

**Will be moving the files to word at 12 , will upload to skydrive for people**

Please note: Any extra more in detail information can be found on yoursear.ch

# About the Team

The team mycit, was formed in the summer of 2013. But to get there we have to go back a few months.

# January 2012

In January 2012, Robert Gabriel entered the BT Young scientist in the Chemical, Physical & Mathematical Sciences Senior Individual category for his project ' A new algorithm to improve the gathering of information on mobile devices'. Which was about the how to compress data for quicker transfer of data over servers. The idea behind the project was to help people with dial up or poor broadband to learn to code. So he thought of an idea to help others like him wanting to learn. Robert wanted to ensure that even though someone might have a disability, they will be provided with the same possibilities as everyone else.

As the young scientist he got a lot of attention from different companies including EMC, Avanya, HEAnet, Eircom, Google, Apple, IBM and Microsoft. The project won 3 awards that year.

It was at the BT Young Scientist that Robert originally heard about the Imagine Cup from Microsoft and was encouraged to enter but due to the Leaving cert it was put on hold.

# October 2012 - March 2013

Move forward to October 2012, where in college in CIT Robert was told about an innovation competition. He worked on the same project and entered it with a working prototype. It won most the innovative award, (the youngest and only first year to win the competition). Word started to spread about the idea and Robert was soon awarded a scholarship and 6 months in the Rubicon (Start up incubation center) to allow him to work on the project. While working on the project in the Rubicon an Apple manager approached Robert also expressing interest in the development of the project.

# September 2013 - January 2014

At the start of September, Robert knew it is time to try and show it on a bigger stage. Robert have put the word out that he was assembling a team of 4 for the Imagine Cup in the local paper to help develop the idea further with the goal of entering the project into the Imagine Cup. Robert wanted to enter the project into the Imagine Cup to bring it to the next level. The team is made up of Matthew Donovan, Robert Gabriel, Rokas Lukosevicius and Libor Kampas.

Our mission/goal is simple, to help people get information faster, thus helping them learn more though access to information quicker.

Personal profiles:

Rokas Lukosevicius

I am a 20 year old student from Cork in my second year of web development in Cork Institute of technology. I have a huge interest in web technologies such as html, css, javascript, php, JQuery mySQL and wordpress. I am currently freelancing on a few projects that require both the use of content management systems and hard code. I can also programme in Java and C# and have a basic understanding of visual studio. I am looking forward to the imagine cup as it will be challenging and good experience.

Libor Kampas

I am a 29 year old mature student from Cork city. I'm currently in my second year of Software Engineering in Cork Institute of Technology. My main programing language is Java. I have some experience in Perl scripting. Before returning to college, I worked as a CNC setter and programmer. I enjoy cycling and cross-country skiing. When I first heard of this competition I wanted to be part of it to widen my range of interest, meet new people and create a innovate product.

Robert Gabriel

I am a 20 year old student from Cork, in my second year of web development in Cork Institute of technology. I have been entering and building software since the age of 15 . I have won all Ireland titles for programming, been youngest to win college enterprise competitions and have worked for several huge companies. I was born with dyslexia, and have overcome much heartache. I am looking forward to the imagine cup as method of bring our project to the next level.

Matthew Donovan

I’m 19 year old student from Cork. I am in my 1st year of Business Information Systems in Cork Institute of Technology. My background is in business. I bring to the table a passion and experience for the business world as well as an understanding of Visual basic. I also have a love for Microsoft products. I say this as I am writing this document with Office 360 on my Surface RT, with my Nokia Lumia 520 beside me and my windows 8 laptop on the table across the room.

# What your project does?

Our project is a rendering engine built in javascript and php. We called it Falcon. It is a rendering and compression engine for websites (on the server side).

It is able to compress and render images/videos, on the fly to match the the resolution of the users screen size and broadband of the user. It shrinks the images or videos down to match the screen of the users screen.

Chart

It provides a service for web hosts and for individuals on any device to make their browsing experience smoother and quicker, more enjoyable through windows 8 and windows phone. Using algorithms and javascript engines it searches the most popular providers of a different services with a patented feature of redirecting the user to offline/cached version of the site they requested if the site was offline for any reason. Searching the web faster than ever before.

Example: Where watching a video on Netflix ,Xbox video, You knowingly watch/stream a 2-3 gigabyte movie. What some people notice (myself as well) , is that you will get pixelated streams if your broadband isn't good enough , or worse stopping and pausing when watching from a 1920 x 1080p movie, on a display that doesn’t need it . It wastes bandwidth on both the user and client side.

So what our project does is , it resizes the video based the clients screen size and bandwidth , which changes the 2gbs movie to 500mbs (based on the ipod touch).

So the savings are huge , when it comes the client and the web host.



Before 2GB After 523-700 MB

As you can see, the two pictures look the same to the naked eye, but in real the picture on the right is ¾ the size of the original file.

Its amazing to see the difference , it works on all windows devices. Thanks to azure and our algorithm.

Yoursear.ch

So we have this great rendering engine, is no good without something for people (the everyone) to use. So we built “Your Sear.ch” it is essentially a web based operating system that is capable of compressing images and video to speed up search results, reduce the loading time of web pages and eliminate buffering of video streaming, while bring all sreach engines into one place. Thanks to our Falcon rendering engine.

Photo ,

The yoursear.ch is suitable for various environments including windows phone, windows 7-8 along with any server on on the web that is based on windows or linux (kernel) . When yoursear.ch is dowloaded and is placed on a SD card and running, various machines can connect to it as creates a local wireless network that is capable of supporting 40 machines at once. so quick buffer free videos can be seen and viewed.

Photo

Over View

The long-term goal of this project is to empower young people who have poor internet access and who want to be coders to break habits and help them to learn not only code but to gain knowledge in different areas, thanks to our rendering engine.

Which would make everything worthwhile, if we can help one child learn more, not only in school but also in areas they want to master.

What we built:

* **Your Sear.ch Os**: yourSear.ch Os is the central program of mycit moving forward. Built on 100% Html5 ,CSS3 ,Php . The first in its class to be fully developed.
* Falcon: Rendering engine that helps with lowering broadband on devices to match screen resolution.For quicker pages and loading. making us 0.001% faster than Google rendering pages from one server.

photo charts ,

Who is your project for?

Our project serves both the domestic internet user as well as global multinationals such as Microsoft, or any other website owner who wishes to improve the user experience for the domestic market where the quality of an internet connection is poor. This allows them to get the most out of their internet connection, while saving money on the amount of bandwidth transferred thanks to our Falcon engine.

An internet giant such as Microsoft could benefit from Falcon by incorporating it into their products such as Bing to provide faster search results or Xbox video to avoid buffering on the streaming of movies through the service. This will result in them saving thousands, while achieving our goal of allowing people to learn new topics quicker and easier.

One of the great things about our falcon engine is that it can be used by any software/web developer.

photos

Through building the software and placing it online for months of testing, we invited developers to try it. To date, there has been over 2000 people accessing the api for the falcon software.

Since June 2013, the software has been tested by ourselves as well as by an independent 3rd party to see how well it was performing. It proved to increase rendering by .01 percent on a homemade server. Remember that when used on a server like that of Bing or Google, the savings would be immense. As stated by Denis Condon of Microsoft Ireland, who Robert met at the Bt Young scientist when shown an early version of the software.

It was also shown to a few Google employees, in which they talked to Robert about the rendering engine and the impact it would have on their company.

After winning 6 Awards the engine has impressed and got attention from different sections of the I.T sector. From networking and transferring data companies like EMC, HEANet, Avaya to the search giants such as employees from Google .

The target audience who can use it is endless because everyone wants or needs faster internet, to save more and most importantly learn more.

Platforms

Our aim is to provide Falcon as many windows platforms as possible. As we wrote everything in Html5,Javascript,Php and CSS, It gives us the use of cross platform.

At the moment it is only able to run on its current build on the following platforms Windows Azure, Windows 7, Windows 8 and Windows phone 7 and 8 .

Downloaders can also place it on other servers like linux but because of the great windows only features of PHP it's noted that we highly recommend, that developers use the falcon software and yoursear.ch on a windows server. To get the full features of falcon and the speed of the rendering.

As noted with the testing by purple house, the features in the pore of the PHP language and the windows server 2012 gave the speed boost and was a lot more effective on the windows platform vs linux .

With our proud two line set up , It takes a matter of seconds to set up and to get access to the features of falcon.

Azure

Currently we run free trial (or basic) versions of Windows Azure services. Services we use is Website and Cloud.

The next stage will be Shared (preview) website service and Small (A1) Cloud service. This will allow expansion of our services to greater group of customers. Windows Azure provides us with easy delivery of our App to customers without the need of enquiring expensive hardware and dealing with expansion costs. From the beginning the cost for Azure services will be relatively low and will increase as we will gather more users. This is great for start-up project on low budget. Free 150 euro credit to use the services helps a lot as well to get started.

Picture here

Currently it is available from <http://yoursear.ch> as a beta.

Why bring it to market?

YourSearch and Falcon is a platform at heart that is in direct response to the growing number of young people that are in the school system and with the growing in the need for information from the web. YourSearch and Falcon offers an all in, open search engine that dramatically change in the lives of their users.It Hits home again allowing more accessible information and videos to be acceable to and gained from for the user.

The program is positioned to be most accessible to young people in college at the start and grown outside the school/college area who are a poor broadband area.

The goal of the yoursearch, is to bring the web search engines into one place while at the same time allowing the quicker rendering and displaying of images and videos on the web .Thanks to Falcon engine. At college level, users strive to guide the web to find what they want while also bringing the social aspects into the mainstream of class activity in order to keep them learning while also seeing their features. With the full Falcon and yoursearch together.

Once a student has entered high school with a history of classroom disturbances and poor academic skills, it takes a tremendous proactive effort to assist a student in redirecting their lives. Our team has found that giving the accessibility to knowledge, they will learn in areas that excite them.This is a huge market in underdeveloped countries. As seen below.

Charts here for broadband speeds

# Bringing to market

We plan on bringing yoursear.ch to the market through the Windows App store for the domestic market and hope to bring Falcon to the business market through tailored packages to suit each business’s, Developers needs, if the feedback is correct for testing .

Api

The access would come in the form of API’s of developers being able to use and download it for projects thanks t a closed API. Which has been made possble thanks to Azure.