Milk Matters: Milk Donor Motivation

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Milk Matters

Human Milk Bank

- Promotes and facilitates the donation and distribution of breast milk

Project Significance

Importance of human breast milk

- Nutritional and immunological properties
- Results in positive health outcomes
- Especially in fragile infants
- Vital medical resource
- Ideal source of food for infants

**Milk Sharing
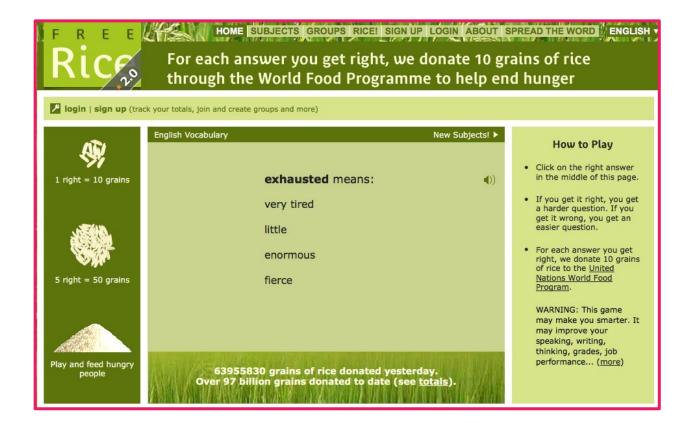vs
Human Milk Banks**

Issues and Difficulties

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- Reluctant to donate to human milk banks
  - Impersonal nature of donation
  - Driven by being able to relate to recipient mothers
  - Need to see the reason for/effect of their donation
  - Time and effort associated with donation
- Issues with participants
  - Logistical difficulties with mothers
- No other conceivable issues

Problem Statement

Chelsea's Research Question

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How effective will donor education, with gamification aspects, be for persuading mothers to donate their excess milk and motivate them to continue donating?

Free Rice

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Mitchell's Research Question

How effectively can a mobile application, particularly including donation tracking, visualisations and feedback, be used to motivate mothers to donate breast milk to a human milk bank, or motivate donor mothers to continue donating or increase their donation?
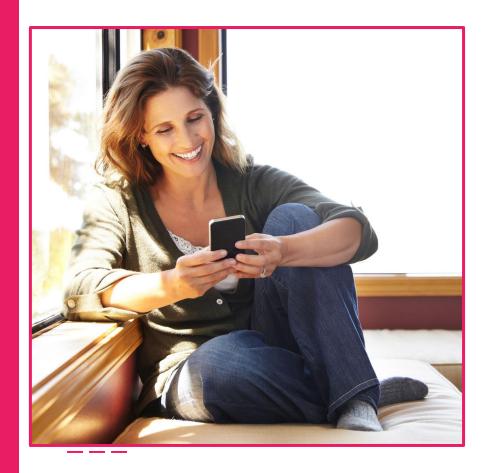
Requirements

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- Educational aspect (with gamification)
- Donation tracking and data visualisation
- Reassurance about donation rate
- Promote donation of other resources
- Depot location
- Notifications and announcements

Key Success Factors

Educational aspect

with gamification

Donation tracking and data visualisation

Milk Matters feed and notifications

Depot locator

Development Procedures and Methods

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- Software engineering project
- Android application
- Co-design with Milk Matters and potential users
- Iterative, interactive design process
- Incorporate HCI design principles

Evaluation

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- Qualitative
- Evaluated according to mothers' opinions of:
  - How useful it was
  - Whether it would encourage them to donate
- Evaluated as technological entity
  - Android standards and HCI principles
  - Bugs
  - Requirements met

Ethical

- Ethical clearance from the UCT Human Research Ethics Committee
- Milk Matters get in touch
- Rights and roles explained before workshops/Interviews
- Signed consent
- Post session feedback and discussion

Expected Project Impact

- Help Milk Matters gain more donors
- Motivate existing donors
- Educate mothers
- Support for mothers who can't provide their children with Mothers own milk

Risks

- Logistical issues with participants
- Co-operation difficulties with Milk Matters
- Scope of project
- Development takes longer than expected
- One team member is unable to perform his/her part of the project
- Mothers are reluctant to use the app

Milk Matters — MILK MATTERS

Timeline: Apr 2016 – Dec 2016

Task	Schedule
Literature Review	Literature Review
Literature Review Draft	Literature Review Draft
Literature Review Final	Literature Review Final
Project Proposal	Project Proposal
Project Proposal	Project Proposal
Ethics Application	Ethics Application
Proposal Presentation	Proposal Presentation
Revised Proposal	Revised Proposal
Development	Development
Paper Prototype and Brainstorming	Paper Prototype and Brainstorming
Design and Prototype Iteration 1	Design and Prototype Iteration 1
Design and Prototype Iteration 2	Design and Prototype Iteration 2
Design and Prototype Iteration 3	Design and Prototype Iteration 3
Preparation for Deployment	Preparation for Deployment
Live Deployment and Testing Period	Live Deployment and Testing Period
Demonstrations and Code Submission	Demonstrations and Code Submission
Software Feasibility Demo	Software Feasibility Demo
Code submission/project demo	Code submission/project demo
Report	Report
First Complete Draft of Final Report	First Complete Draft of Final Report
Final Project Paper Handin	Final Project Paper Handin
Reflection Paper	Reflection Paper
Project Media	Project Media
Initial Project Website	Initial Project Website
Project Poster	Project Poster
Final Website	Final Website