Designing for young patients at the Children and Youth Clinic of Akershus University Hospital

The Children and Youth Clinic (BUK) of Akershus University Hospital treats children between 0 – 18 years old. Some patients come for an operation, others for an appointment with a specialist or for day treatment at the polyclinic. We would like to invite you to contribute with your designs to support the young patients when they visit or stay at the hospital. How can we make their waiting or play areas more interesting or informative? How can we help them to find their way in the hospital? Can we make it more adventurous to walk around in the hospital?

Design@BUK

Several IFI master students are writing their master thesis on designing with young patients at BUK. It is a challenging place, but very rewarding.

Join us !

Akershus universitetssykehus

SCHLUMBERGER

USER ASSISTANCE PROJECT PROPOSAL

Imagine you have a software application that you have to work with in your everyday job. You have good training in your field and understand your chosen field well. The software at your disposal is highly complex. You can navigate basic workflows, but then you begin to have some problems with the complexity. All you have at your disposal is basic online help. You find yourself thinking 'wouldn't it be nice if they had _____to help me out?' This is your challenge. In highly scientific software, what progressive elements of User Assistance would you like to see? What would you design that would help close the gap between being stuck and using the product effectively? What gamefication elements would you bring in to the platform? How would you introduce a new way of learning and understanding into very traditional software with a highly educated user base? This is your opportunity to revolutionize the way people are using scientific software, what will you do?

User Profile 1-

- Fresh out from university- mid to late 20's
- Masters degree in Geology
- Active on many online communities including Facebook, twitter, FourSquare, TripAdvisor and Instagram
- Has solid background in video game playing
- Familiar with touchscreen technology and has always worked in modern operating systems, like Windows 7/8
- Enjoys the challenge of the job, but would like for the software to be more exciting

User Profile 2-

- A man who has been with the company for 30 years
- Multiple degrees, including doctorate, has authored papers and patents
- Not active on many online communities other than LinkdIn and his Facebook account was set up by his daughter
- Has no background in video game playing
- Is not familiar with touchscreen anything and is still upset that Microsoft went to the ribbon a decade ago
- Thinks he knows everything about the job and only begrudgingly admits he might need some help

These are both legitimate user profiles of our software. Assume there is a User Assistance Platform that supports all help aspects of the software with the ability to host multiple assistance 'apps', live and in context. How will you address the needs of these users? What will you create for the older generation to make them feel comfortable about using the applications? What will you create for the younger generation that will stimulate them and make them excited to use the software?

INSPIRIA SCIENCE CENTER

MOBILE AND AUGMENTED SOLUTIONS INSPIRING TO REFLECTION ABOUT SCIENCE INSTALLATIONS

As the youngest of eight regional science centers in Norway, INSPIRIA science center opened in 2011 under the Ministry of Education and Research and receives state funding for their development through the Norwegian Research Council as well as local industry. The center focuses on 12 main attractions, whereof some are based on laboratorium activities and some based on exhibits and installations. The center is continuously in process of further development and has a special interest in exploring possibilities for further development of ways to engage visitors by way of mobile and augmented technologies.

Challenge:

How can augmented reality solution for mobile phones strengthen visitors' reflective thinking and engagement with scientific phenomena?

Design Brief:

Science centers have as a goal to communicate science and engage visitors in understanding and relating to central science question and science development. One of the main means for this is the designed environment of the science center or museum; the physical exhibition and the installations inviting visitors to understand central principles of scientific inquiry by way of interactions.

Designing such environments in ways that scaffold the complex processes of science learning during short museum visits is not an easy task. Several studies show how exhibitions often fail to support visitors in reflective thinking, fail to facilitate understanding of explanations and theories and even result rather in misconceptions about scientific phenomena (Land 2000, Achiam 2012). More specifically, studies of interactive exhibits show that in some cases they actually seemed to teach misconceptions (Borun, Masey and Lutter 1993), and in other cases that visitors constructed unexpected knowledge which was not in accordance with canonical science (Anderson, Lucas, Gins & Dierking 2000, Achiam 2012).

Misconceptions and misunderstandings of installations is clearly a question related to how the design of interactives relates to content and the desired reflection upon science that stays behind the installation. The challenge articulated above then also involves to figure out how mobile and augmented reality can support the reflections about concepts and statements integrated in the installation.

Students will be invited to a work on mobile and augmented possibilities related to three specified installation at Inspiria. The working process will start with a guiding tour in the center, and description of the challenges of the three installations in question.

The collaboration between IFI and Inspiria is part of the National project in science center EXPAND.

UiO : University of Oslo Library

What happens when our users are allowed to develop library services, for themselves?

UBO is the biggest academic library in Norway: More than 3.5 million books, 500.000 e-books, 20.000 electronic journals and handles over 4 million full text downloads a year.

However, the library does not always know which services our users wants or needs. Furthermore, new technologies and media makes it possible for the library to engage its users in new ways than before, but exploring and engaging all these new possibilities is not feasible for the library itself. User Driven Innovation - where users develop services for themselves – can help the library make new and innovative library services, which enhances the user experience of both the physical and the digital library.

UB Oslo has for the past two year been working closely with student projects in INF2260/4460 in developing prototypes and ideas for innovative library services. Last year one of the student projects at UBO won the best student project competition. And the project group was later given the opportunity to implement and develop their prototype into a fully functioning App – now available at Apple's AppStore and Google Play

We offer a team of library staff, who will cooperate closely with the project groups, facilitate equipment, rooms, and give technical assistance. You will be able to present your project to Netlife Research and receive professional feedback on your design and ideas.

Student projects at the library:

1. LEAP Motion @ the Library

Explore how the motion sensor Leap can be used in the Library.

We have the tech! You have the ideas! Let's innovate!

2. RFID – Library communication.

The library is moving away from barcodes which must be scanned on by one with a barcode reader.

With RFID tags within books complementary information can be added: abstract, people's opinions, other traces

3. Gamification in the Library

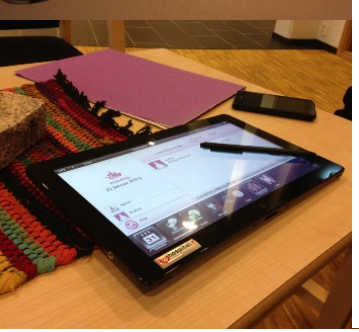
How to engage and commit students?

SAS fly-points, STRAVA, platinum, gold or silver customers are ways to commit users. Can it be done in the library?

4. Social Media in the Library

Can FaceBook, Twitter, Snapchat & other help users in the library?

Can SM help student and researcher to share and cooperate in new ways?



August 2013

Exploring new technologies at Kampen Care+

One of the ongoing research projects of the DESIGN group is the study of new technological opportunities at Kampen Care+. Several of the group members are currently doing research at Kampen. Therefore, this project offers an opportunity to work on one of our department's own research projects in close collaboration with our group members.

After studying users, technology and equipment for a year, we are now ready to explore new design solutions tailored for the residents at Kampen. Our long-term goal is to develop and experiment with ideas and prototypes that will help the elderly become more independent and self-sustainable.

This project is mainly aimed at students who (1) want to help build functioning prototypes that will be tested on real users, and (2) want to work in close collaboration with elderly users.

Challenge:

How can we use technology to create a better living situation for the elderly at Kampen?

What we will provide:

- Access to real user with real user problems
- Access to previous research data in the same project
- Supervision by people participating in the same project
- A fully equipped apartment at Kampen that can be used for testing/living lab.
- Equipment for recording, monitoring, video recording etc.

Contact persons:

Suhas G. Joshi *(joshi@ifi.uio.no)*

Sisse Finken *(finken@ifi.uio.no)*

MUSEUM OF CULTURAL HISTORY

JEWLERY AND BODY DECORATIONS AND MODIFICATIONS

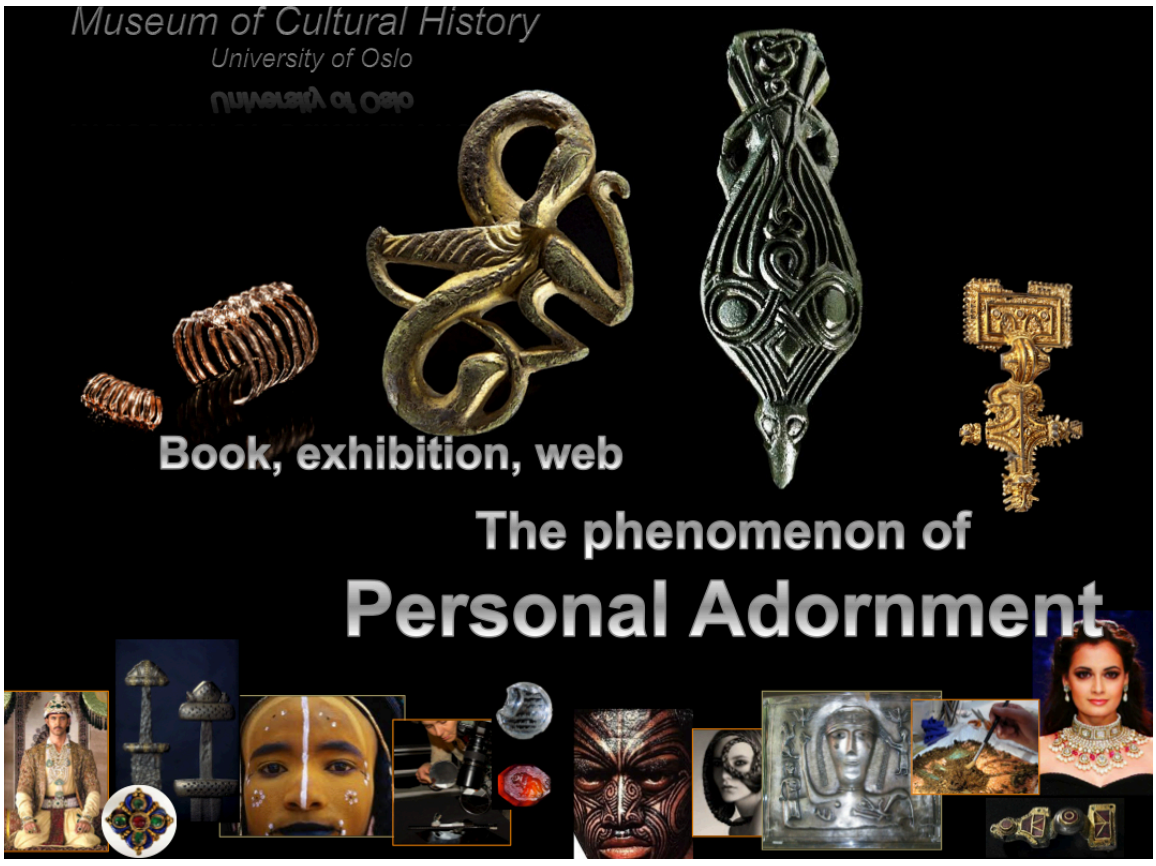
The Museum of Cultural History is the largest Archaeological and ethnographical museum in Norway, holding a collection of more than 1 million objects.

The museum is conducting a large number of research projects, in addition to exhibition and excavation projects every year.

We want to find new ways to support our visitors in interacting with our exhibitions during the museum visit. This year we will start a new project on the phenomenon of adorning the body.

This is your challenge:

How do we inspire the public to contribute with their own body-adornment, histories and magic jewellery at the exhibition?



Play Power: inspired learning through play

Vision
Oslo Barnemuseum is a non-profit organization working to establish an interactive museum for children 0-12 with inspiring environments for learning through play. Play experiences found in children's museums help develop children's creative thinking, self-confidence and understanding of the world around them.

Planned exhibits include multicultural, health, environment, art and science themes. The museum is currently operating as a mobile museum, "Play Power," which visits schools, preschools and festivals with a variety of hands-on activities.

Project: Play Power

Design and prototype an activity for Oslo Barnemuseum's mobile museum.

Design Criteria

- No language or reading required
- No (or minimal) queues
- Engage multiple senses
- Bring strangers together for meaningful interaction
- Built in child-sized proportions (easy to reach and use)
- Easy transport, low cost

Design input and prototyping opportunities
Oslo Barnemuseum cooperates with Oslo schools' after-school-programs (aktivitetsskoler) and can arrange visits with children during the course project.

Contact Katie Coughlin (katie@oslobarnemuseum.org)

www.oslobarnemuseum.org

Project: Classroom of the future

Overview

The Oslo School Museum will add a new exhibit “Classroom of the future” in autumn 2014. The exhibit is part of an innovative project to explore the future of school learning. The use of technology will be a central theme. The room will create an imaginative contrast to the museum’s historical exhibits and will engage visitors in exploring new possibilities for future school learning.

Design task

- Design an educational application for new classroom learning (eks. gaming) *or* a new way to learn about traditional topics or objects. (eks: the multi-touch virtual autopsy table allows students to explore mummies and other objects in ways not possible before.)

- The classroom of the future should encourage innovation and open-ended thinking. It should help students develop the skills needed in the future: to work in groups, think creatively and solve problems imaginatively.

- Groups are invited to the museum for a project briefing, to see the current ”empty” classroom of the future and to learn about the museum’s current offering.

- Project leader Katie Coughlin and museum director Aud Rudshagen will be available for input and feedback to projects.
  (katie@oslobarnemuseum.org)

Design input and prototyping opportunities

The Oslo School Museum cooperates with Oslo schools’ after-school-programs (aktivitetsskoler) and can arrange visits with school children during the project.

www.osloskolemuseum.no

On behalf of Telespinn - CGI UX offer the following challenge(s):

Telespinn is a small scale spinning mill which started in 2008 with a view to exploiting the unique wool from mohair goats and help preserve the cultural landscape in Telemark in Norway.

We take care of the whole process from fiber to finished yarn. We use no harmful chemicals and take care that the garments are environmentally friendly and locally produced.

Our customers are who knit, weave or crochet. Many are interested in coming to visit to see the process from goat to finished yarn. Telespinn make different kinds of yarn in various colors. The products are sold in our own store online.

Challenge:

- How can Telespinn redesign their web presence to better meet the user needs and sell more products?
- What should be the customer experience - from interest to shipped product? (think customer experience journey and service design)

We would like you to investigate online strategies and concepts that take into account one or more of the following trends:

- mobile retail and checkout
- social / community based marketing
- responsive web design for retail (i.e. adaptive design that work on any device and adapt to the screen size)
- Using paypal and/or google checkout to process payments

We offer:

Concrete feedback to your designs and concepts from the CGI User Experience (UX) team and from Telespinn (the client). We encourage you to user test any concept you come up with and may assist you in this and other regards.

Contact persons:

Telespinn
Audun Solheim (post@telespinn.no)

CGI UX
Ingjerd Jevnaker (ingjerd@ux.no | www.ux.no)

SINTEF projects

The Master System

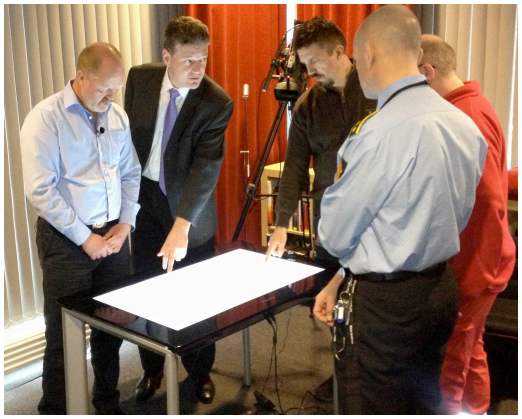
Overall goal

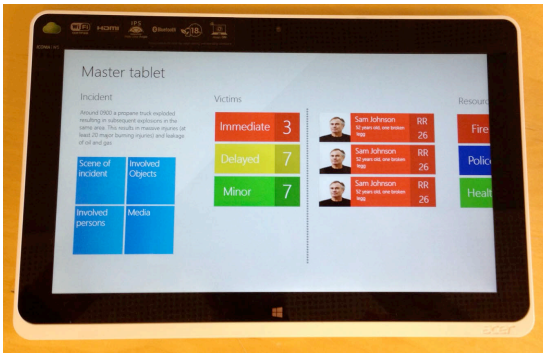
Bridge Master assists in keeping common situation awareness among central actors during an incident.

Main functionality

The Master provide functionality to present and act on three types of information which are accessible through the BRIDGE system:

- *Information about the incident*,
  ex incident location and number and triage status of victims.
- *Information about the response*,
  ex number and position of police, fire and health vehicles
- *Information from external services*, ex Weather





Team solution and tablet solution

SINTEF Project possibilities

SINTEF can supervise three groups – below we have four topics. We are open for groups also to work on the same topic.

- **Ikondekorasjon**
  På mobile enheter kan du som regel se hvor mange uleste meldinger du har på ikonet for meldinger på hjemmeskjermen. Dette gjøres ved at ikonet dekoreres med et lite tall som sier hvor mange uleste meldinger du har. Dekorering av ikoner kan gjøres på mange måter, bl.a. med tekst eller tall, fargebruk eller detaljer ved den visuelle utformingen av ikonet. I hovedbrukergrensesnittet i BRIDGE benyttes det ikoner for å visualisere informasjon som er nyttig for redningsetatene i forbindelse med en ulykke. Denne oppgaven går ut på å finne ut hvilken informasjon brukerne har behov for å få visualisert som dekorasjon på ikoner, og å komme med forslag til hvordan denne informasjonen skal visualiseres i ikondesignet.

- **One control vs. multiple controls in multiuser settings**
  This assignment consists of (1) developing a simple multiuser prototype for the Pixelsense multi-touch table, and (2) utilize this prototype to test the usability of one control vs. multiple controls in a multiuser setting. The group could for example develop a drawing application that can contain one or more drawing controls, and then conduct an experiment to see whether there are differences in usability when using one drawing control vs. multiple.

- **Visualization of map object information in multiuser settings**
  This assignment consists of (1) designing and developing an efficient solution for visualizing a large number of map elements information in a multiuser setting, and (2) testing the usability of the solution (maybe compared with alternative solutions that are already available, such as the popups in google maps).

- **UI transformation**
  The master system is developed in .NET and WPF technologies. There is a need to make the Master more terminal independent and we want to transform the design to HTML5 for mobile units. This topic will look into how the current design and UI implementation developed in C# and WPF could be transformed to HTML5 using JavaScript libraries and CSS.