

**Project's Makers/Authors:**

Alan Meany

Graduating with a Bachelor of Arts (Hons) in Multimedia Alan continued his studies and began the MA in Media Design in Cork Institute of Technology. His present research interest includes key areas of Human Computer Interaction along with many aspects of Creative Digital Media including interactive design and photography.

**Title:**

AmbientKnowledge

**Description:**

A significant problem with modern Energy Information Displays is incentivising people to sustain their use after the novelty of the display diminishes. AmbientKnowledge is designed to address this problem through two main features; Aesthetics and Interaction design. AmbientKnowledge is an Energy Information Display that glows different colours in order to display the real-time energy consumption in your home, providing domestic energy information in an aesthetically pleasing, easily accessible and convenient manner.

AmbientKnowledge appeals to the peripheral senses and provides the user with information without demanding their attention or introducing any additional interaction. It avoids overloading the user with information or distracting them, allowing them to receive information and proceed with everyday life. This allows for a smoother transition between the users focus on their task at hand and the information being provided. AmbientKnowledge is tuned into our needs and incorporated into our activities, supporting all aspects of our lives. It has the ability to provide energy information in a pervasive, subtle manner, with minimal effort needed from the user.

Accessible, attractive and clear feedback is an established method of promoting a change in behaviour and a reduction in energy consumption. A change in behaviour is only likely to persist if the feedback can be sustained and this is why AmbientKnowledge can be very effective in reducing energy consumption. Ambient representations can be aesthetically pleasing and subtle, obtaining long-term user acceptance. AmbientKnowledge is a desirable object and also one that reduces the burdens and cognitive load on the user so that they may not get annoyed or distracted by the display, ultimately sustaining its use thus sustaining a reduction in energy consumption.

Consumer interest in Energy use is higher than it has been for decades. Experts predict that Energy Information Displays will enter people's homes in large numbers over the next few years. AmbientKnowledge can be easily and safely installed in the home. It uses a current transformer (CT) and a step down AC – AC power adapter to produce signals proportional to the Current and Voltage being used in the home. The CT sensor and adapter are non-invasive methods of retrieving energy consumption information. Simply clipping the CT sensor around the live or neutral wire inside your home will allow AmbientKnowledge to calculate the Current. Plugging the adapter into any socket in the house collects Voltage values. An LED then glows various colours depending on the real-time energy consumption in your home. LEDs are sustainable, energy-efficient and environmentally responsible. A single LED could last three to six years if left on for 24 hours a day. LEDs contain no hazardous or toxic materials such as mercury. AmbientKnowledge is energy-efficient requires no special training and is easy to install and maintain.

**Credits:**

I would like to thank Project Supervisors Trevor Hogan and Paul Green for their supervision and guidance throughout the design and development of *AmbientKnowledge*.

**Project's Makers/Authors:**

Laura Kacinauskaite

Laura Kacinauskaite is a Lithuanian graduate student from Cork Institute of Technology. She has produced and collaborated on projects ranging from interactive and networked environments, to fine art photography and montage.

**Title:**

Céannacht

**Description:**

Céannacht explores non-Irish national's perception of Irish people. The project has been designed for non-Irish nationals to create an image of Ireland. The goal is to provide a platform, which collates and represents online data. Céannacht allows people to create an Avatar, which is a visual representation of their personal view of Irish People. An online environment purposefully designed to help people understand and affect the ways in which the individual actively constructs stereotypes and identity.

The realisation of the project gave the opportunity to raise and answer the question "What is the Irish stereotype outside the Island of Ireland?"

This project was initiated from the concept of self-image and prejudice of others, both positive and negative, in online and public spaces. Questions about how do non-Irish nationals perceive Irish led to the development of two frameworks, one is an online application, which provides users with visual connection and secondly a digital artifact which portrays a blended image in a public space.

The social aspect of this project enables audience to connect and reflect various opinions of Irish stereotypes. This project connects and encourages the responsibility of stereotyping between people in public and online spaces.

Céannacht is a tool, which explores stereotypes and peoples perceptions. Other cultures may benefit from an environment that supports reflection of live identity and community, relations between participation and gaining knowledge to display existing cultural issues. These studies might be carried in any country, for any community. It is hoped that this project may develop new ways of thinking about identity and prejudice of others.

Implementation: An online environment is created using an Ajax Web Application implemented with web standards (HTML, CSS, and JavaScript) and the jQuery JavaScript framework. It collects all the users' choices and sends them to the server via Ajax. The server will store all the details of the avatar (body type, clothes, eye colour, etc) in a database. The reconstruction of all the avatars in the database uses web standards overlaying images of the avatar features over each other.

**Credits:**

I would like to thank Project Supervisors Trevor Hogan, Paul Green, and Joey Campbell; CIT Lecturer Gary Couse, and Ronan Barry.

### **Project's Makers/Authors:**

Niamh Hutton

Niamh Hutton graduated from the Cork Institute of Technology, Ireland in 2010 with a BA in Multimedia. She is currently undertaking voluntary work as a website developer for a regional newspaper and she hopes to pursue a career in web design.

John Constant

John Constant is a practising digital artist and a graduate from Cork Institute of Technology with a BA (Hons) in Multimedia. He is presently working in web development, whilst also undertaking a number of different projects in the digital arts sector.

Ian O'Leary

Ian O'Leary graduated from the Cork Institute of Technology, Ireland in 2010 with a BA in Multimedia. He is keenly interested in music, film, gaming, art and graphic design and is presently working as a freelance web developer and designer, a career he intends to continue over the coming years.

### **Title:**

Presto

### **Description:**

Inspired by traditional long-exposure photography Presto is a participatory digital space that enables people to create digital visuals and present their creations in a public forum. Presto allows people to use any light-emitting objects as drawing tools; the light emitted from these objects is tracked by a video camera, interpreted by specially designed software and displayed on screen as digital visuals.

One digital visual piece can be created by an individual user or as a collaboration among people sharing a physical space. By capturing these interactions Presto provides people with a public platform to express themselves artistically, leading to an interesting and fun experience. The principle goal at the core of the project was to develop a framework that affords people the opportunity to create unique and visually interesting imagery using a digital medium. The system is instantly approachable and encourages experimentation and creativity.

The purpose of the project is to compliment existing approaches to the creation and presentation of digital visuals with a more interesting and enjoyable experience. Presto allows the user to take on the role of an active participant as opposed to a passive observer in the artistic process

The experience of creating the artwork is just as important as the final output and with this in mind we set about ensuring that the artistic process is as interesting and fun as possible.

### **Credits:**

Trevor Hogan, (CIT Project Supervisor); Paul Green, (CIT Project Lecturer); Joey Campbell, (CIT Project Lecturer); Rose McGrath, (CIT Head of Department); Leo O'Sullivan, (CIT Department Technician).