Introduction

Educational Aims
The aim of this project is for the students to gain experience of the process of designing a product or system where playfulness and Ubiquitous Computing are involved. Emphasis in this project is to give experience prototyping and systemic thinking as methods for exploring user experience on a conceptual level.

The third major project in the Master Programme in Interaction Design at Umeå Institute of Design (UID) focuses on Interaction Concept where interaction design is explored in three levels simultaneously: first, “human-artefact-interaction level” with the actual user interface in focus, secondly, “socio-cultural level” with focus on how and why people communicate through technology and services, and finally “systemic level” where a holistic view is focusing on the bigger picture and the emergence of digital eco systems.

In this semester project the concept of Ubiquitous Computing, coined by Mark Wiser at Xerox PARC in 1991, is very prominent. Ubiquitous computing is a post-desktop model of human-computer interaction in which information processing has been thoroughly integrated into everyday objects and activities. In the course of ordinary activities, someone “using” Ubiquitous Computing engages many computational devices and systems simultaneously, and may not necessarily even be aware that she are doing so. This model is usually considered an advancement away from the desktop paradigm.

This project is carried out in collaboration with an industrial partner, and emphasizes integration of hardware and software solutions in the final design of the product.

Project theme: Tangible Savings for Kids in a Digital Age

Coins have served as the main monetary artefact since the Ancient Greeks and from that time people have saved money in different kinds of jars or boxes. In most western world countries during the 19th and 20th centuries, these containers took on the shape of pigs and were often used as promotional gifts to new-born children from the local bank along with a savings account with a small pre-paid amount to encourage the habit of saving money and tie them to the bank as a trustworthy and lasting financial institution.

Standardized monetary tokens like the coins, followed by the banking system and banknotes introduced in Europe in 14th century Italy, have together formed a successful structure and in many ways contributed to the development of human civilization during the last two millennia. However, the handling of physical money has also been surrounded with problems – initially mostly regarding theft and robbery and in the 21st century increased labour costs. The international banking system is constantly working on strategies to reduce the usage of physical cash in
society to reduce handling costs and increase safety for both the banks and their customers. This process started with the mass-introduction of credit and payment cards in the 1970s. Today, there are many internet-based payment services and this transformation process in ongoing – although many strategists realize that physical money will still circulate in society for at least 50 more years, or longer.

Still, in a world where physical handling of coins and bills less and less becomes an everyday event, the piggy bank in its current incarnation is becoming more or less obsolete. However, the underlying concept is still viable – the habit of saving money early in life have often proven to induce children to grow up to become adults with less risk of ending up in economical trouble when spending money they do not have. Additionally, the banks have seen a trend of losing the traditionally strong bond between young adults and the banking system, mainly due to the fact that most children today never have come in contact with a bank.

Your task in this project is to design an artefact that will serve as a digital piggy bank to overcome the two main problems, stated above; digital money is very abstract for young children, and that children have no relationship with banks.

What would digital money storage for a growing child look like? What would make money less abstract for a child? And at the same time, how can it be enjoyable and useful for children of different ages? What would a digital money gift from an adult relative to a child look like when physical money is not used?

In this project we will collaborate with Swedbank, a leading Nordic-Baltic banking group founded in Gothenburg in 1820 with 9.5 million retail customers, who wishes to enhance an economically sustainable community where children in an early age learn what money is and how to relate to it.

With this project, Swedbank wants the piggy bank concept to be a symbol of saving rather than just a place to store coins. The piggy bank has a long history together with Swedbank and has been a part of their system to build relations with young children.

Swedbank envisions your resulting concepts to serve as inspiration for a new, mass-produced physical artefact, be suitable to use as an official gift product and be part of the bank’s brand. The artefact could also have interfaces and services for distance interaction - although the main interaction will, especially during the early years, take place when the child and the adults are handling the physical artefact in the home.

The target audience for the product is complex because the primary users are children who are growing and developing physically and mentally over an extended period of time. They will evolve from small children who are interested in tangible things like basic bright colours and simple geometrical shapes to adolescents capable of advanced interactions and applying various approaches to achieve goals and be prepared to struggle on the way there. The secondary user group is made up of those who can help and contribute to children’s savings, e.g. parents and older relatives.

Project structure and time plan
The project is divided into three phases:
WEEK 47         : PHASE 1, Initial research and design brief writing
WEEK 48 - 49: PHASE 2, Additional research and ideation
WEEK 50 - 03: PHASE 3, Final design and documentation

Design Rhetorics Methodology DRM
You will have seminars in Design Rhetorics Methodology, DRM, running in parallel with your project. The seminar package is named DRM MasterClass level 1. Here you will be introduced to rhetorical principles and DRM and learn to develop your ability to present and communicate design work. The course consists of five seminars (four of which are webinars), one live session at UID and one individual tutoring session at UID.

A detailed and updated schedule, can be found here.

**Expected results**

**PHASE 1** – to be delivered individually via email to Linda, Tara and Jennie by Friday December 4th.

In this project you will write your own design brief. The brief, as the name suggests, is a short document that outlines your project. The purpose of the brief is to serve as a guideline for you as well as for the tutors. The document should be two to four pages in length. The format should be A4, PDF and 50-50 text/images. Your design brief should state:

- Your chosen design theme with references to sources of inspiration
- Timeplan
- Chosen design methods
- Expected deliverables
- Your contact information and your blog address (if applicable)

**PHASE 2** – to be delivered individually at the mid-presentation on Wednesday, December 14th.

- A presentation (15 min) of your research and concept ideation – both live and as a PDF
- An update of your personal brief

**PHASE 3** – to be delivered individually at the final design presentations on Monday, January 16th (internal) and on Thursday, January 19th.

- A process logbook (online or in PDF format) describing the design process in chronological order
- Deliverables stated in your brief
- A presentation (20 minutes) showing both your process and your final design
- Three pictures (1024 x 768 px) with captions and a 200 words abstract of your project for web publication on UID’s website

Swedbank contact persons:
Jenny Ström, Björn Larsson, Swedbank

Course responsible:
Linda Bogren

Project tutor:
Tara Mullaney

Tutor in writing a brief:
Jennie Forsberg
Teacher and tutor in Design Rhetorics:
Fredrik Goffhé, www.formal.se