a color visualization system to indicate the investment risk based on ROI or return on investment.

EXPECTED IMPACT

With **REAL ESTATE EVALUATOR** seeks to be the tool for consultation and analysis when acquiring a property. It is expected that the mobile app provides reliable data, accurate results so that anyone who wants to acquire a property can be assured that the investment will be good.

Anyone who is in that process of buying a property, with **REAL ESTATE EVALUATOR** will find the ideal tool to evaluate and analyze all those data that are involved in the purchase of a property.

REAL ESTATE EVALUATOR demonstrated at the testing stage that it provides accurate data, which takes into account all the values that are involved in the real estate investment analysis process.

Similarly, the mobile app showed that while it is true is an ideal tool for those who will invest, it can also serve for professionals in the area of real estate, such as real estate brokers, agents and even for professionals in the area of banking, specifically in the area of mortgage loans.

Those people who are evaluating to buy a land, a property or even a building or commercial center for investment, rent or later sale, can find in **REAL ESTATE EVALUATOR** a powerful tool that will help in the analysis and evaluation.

DIRECT AND POTENTIAL USERS OF THE STUDY

The direct users of the mobile app will be any person who is thinking of buying a property to live in, as it was designed, with that purpose, and its development was thinking of those direct users.

The potential users of the mobile app is anyone who wants to know precisely the risk and feasibility of buying a property, either to reside in it, to rent or to have a property that increases its value over time. Brokers and real estate agents, real estate companies, banking professionals, investors, buyers, all will get a **REAL ESTATE EVALUATOR benefit**.

THEORETICAL FRAMEWORK AND STATE OF ART

THEORETICAL FRAMEWORK

When you are in the process of evaluating to buy a property, it is vital to have all the elements and information to make the best decision. And this is true not only for the investment in if you buy a property, but for the period of time in which we will have the debt if, like most people, you acquire or intend to acquire the property through a bank loan .

But even when it is purchased in cash or without resorting to a mortgage loan, the investment always represents a risk and it is essential to make the best decision when evaluating where to invest.

All the expenses besides the investment or initial payment, must be considered to know if the investment is profitable or not. Light, water, legal expenses, maintenance, improvements, even administration, cable tv, telephone, etc., must be evaluated so that the investment, regardless of the reason for it, has the minimum risk and is a long-term investment and that economically does not affect the budget.

STATE OF ART

There is no tool in the market that allows or facilitates accurate and reliable analysis for real estate investments. If there are mobile apps that allow management or administration of the properties as such, photographs, location, property characteristics and other data specific to the property itself.

Using updated development tools it has been possible to develop a mobile app that not only takes into account those physical characteristics of a real estate property itself, but also allows to include all relevant and important data that a buyer and investor must know in advance to take the best decision

By incorporating new functionalities, the benefit to the mobile app can be increased, which would allow not only having a tool with an incalculable value of investment analysis, but a reference for evaluating properties.

METHODOLOGY

To achieve the objectives the application was used Genexus development program, version Evolution 3 Update 12, an agile development platform that allowed rapid development of the mobile app, creating a single code that could serve to develop a back office or, which is one of the goals of improvement of this business plan, the creation of the mobile app for iOS devices.

The mobile app was developed looking for the easiest way to analyze the information but giving the user a simple and easy to use tool. Even when the information required by the application to give an accurate and reliable result, it has been enough to find a way to give the user a good experience.

The techniques are simple in their use but require that a professional with specialized knowledge of .NET, C # and Genexus Evolution 3 and with knowledge in systems development and basic knowledge of mobile systems, will develop and adapt the mobile app to achieve the specified objectives.

The flow of data is basically simple: it registers the property and its characteristics, the banking information or, the way in which it is thought that the property will be acquired, after that the application requires the fixed expenses of the property to be recorded as water, electricity, telephone and others, and finally other operating costs such as maintenance, insurance, as well as information regarding the rent, although the property will be acquired as an investment for rent.

After having registered all these values, the application analyzes them, performs the necessary analytical calculations and establishes what is the ROI of the property, ie the return on the investment and if it is bad, regular, good. The application has a section of terms which explains some words that appear in the application and that the user would like to clarify their meaning.

For the tests the application was installed in an android mobile device and for a period of two months properties with different purposes were registered, purchase for residence, beach properties, land, apartments for investment and they were tested with real data.

WORKPLAN

Introduction

The study was based on the premise of providing a useful, reliable and accurate tool to evaluate properties when you are in the process of acquiring real estate. Given this premise, for those who are in this process it is essential to acquire a property not based on feelings or tastes but on real data.

Understanding that reliability and precision are only obtained when all the data involved are collected and analyzed and that the accuracy depends on a correct analysis of said data.

During a period of three months the mobile app was developed to begin the unit tests, quality control and final tests. For the development of the application, a laptop was requested as a loan for a maximum period of three months and the Genexus X Evolution 3 development software was installed.

After the final tests and the review of the data used, we proceeded to upload the app on Google Play, following the guidelines of that Store and configuring the properties of the application in Genexus for that purpose.

Now it is required to achieve the objectives of this plan, acquire a laptop to continue with the adequacy of the mobile app, uploading the development tool version, taking the version for the Apple Store and adding new features and improvements to the app .

General Objectives

- Install the new version of Geneux, version 16
- Upload the mobile app to the Apple App Store

Specific Objectives

- Buy a license of SmartDevicesPlus and one of WorkWithPlus to improve the UI of the mobile app
- Pay a year of subscription as a developer in Apple Developer to to be able to upload the application to the App Store
- Buy a MacBook Pro Laptop as a work tool
- Buy the virtualization software Parallel

Goals

The main goal of the work plan is to improve the mobile app **REAL ESTATE EVALUATOR** by increasing its functionality thanks to the new version of Genexus, and make available to other potential users, the mobile app in the Apple app store.

Improve the user interface (UI) giving the user a better experience when using the application, thanks to the SmartDevicePlus functionalities and create a back office with a good user interface, using WorkWithPlus.

Review and evaluate the new features of Genexus version 16, which includes virtual reality or AR, improved graphics and Big Data components, apps in the iWatch, which can be useful in an application such as **REAL ESTATE EVALUATOR**.

Make modifications to the mobile app to give a better user experience, changing the user interface, creating reports that are sent by mail or attached by whatsapp or by other means, as well as correct some small bugs that the current application has.

Indicators

The measurement indicator for this study will be the generation of the app for the iOS version and be able to upload it in the Apple Store, improve the usability of the mobile app, using the strength of SmartDevicesPlus in the UI or user interface.

Activities

The activities related to the study to achieve its objectives are:

1. Buy the equipment, laptop, with the necessary features ..
2. Buy and install the developer Genexus 16.
3. Buy and install WorkWithPlus and SmartDevicesPlus.
4. Pay the Apple Developer Program fee.
5. Buy and install the Parallel program.
6. Update the mobile app **REAL ESTATE EVALUATOR**.
7. Make the tests of the application after the upgrade to version 16 of Genexus.
8. Upload the app in Apple's App Store and upload the new version of the mobile app for Google Play.
9. Review the new features and evaluate each of them to include them in the application.

DETAILED BUDGET

To develop this plan you need:

DESCRIPTION	AMOUNT	TOTAL
Laptop	1	3,200.00
Programming software for mobile devices (GeneXus)	1	2,500.00
Parallel 150.00		1
Work With Plus	1	1,500.00
Smart Devices plus	1	1,500.00
Apple Developer Program	1	100.00
<i>Miscellaneous (may include warranties , briefcase, etc)</i>		<i>1,000.00</i>
TOTAL		9,950.00

EXPECTED RESULTS

1. Achieve that the mobile app is a tool of constant use for those who are in the process of evaluation to acquire a property, or the tool of consultation and analysis for real estate brokers and professionals of the bank.
2. Improve the mobile app **REAL ESTATE EVALUATOR** for the Google Play version as well as obtain the mobile app for the Apple App Store version.
3. Improve the user interface of both versions (Android and iOS), improving the user experience when using the application.

STRATEGY TO USE FOR THE TRANSFER AND COMMUNICATION OF THE RESULTS TO THE POTENTIAL USERS

1. Make use of the social networks to market the application, creating important content referring to the characteristics of the application.
2. Participate in technology events to make the mobile app known to other IT professionals.
3. Show the application to one or two agents or real estate agents so that through them there is a reference, the operation and precision of the tool.

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