

sustainable everydays

As we progress towards our future, lowering mindless resource consumption and weighing the impact of our actions and behaviours on our environment is going to become more of a necessity rather than just being an option. This will involve a fresh perspective on our day to day expectations and behaviours. At present, our society is set in a scenario where consumption is the norm, with increasing tension between our needs and the need of a green environment. To have a rational discussion on the complexity of sustainable lifestyle requires visible scenarios of a society which day to day sustainable practices.

Interaction design by principle creates innovative solutions for the future, not just for the immediate, temporal instances, and is capable for helping us experience, discuss and improve the imagined future.

Design task

- Imagine a future where sustainability becomes an everyday routine. How might we present a vision for a such a future?
- 2. How might we use design to imagine essential products, services and routines in such a future?

EGMONT Publishing











conserveandconsume.wordpress.com

This project is under the umbrella of a larger project — Conserve and Consume (C2), which is focussed on creating sustainable solutions for the market. C2 is a partnership between University of Oslo, SINTEF, Greenphones, Skylib, Schibsted Vekst, Snapsale and Bengler.

Can Games Motivate Urban Youth for Civic Engagement?

We explore the possibility of using games as a way of engaging youth in environmentally-oriented participatory art or other cooperative urban projects. Our approach was design-led, and youth participated in evaluating games that we proposed from the perspective of motivation and engagement, both in the environmental issues in the games themselves and in the likelihood of subsequent real life involvement stimulated by the games. The findings show that ultimately, personal passion for the cause that the game represents, and not the game itself, would be the central factor in a youth's decision to engage in real life. Social embeddedness was also valued high, as well as the possibility to make a real difference.



We wish to continue exploring the power of games to motivate for engagement!

This is part of the Creative Europe EU project with partners from 11 institutions across Europe











INTERACTING WITH MODERN ART

Design Brief - INF 2260/4060 fall semester 2015

THE ARTIST DJENANA VOLJEVICA CICIC SHARES HER WORK!

HOW IS DIGITALIZED, INTERACTIVE VERSION OF THE WORK EXPERIENCED (COMPARED TO THE ORIGINAL WORK)?

WHAT DOES THE ABILITY TO INTERACT WITH THE ABSTRACT ART
BRING IN TERMS OF EXPERIENCE?
IS DOING ENHANCING OR TAKING AWAY FROM
UNDERSTANDING, LIKING, EXPLORING, EXPERIENCING THE WORK?









University of Oslo Library projects

UBO is the largest academic library in Norway and wants to develop its services based on service design. New technologies and new media make it possible for the library to engage its users in new ways, but it wants your help in exploring and engaging in all these new possibilities.



UBO has for some years been working closely with students in INF2260/4460 in developing prototypes and ideas for innovative library service. We offer a team of our library staff, who will cooperate closely with the project groups, and facilitate equipment and rooms. Student projects at the library this year are:

The Science library looks for ways to introduce electrical paint (www.bareconductive.com) to support various forms of interaction with services offered by the library.

At the **Humanities and Social Science Library**, the project is aiming for a redesign of services at the welcoming area. Topics can be lending and return of books, claims, information desk services, and more.

CONSERVE AND CONSUME - redesigning sustainable consumption

CONSERVE & CONSUME (2014-2017) IS AN INNOVATION-PROJECT FUNDED BY THE RESEARCH COUNCIL OF NORWAY THROUGH THE PROGRAMME USER-DRIVEN RESEARCH BASED INNOVATION (BIA).

PARTNERS: GREENPHONES, SINTEF, IFI



Do you feel comfortable changing your phone often? Would you feel better about it if you knew that your old one comes to good use? Could you think of some persuasive designs that could compel the users to re-cycle their old phones? Or, alternatively, refurbishing your phone?

Think about a service that would enable you to make practical and ethical decisions (given that many materials used in smart phones seriously deplete available resources of those minerals and metals) regarding your smart phone use?

Un/Branded Identities

While we are directly dependent on consumption for our survival (eat, drink, basic clothing, shelter, contentment), consumerism has inextricably gotten linked with society and cultures across the world leading to overconsumption, a movement driven primarily by business interests. In addition to the negative environmental consequences, studies have proven the effects of "buy more, throw soon, buy again" on our personal and collective well being as well.

Interestingly, the notion of self identity and social acceptance is a human construct and thus can be re-defined. Several decades of marketing strategies and campaigns have successfully linked finding meaning, contentment, acceptance and notions of self primarily through what we buy, own and consume. Design is uniquely poised to expose and create conversations around the relationship between buying trends, emotions and social acceptance and the kind of futures such linkages could lead us to.

Design Task

- 1. How might we design experiences that promote reflection and discussions amongst urban youth around buying behaviors and notions of identity and social acceptance?
- 2. How might we design to speculate and discuss the nature of self and social identity in the context of buying behaviors?



u3oslo.tumblr.com smartsculpture.eu

This project is a part of the Norwegian subproject of the EU project — The People's Smart Sculpture (PS2) which is a collaboration between 12 project partners across 8 countries. The project aims at stimulating participatory culture and greater civic participation in European countries.













The delTA-project, lead by SINTEF, is about research on how we can design for civic engagement among youth through social media. Organizations aiming to foster civic engagement, such as government bodies, news outlets, political parties, and NGOs, struggle to purposefully use social media to engage young people. To meet this challenge we need to develop new concepts that can inform and stimulate future design.

Plan Norway (Plan Norge), one of the research cases in the delTa-project, are one of the biggest humanitarian organizations in Norway that are working with child welfare around the world. One of their aims is to engage youth (16-26 years) in Norway in discussions, debate and engagement around humanitarian issues, and if possible in conversations with youth in the South. The task is to develop and design a new innovative concept that can engage Norwegian youth in humanitarian issues. Another case is Amedia, that host the several local news outlets in Norway. Amedia are aiming for new design concepts that can stimulate youth to read and engage in local news.

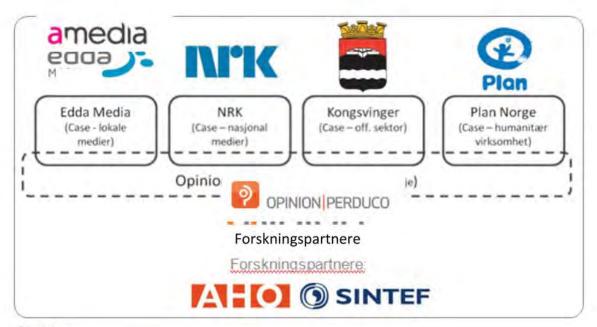
Contact:

Petter Bae Brandtzæg PhD. Senior Scientist at SINTEF

www.sintef.no

https://petterbaebrandtzaeg.wordpress.com/

More about the project: http://deltaprosjektet.origo.no



Støttet av:







At the recommendation of the United Nations' Intergovernmental Panel on Climate Change, Eco-Agents (www.miljoagentene.no) established its own climate panel for children in February 2015. Children's Panel on Climate Change (www.miljoagentene.no/klima) is comprised of 6 representatives (10-13 years old) from across Norway with the goal of collecting and disseminating children's opinions on climate issues.

There is currently an interactive web forum on Eco-Agents' website with news, discussion and an online form for children to deliver their input.

miljoagentene.no/nyheter/har-du-noe-du-vil-si-til-de-som-bestemmer-article2748-6.html

Children's Panel on Climate Change plans to deliver a report to politicians at the end of 2015 to be used as input to the United Nations Climate Change Conference in Paris in December 2015.

Design task:

- How could interaction design and digital media be used to stimulate increased engagement and debate among children in Norway for issues related to climate change?
- How might a cross-media platform be used to create a positive spiral of participation?

Eco-Agents

Eco-Agents works to help children to believe in themselves, the future and the value of taking action. Located in Oslo, Eco-Agents has approximately 4,000 "agents", comprised of individual members and group members from approx. 200 group clubs (schools, preschools and other groups). Eco-Agents is active with public events and social media (Twitter, Facebook, Instagram).

Development work is guided by the Department of Informatics at the University of Oslo and Oslo Barnemuseum as part of the EU-cooperation "The People's Smart Sculpture" with the goal of stimulating participatory culture across European countries. Funding for the Norwegian sub-project "Unge Urbane Uttrykk" comes from the EU and the City of Oslo.













Si; *D* is Aftenposten's opinion and debate forum for youth ages 13-21. The forum was established in 2005 and publishes a daily opinion page in Aftenposten. Once per week, there is expanded coverage on a double page. Participation is open, as is the range of topics. *Si*; *D* receives input from young individuals all over Norway, as well as from a group of regular contributors.

In addition to publishing in Aftenposten, *Si*; *D* uses its website and social media (Facebook, Twitter) actively to distribute opinions and engage readers in debate. While opinions pieces are restricted to youth, resulting commentary can also include adults. Politicians and other adults are occasionally given the opportunity to respond via "Det fossile hjørnet" (*The fossil corner*).

Si; D accepts opinion pieces via email (<u>sid@aftenposten.no</u>) and via an online form on its website (www.aftenposten.no/meninger/sid).

Si;D is interested to explore new methods for collecting input from youth, as well as ways in which it can better organize and present opinion pieces online to increase visibility, reach and participation.

Design task:

- How could interaction design and digital media be used to stimulate increased engagement among youth in Norway? For the project, you should focus on one or two opinion themes (consumerism, mobbing, environment, etc. – see above!)
- How might a cross-media platform be used to create a positive spiral of participation?

Si;D

Norway's only daily opinion column for youth. Located in Oslo at the Aftenposten offices.

Development work is guided by the Department of Informatics at the University of Oslo and Oslo Barnemuseum as part of the EU-cooperation "The People's Smart Sculpture" with the goal of stimulating participatory culture across European countries. Funding for the Norwegian sub-project "Unge Urbane Uttrykk" comes from the EU and the City of Oslo.













Motion Sensors

For patients with post- traumatic confused states after accidents or injuries with attached medical instruments and are in need of continuous observations

- To avoid such patients removing the attached instruments without the awareness of health personnel, which may have severe effects.
- To monitor some patients who are in need of continuous observation, but are uncomfortable with a nurse siting in the same room the whole time.
- To monitor patients with "Locked in diagnosis" that are totally paralyzed with no speech function (examples)

The sensors might also be attached to the actual instruments, and when the patients hands approaches such instruments, sensors send a signal to a signal-receiver (alarm) carried by the nurse thus allowing for an immediate response to avert any disastrous situation.

How might we create a better experience for Oslo Bysykkel us



Brief

Bike sharing is great. It allows people to move around the city without owning a bike, borrowing it only when needed. However, the Oslo bike sharing service has some problems. With your help we hope to redesign it. We think that Oslo Bysykkel, the current bike sharing service, can be greatly improved, creating a better experience for all the users (Oslo citizens and tourists alike), maximizing the bikes availability and solving some of the current problems.

Process

For all our projects we follow a three steps design process. The first phase, "Insight", is where we gather insights about unmet needs and opportunities to inform the ideation process. The second phase, "Ideation", is where we develop ideas and concepts for solutions informed by insights and based on research. The third phase, "Implementation", is where we finalise and document concepts for implementation. You will conduct activities on each stage of the process and based on insights and iterations, you will come up with the best solution to the challenges found.

In this project you will have to consider the complete user journey: from the first contact with the service to the first bike sharing experience. What does the user need? What does he do? What problems does he encounter? You can redesign the mobile app or the Oslo Bysykkel's website but it may not be necessary, depending on the challenge you decide to tackle.



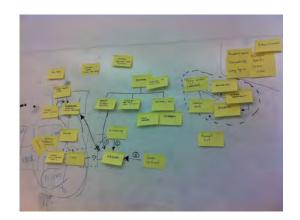
What is Designit

Designit is an international strategic design firm with 320 designers, strategists and developers. At Designit we combine design, business and technology to solve problems, improve lives and create new business growth. With our human-centered and holistic approach we help companies transform, and create a smarter future for everyone.

Designit OIU Autumn 2015











Connected services for the energy and utilities industries

About Accenture:

Accenture is a global management consulting, technology services and outsourcing company, with more than 305,000 people serving clients in more than 120 countries

Challenge:

How may emerging technologies and connected services be used to create innovative and sustainable solutions within the energy and utilities industries?

We are looking for:

Motivated students who are great team players, and ready to deliver a knockout concept and prototype. You will be part of a scrum development team, using a lightweight scrum methodology for the design and delivery process.

Students working with Accenture will have to use IBM Bluemix for their prototype, which is a cloud-based platform for developing apps. IBM Bluemix requires a minimum of programming skills, and students will have to learn how to use this platform, thus a willingness to learn new technologies is required.

Accenture will provide:

- Weekly follow-ups with the student design teams
- A dedicated coach for each team
 - Our coaches are graduates from IFI, and have relevant experience from INF2260/4060
- Introduction to IBM Bluemix, and the opportunity to learn and use this cloud-based development platform for apps
- The chance to work in a scrum-team, and a sense of real life project work
- Access to IoT-related gadgets to be used as part of the prototype, i.e. iBeacons, Google glasses, Raspberry Pi's etc.
- Access to technology- and industry experts

Design Brief INF 2260/4060 fall semester 2015



VERY SIMPLE INTERACTION FOR ELDERLY USERS

Many elderly sit alone in their own home with little contact with others in the same situation. Many will move less about, eat less and over time their physical and mental condition will deteriorate. From a good life in their own home they will need more and more services from municipal care givers and risk ending up at a nursery home or a hospital.

Velferdsfabrikken is a startup company that wants to contribute to turning this trend by stimulating and supporting social contact with the help of technology for communication and entertainment via the living room TV.

Technology for communicating via TV exists and is easily available. For the target group of elderly people with mild cognitive deficits, technical solutions with cables, remotes, menu structures, apps, keyboards and mouse provide a large hindrance for use. They will need very simple mechanisms for interaction with the technology to be able to answer or set up electronic communication themselves.

Design task:

 How could interaction design be used to investigate a very simple remote control for interaction between elderly users and/or between elderly and care givers in the municipality?

Velferdsfabrikken

Velferdsfabrikken is a new startup company with owners with expertise and previous work experience within telecommunication and municipal services. Velferdsfabrikken works together with partners such as municipalities and technology companies.

LUDVIG – your helping friend

Amela Karahasanovic amela@sintef.no



What is the problem

- Elderly should be able to live at home as long as possible
- Important: security/safety, social contact, physical activities, eating properly
- Missing good home solutions
 - User friendly
 - Robust
 - Holistic
 - Meeting user needs

Solution

- Adaptiv mobil robot-plattform
 - Safety (fire, alarm)
 - · Communication with friend, family, doctors
 - Motivates for healthy life-style (food, training)



Synchronizing music to match repetitive bodily movements

This design task is closely connected to an ongoing phd project that explores how music and human movement can be meaningfully coupled through interactive technology, with the goal of motivating senior citizens to be more physically active /exercise. I have made a prototype that synchronizes the tempo of a piece of music to the tempo of human movement, as sensed by various sensors. The idea is that the music dynamically changes the tempo to match the frequency of the exercise movements. The system is designed to work with the Kinect motion sensor, but it also works with the Arduino platform and its multitude of digital and analog sensors.

There are two possible design tasks to choose from:

1) Visual feedback to help users understand system behaviour

Design a visual feedback system that shows users how their movements affect the music. Currently, the system does not provide any form of visual information, which can make it difficult for users to understand how their movements affect the music.

This task involves:

- a) designing a visual interface that makes the functionality and mechanisms of the system more transparent and comprehensible for the user,
- b) testing the system with users, with and without visual feedback,
- c) interviewing users, analyzing and evaluating how the visuals affect users' understanding of how their movements influences the music.

Suggested platform / technology: Processing / Arduino / MaxMSP / (Quartz Composer / Unity)

2) Movement-based interface for rhythmic interaction

Design a sensor-interface that connects an existing exercise activity to the functionality of the system.

This task involves:

- a) selecting a specific exercise activity and context, and designing an interface that captures the repetitive movements that the user performs,
- b) testing your interface with (senior) users in the chosen exercise context,
- c) interviewing users, analysing and evaluating how the music affects the user's experience of the activity (their motivation to exercise, and the meaning they derive from the activity).

Suggested platform / technology: Arduino.

Here's a link to a short video demonstrating the prototype using Kinect: https://vimeo.com/136595531. The password is: inf2260/4060.

Tangible interaction for seniors!

Do you want to work with tangible interaction?

This is a project for those who want to work with new fun devices (beacons, stickers, induction chargers, sensors etc.) and come up with clever ways of offering support to elderly people seeking independence. Prior projects have utilized iBeacons, Kinects, Ardugloves, iPads, DAB-radio etc.. The design task would be to explore how we might apply such tangible interaction as an alternative to screen-based interaction in this particular context. If you have any technologies you want to explore in mind you can work with that – or we can come up with something fun together.

Prior four projects on this topic have all received final grade A, and all been among the top 3 contestant in the course competition. Last year they received 1^{st} and 3^{rd} place. One team also made it to the final of "Rektor's utfordring" last year. Two research papers were also published last year based on the work from these projects.

I ask that only groups with high ambitions and expectations apply to this project. I intend to supervise this project myself.

Contact me for questions or more details.

Joshi

joshi@ifi.uio.no

