# CO2 Emissions in IT

What do we do to our enviroment daily behind our pc's?

By:

Lars van Gijsen
&
Youri van der Zwart

Our way to try and change the world

# Inhoudsopgave



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# Justification

## How it all started

We started out with the idea of making an interactive video about the environment, making it in the form of a quiz. After seeing the first college intro movies we saw this was already done by another group and since we like to be original we dropped the idea of making it so general. Soon after the idea was born to make the application in particular about what the IT had for impact on the environment.

## Research

For this to work we had to find some shocking material to make sure our application would have a lasting impact. During this research we found the following shocking facts:

- The IT produces more CO2 than the automotive and aviation industry
- 3 searches in Google cost just as much energy as boiling 1,5 liters of water
- There are 25 pc's running 24/7 to enable you to fetch your email every so many minutes

We found these numbers quite shocking and thought they would be shocking enough for the public to in our application.

## Making the world a better place

To make sure we are not only scaring everybody of but also make some suggestions as to what people could do themselves about making these numbers less shocking we thought of the idea of including some videos at the end of our application in a video carousel in which we could give some examples of big IT firms giving the good example in lowering CO2 emission and how the viewer as an individual could do something about his own IT CO2 emission.

To make the user aware of how much time he was actually willing to put into the environment we linked the end score to not only the number of question which were answered properly by the user, but also to how many videos they watched from the carousel before ending the application.

# Using Ximpel

For our application we used Ximpel 2.0 because we were planning on using quite a lot of material and both of us didn't have much space on our account left so using Youtube as a repository seemed quite handy.

XIMPEL
eXtensible Interactive Media Player for Entertainment and Learning

## Cons:

This version of Ximpel has a few minor bugs, which is very normal of course for it is still in Beta development. There are however some things which in our eyes could have some improvement:

### *The usage of variables:*

We found it very frustrating that besides the score variable there wasn't any way to put in variables in an easy way to for instance keep track of how many seconds somebody is inside the total app or how many seconds somebody is looking at all the videos in total.

### *Customizing Ximpel:*

To the contrary of Ximpel 1.x it isn't possible to customize Ximpel 2.0 which is in our eyes a shame for the more advanced programmer who wants to use his own functions to enhance his app.

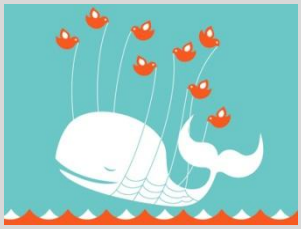
## Pros:

The usage of Ximpel is indeed as the name suggests very simple. Everybody with very little knowledge about computers let alone about programming can make an interactive video, which of course is very fun.

Though it is very easy to create this very first app it is also interesting to use for somebody with more programming skills because Ximpel 1.x allows for the customization of the complete app and all its functions.

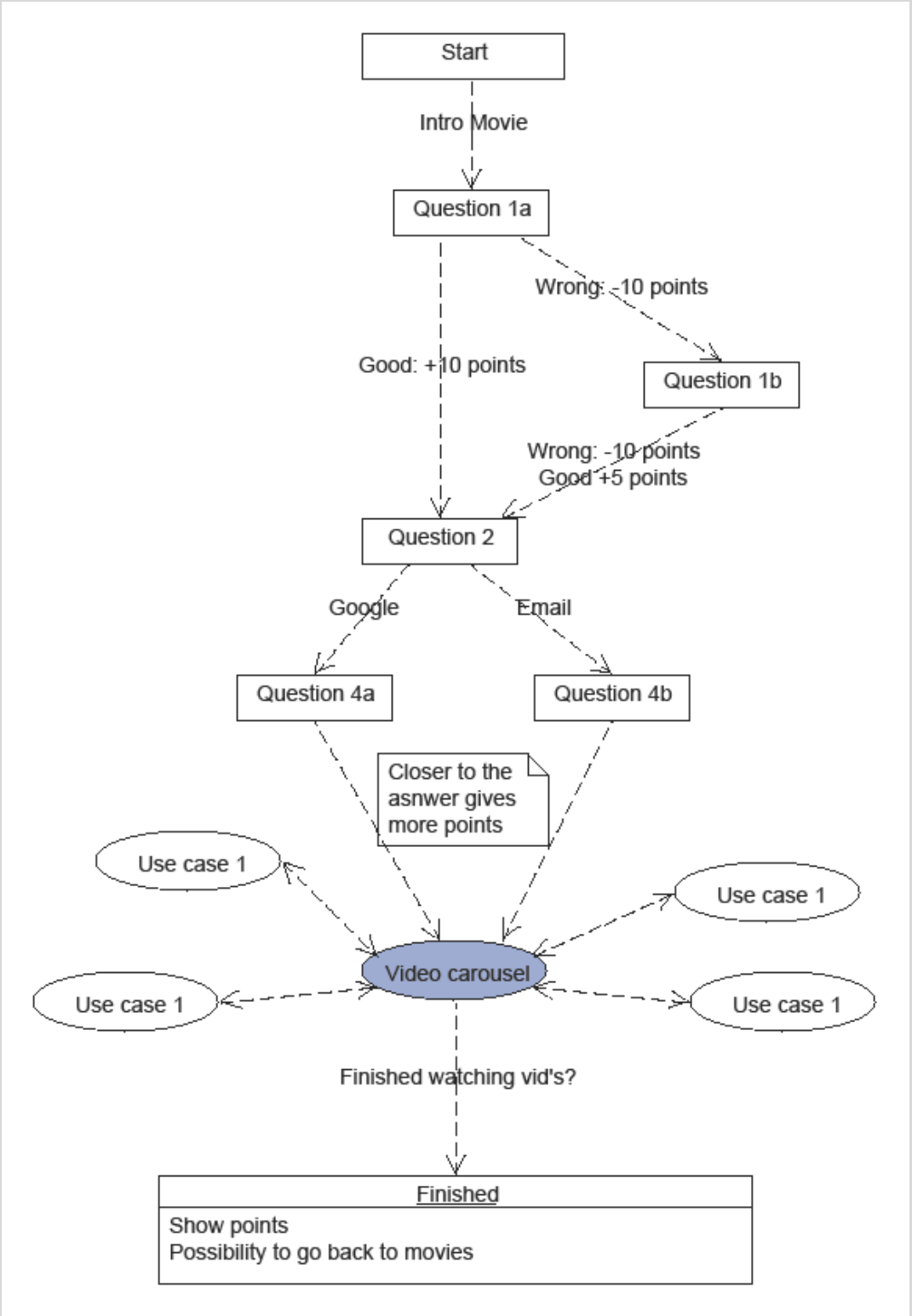
# Issues

It was sometimes difficult to find some interesting material for the video which was also still relevant and not to boring or long-winded. Along the way it surprised us as to how much or actually how little research there was available on the internet about the impact of the IT on the environment unlike any other environmental problem.



## Our story graph

We didn't deviate from our initial story graph too much because most of the ideas we had worked out the way we planned, only because we are using Ximpel 2.0 we couldn't fit in the much liked Twitter input, so this has become our graph:



## What we learned from making our app

Though we are both computer science students and use our computer daily more than the average person, we now do see that there are some drawbacks to this. We think it is important that a lot of the initiatives which are being worked out around the world as we speak to make the IT emit less CO2. We found this criticism very helpful from our fellow students to make the app not only dark but also give people and businesses an opportunity to make some changes to their own habits.

## Making the viral

We deliberately choose not to use any of our app film material in the viral, though there are pieces of "Warriors of the net" in both we never took the same, we did this so people won't be seeing material a second time.

We had some critic from the student assistants that the ending of the viral was so "windows movie maker" like, we decided to keep it this way because in our eyes it kept it a bit more *down to earth* and less driven by special effects.

## Last minute suggestions

As was suggested during the presentation of our application was to make the feedback per question more obvious, which we did in our final online app where we give feedback after each question so it is more clear which question is answered correctly and which ones aren't.