

Institiúid Teicneolaíochta Cheatharlach



At the Heart of South Leinster

Functional Specification

For

iPhone Application

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1. Vision

1.1. Purpose

The aim of this Project is to develop a prototype of commercial iPhone application for the Red Oak Tax Refunds Irish Company of their Tax Refund Calculator currently online on the internet.ⁱ The aim of the Tax Refund Calculator as an iPhone app is to play significant role to direct the customers to Red Oak in order to get a full Tax Refund Assessment to see how much more they are due. This Tax Refund Calculator will be built for PAYE (Pay as you earn) income tax payers and will cover most scenarios. This will include rent relief, medical expenses tax, PAYE tax credits, Ireland resident personal tax credits, service charges, trade union subscriptions tax credits and calculates refund amounts due for employment expenses.

This tax back calculator app will calculate and display how much the tax refund estimation of a user, after he/she has entered the required details. Then for a full refund check, application presents the contact form in order to establish communication channel between the user and the Red Oak Tax Refunds Company.

1.2. Business Case

There are plenty of similar iPhone applications available in the Apple Store. Some of them are mortgage, loan, tax, budget, currency calculators which belongs to financial iPhone app category. Some of those applications have really advanced functionalities and efficient, usable and suitable user interfaces while others are considerably weak.

1.3. Stakeholder Descriptions & Goals

The stakeholder for iPhone Tax Refund Calculator application is a current employer or an employed people formerly in Ireland. They can get a refund of tax they have already paid if they were employed and find themselves unemployed. They can also get tax back if they are still employed but have paid more tax than they were liable for. Another

way to get tax back is through tax relief on services or products that they have bought, for example, medical expenses drugs and treatments a doctor prescribes.ⁱⁱ So, they need the Tax Refund Calculator to evaluate their estimated tax refunds before applying to get their refund back. Our main goal while developing this iPhone application is attracting people to make them to apply for extensive refund check by a skilled tax refund team in Red Oak Tax Refunds Company.



1.4. Application Overview

The environment of Tax Refund Calculator iPhone app is written in Objective-C Xcode IDE and this is where the Graphical User Interface is designed and coded. Objective-C programming language and Xcode IDE are the only ones in order to develop an iPhone application. Intel-based Mac is another compulsory technology that I am currently using to develop this application as the iPhone SDK requires OS X to run applications such as Xcode and the iPhone Simulator.

Red Oak Tax Refunds Calculator main components are Navigation Bar at the top, Segmented Control just below the Navigation Bar and the Tab Bar at the bottom. Navigation Bar indicates the title of the view and contains some of the buttons. Segmented Control enables the user immediate access to any views ("Details", "Home" and "Expenses" which are crucial views in order to

perform calculation) by switching between them. Tab Bar involves three tab bar items from left to right "Calculator", "Contact" and "Update". Tab Bar allows also the user to switch between these three views at any stage. This iPhone application will enable the

user to perform efficient and quick evaluation of their refunds. GUI will be an elegant and as user friendly as possible since the users' first impression comes by looking just the GUI of the applications. The user will not only calculate their tax refund with this application but also they will enjoy with it.

1.5. Summary of Application Features

Red Oak Tax Refund Calculator as an iPhone app is a convenient, easy to use and quick refund calculator that you just need to enter the information you know, and the refund calculator fills automatically the refund estimate for you.

Features

- This tax back calculator includes rent relief, medical expenses tax, PAYE tax credits, Ireland resident personal tax credits, service charges, trade union subscriptions tax credits and calculates refund amounts due for employment expenses.
- Calculator fills automatically your refund estimation as long as you enter the informations required. There is no such a "Calculate" button exist.
- Explicit helps provided, they are associated with each field in order to clear any ambiguity that the user may encounter while filling the informations.
- Fast and immediate access between the steps required (Details, Spouse, Home, Expenses) by the Tax Refund Calculator to estimate your refund.
- Contact form is provided for the user which establishes the communication channel with the Red Oak Tax Refunds Company's refund expert for a detailed refund check.
- The user can check for updates any time. Tax Refund Calculator updates itself when the user required to do so.

Upcoming Feature (Next Version)

- Red Oak Tax Refunds Calculator lets you save and organize all your loans to a Favourites list so the user do not have to enter his/her Tax Refund information each time.

2. Functional Model

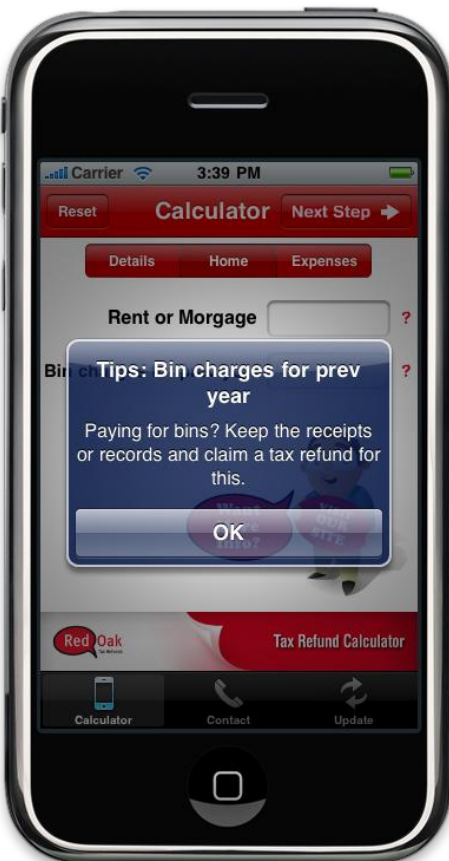
Tax Refund Calculator has an explanatory help to clear any ambiguity of the user which associated with each field of the calculator. The application will pop-up the blue message box with the relevant information, if the user touches the red question mark icon (?) beside the relevant field.

2.1. Help Icon (?) Pressed Screen Shots - "Details" Segmented Control

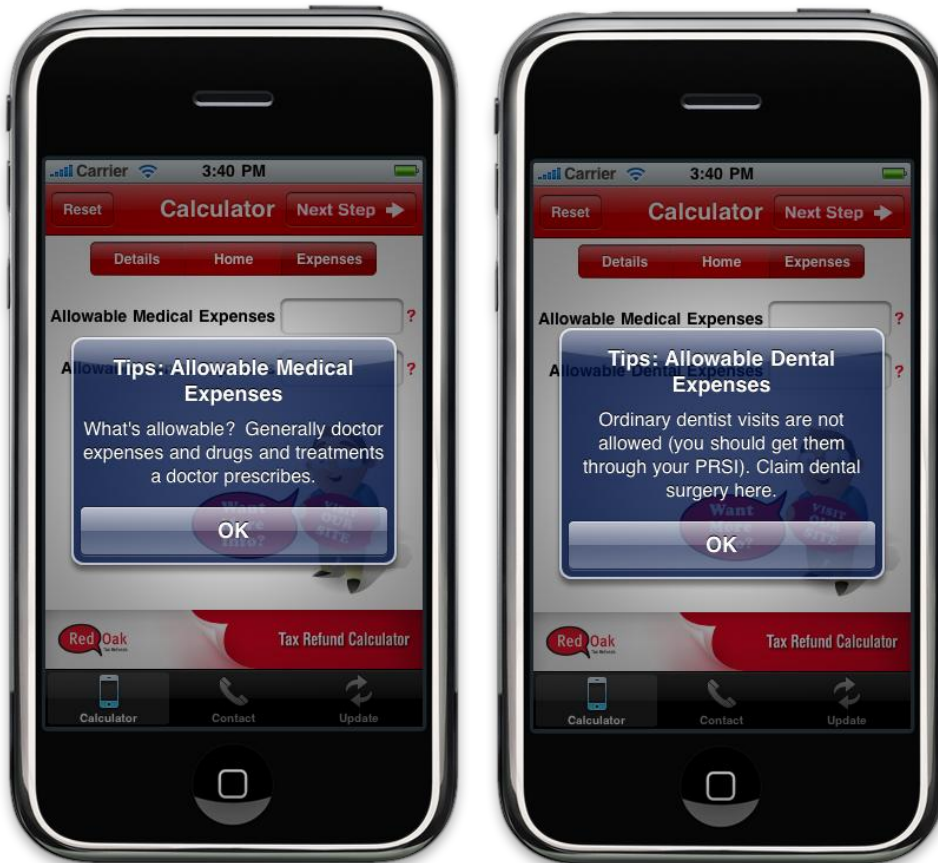




2.2. Help Icon (?) Pressed Screen Shots - "Home" Segmented Control



2.3. Help Icon (?) Pressed Screen Shots - "Expenses" Segmented Control



2.4. GUI Prototype Screen Shots

“Details” View Screen Shot

Carrier 3:26 PM

Reset **Calculator** Next Step →

Details Home Expenses

Tax Year 2007

Marital Status Single ?

Date of Birth 14.05.1972 ?

Dependent Children 0 ?

Annual Salary Before Tax 50,000 ?

Tax on Pay 2,000 ?

Profession Lawyer ?

Member of a Trade Union? ON ?

Other Income in the Year? OFF ?

Calculator Contact Update

This screen shot is the start-up and the first step of the Tax Refund Calculator iPhone app called “Details” that allows the user enter his/her personal income tax information. The user can proceed next step “Home” either by touching the “Next Step” button above at the navigation bar or the user is able to immediate access to any step (“Details”, “Home”, or “Expenses”) he/she wants by using the segmented control. “Reset” button is also provided on the navigation bar, if the user wishes to reload the calculator and clear all the fields contained by the “Details”, “Home”, “Expenses” and “Your Tax Refund” views.

“Home” View Screen Shot

Carrier 3:28 PM

Reset **Calculator** Next Step →

Details Home Expenses

Rent or Mortgage Rent ?

Bin charges for prev year 600 ?

Want More Info? VISIT OUR SITE

Red Oak Tax Refund Calculator

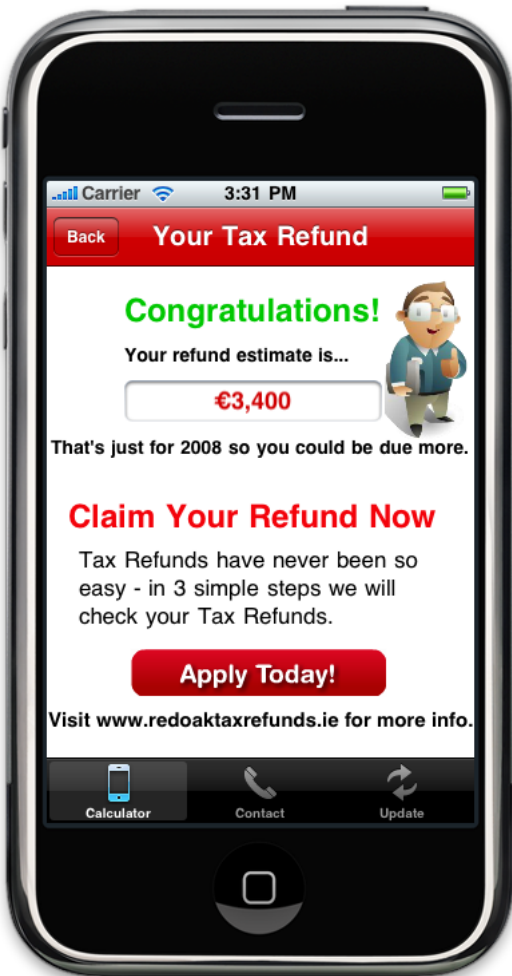
Calculator Contact Update

This screen shot is the second step of the Tax Refund Calculator iPhone app called “Home” that allows the user enter the information about his/her principle residence. The user can proceed next step “Expenses” either by touching the “Next Step” button above at the navigation bar or by using the segmented control. Reset button also exists on the navigation bar to reload the calculator.

“Expenses” View Screen Shot



This screen shot is the third and the last step of the Tax Refund Calculator iPhone app called “Expenses” that allows the user enters information about allowable expenses before presenting the result of the estimated tax refund. The user gets his/her tax refund estimation whenever he/she touches the “Next Step”, the calculator will switch and display the view “Your Tax Refund”. Reset button also exists on the navigation bar to reload the calculator.



“Your Tax Refund” View Screen Shot

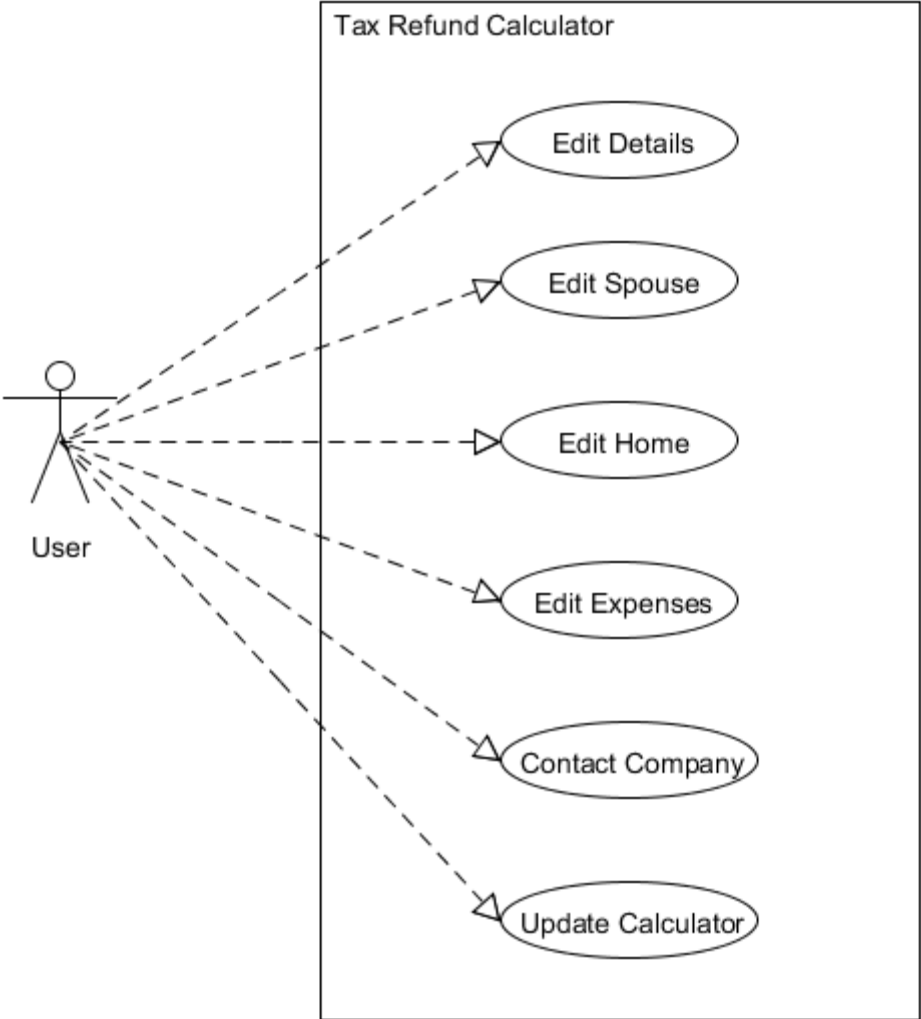
This screen shot displays the estimated tax refunds of the user. The user is allowed to come back to the calculator (“Details” view) by touching the “Back” button on the navigation bar above, if the user doesn’t satisfy with the result and wants to make changes. The calculator dynamically calculates and fills the user refund estimation as long as the user fills the information without requiring further button for calculation.



“Contact us” View Screen Shot

This screen shot allows the user to contact with the Red Oak Tax Refunds Company. The user enters the required fields and touches the “Submit” button in order to establish communication channel with Red Oak. “Contact us” is last but not least view since this iPhone app’s aim is to attract the users with the result of the calculation and makes them to apply Red Oak Tax Refunds Company to get back their tax refunds.

2.5. Use Case Diagrams



2.6. Brief Use Cases

Use case : - Edit Details

Actor : - User

Description : -

This use case begins when an actor wishes to enter the information about personal income tax. The actor fills all the information required in “Details” view.

Use case : - Edit Spouse

Actor : - User

Description : -

This use case begins when an actor wishes to enter the information about his/her spouse’s income tax information only if the user is married. The actor fills all the information required in “Spouse” view.

Use case : - Edit Home

Actor : - User

Description : -

This use case begins when an actor wishes to enter the information about his/her principle residence. The actor fills all the information required in “Details” view.

Use case : - Edit Expenses

Actor : - User

Description : -

This use case begins when an actor wishes to enter the information about his/her allowable expenses. The actor fills all the information required in “Expenses” view.

Use case : - Contact Company

Actor : - User

Description : -

This use case begins when an actor wishes to make a contact with the Red Oak Tax Refunds Company. The actor fills all the information required in “Contact us” view and sends this information to the company.

Use case : - Update Calculator

Actor : - User

Description : -

This use case begins when an actor wishes to get an available update for the Tax Refund Calculator. The actor touches the “Update” tab bar item to switch the view and touches the relevant button in “Update” view to trigger an update.

2.7. Some Detailed Use Cases

Use case : - Edit Expenses

Actor : - User

Description : - {See Brief Use Case}

Main Success Scenario : -

1. The user switches to view to the “Expenses”.
2. The system presents the user with the “Expenses” view.

3. The user enters the required information in “Expenses” view.
4. The system performs dynamically the calculations at the background as long as the user fills the information.
5. The user touches the “Next Step” button at the navigation bar.
6. The system displays the estimated result of the tax refund.

Alternatives : -

3a. The user touches the “Details” segment to fill the empty required information.

1. The user fills the empty required information.
2. Go to step 1 of Main Success Scenario.

3b. The user touches the “Details” segment in order to make changes.

1. The user makes changes on “Details” view’s information.
2. Go to step 1 of Main Success Scenario.

3c. The user touches the “Reset” button at the navigation bar.

1. The system reload itself and clears all the fields contained by “Details”, “Home”, “Expenses” and “Your Tax Refund” views.
2. The system presents the start-up “Details” view and wait for the user inputs.

3. Bibliography

ⁱ Tax Refund Calculator, Red Oak Tax Refunds,

<http://www.redoaktaxrefunds.ie/tax-refund-calculator-ireland?PHPSESSID=eb8a18c646e0e7a47557abe0ffcc4b2c>

[Accessed Feb 5th, 2010]

ⁱⁱ Getting a tax refund, Citizens Information Board,

<http://www.citizensinformation.ie/categories/money-and-tax/tax/income-tax/getting-a-tax-refund>

[Accessed Feb 5th, 2010]