CSE 651
Seminar on Mobile Computing
Professor Anita Wasilewska
Professor Jennifer Wong

# ACCOUNT BOOK

106867200 Raksik Kim
(raksik@gmail.com)

Why an account book?

Motivation

- Managing incomings and outgoings must be the most important thing in a developing country. Thus I want to tell Senegal people about the concept of managing money and saving one.
Especially I choose 1 person who has lots of sources of incomings and outgoings.

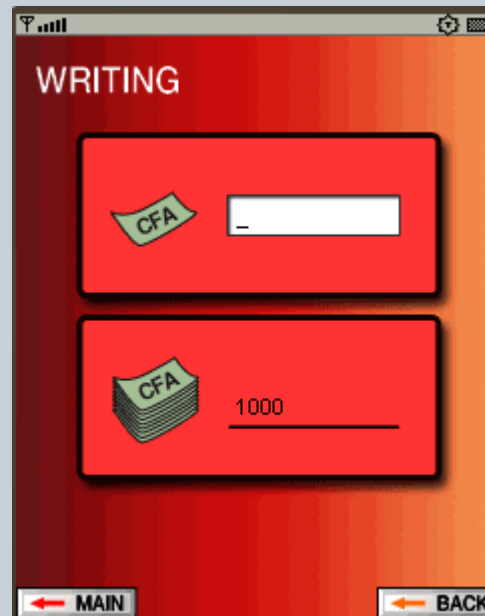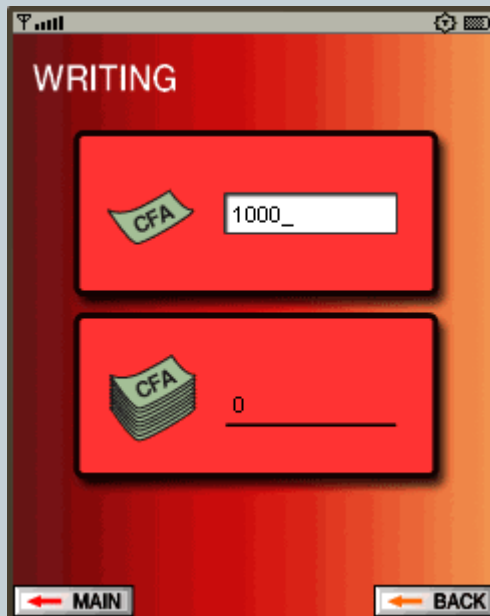# Simulation – Setting the Goal
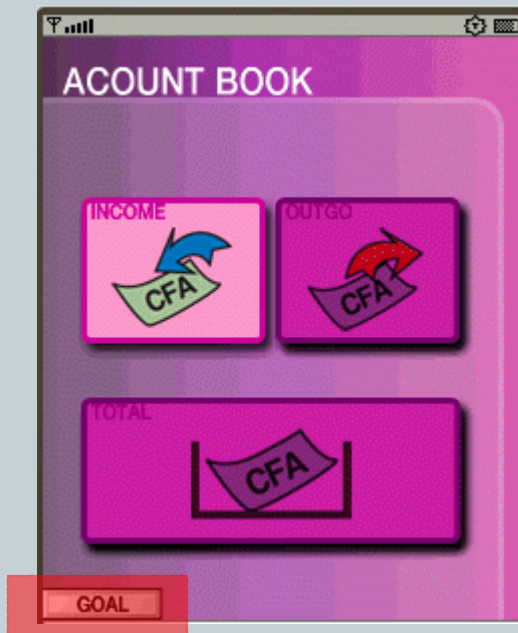
- It is possible to store the goal that you want to save a specific amount of money
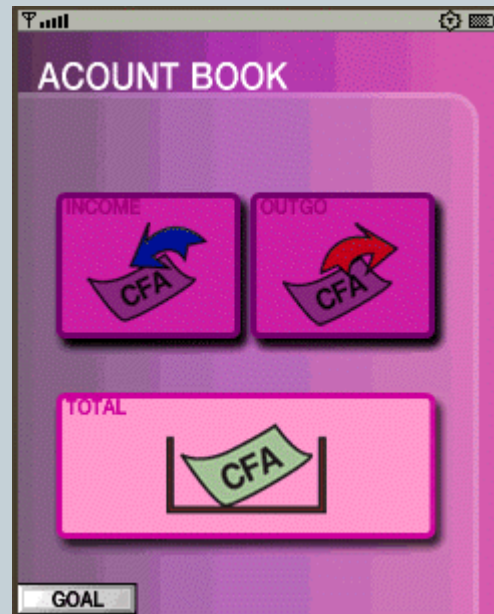
Simulation – Income(1)
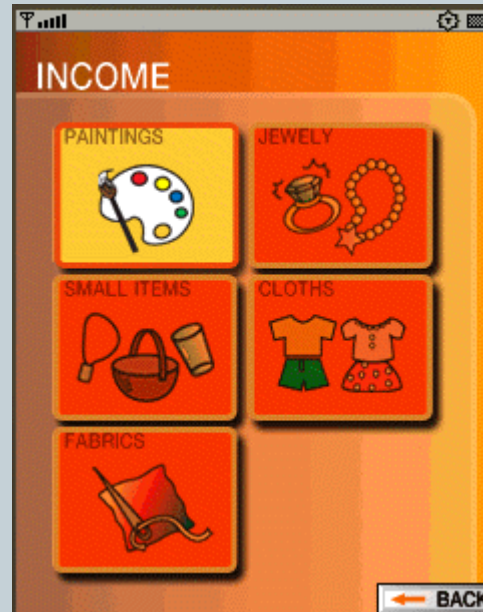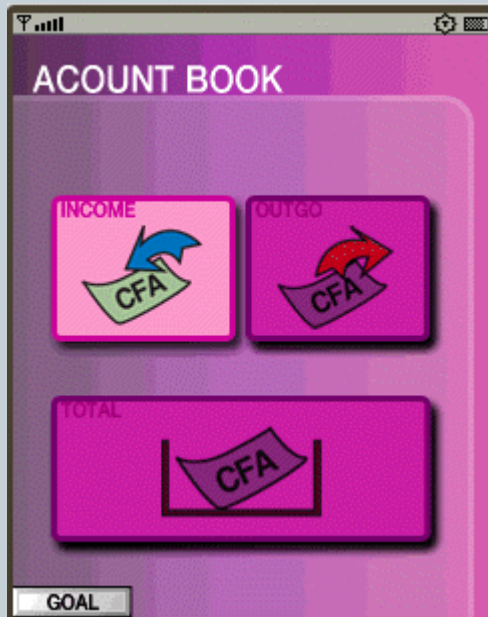
- It is possible to store some amount of money that you get from each item.

Simulation – Income (2)

- After writing number
- (money), you can store the number by clicking the enter button.

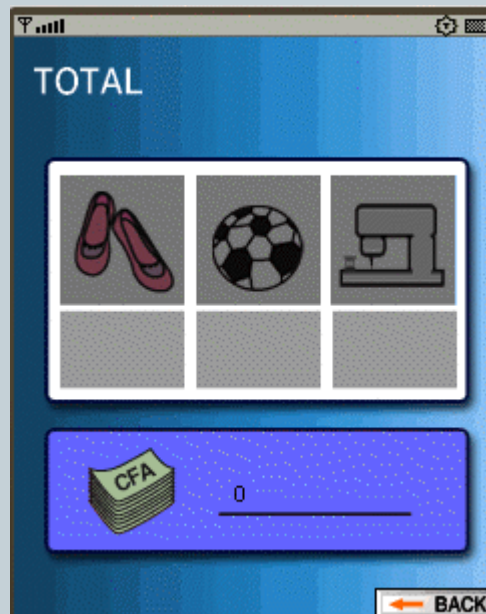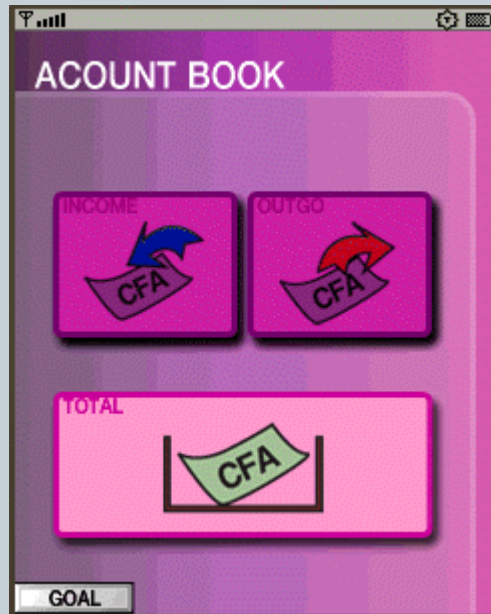# Simulation – Total(check the Income)

- After storing the number, you can check the result.

Simulation - Outgo

- You can store some money that you spent. After writing each value, you can check the result by clicking the enter.

Simulation - Total

- The minimum value is 0(zero) not negative number.

Development Environment

- J2ME(low level GUI)

- Eclipse + WTK2.5.2

- Windows XP

Advantages of Low-level GUI

Low-level GUI

- Can control position(x, y) of items such as images, text.
- Can use buttons effectively.
    - Before using this GUI, I cannot go back to the specific menu to which I want to move. However, in this GUI, the BACK button can be used for going back from many status to other many previous status.
      for example:
      1. income menu → main menu
      2. outgo menu → main menu
      3. taxi menu → outgo menu
   4. jewelry menu → income menu
   5. …

Disadvantages of Low-level GUI

Low-level GUI

- Is difficult to control, since every thing should be controlled by a programmer including (x, y) position.
  - For example
    1. High-level GUI can use a text box, images just by calling the method. However Low-level GUI should control all things including (x, y), alignment.
- Does not include some items that exist in High level GUI.
  - There is not a Text box (Text field) in the Low level GUI. Thus I cannot write number or alphabet easily. I should write or erase both number and alphabet with "drawString" method.
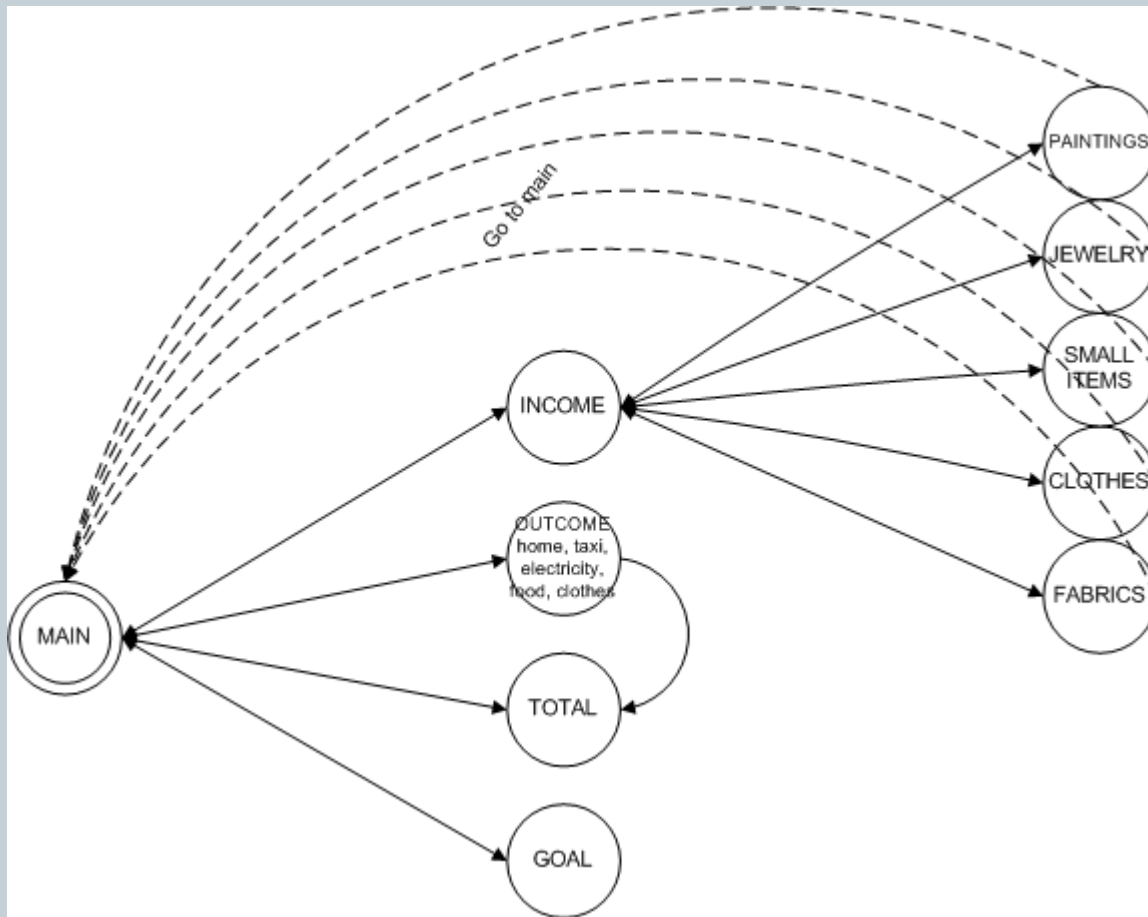
Account Book

- I declare one status variable for each menu.

- By using the status variable and a BACK button, I can go back and forward to the specific menu easily.

Account Book - Main Menu
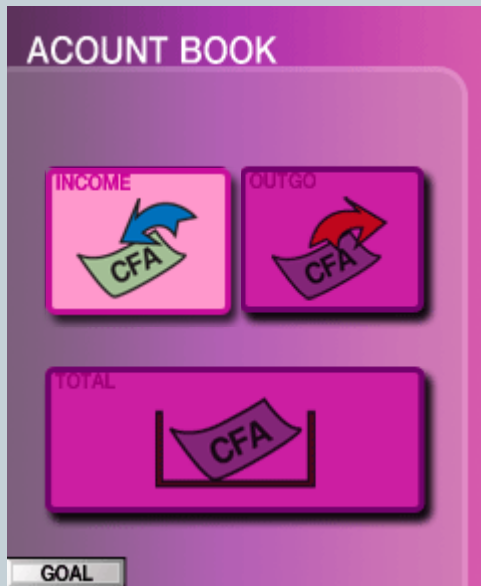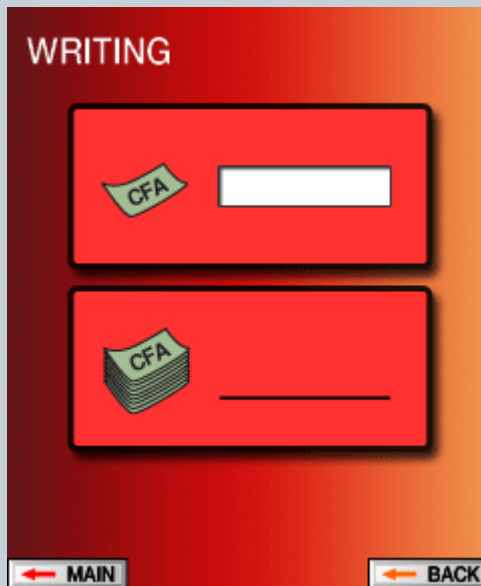

- Buttons
  - Arrows(UP, DOWN, LEFT, RIGHT) buttons
  - OK button
  - Left menu button to go to GOAL menu

- STATUS
  - STATUS: MAIN(Depth 0)
  - MAX item index: 3 + 1(for GOAL)

- SUB MENUs
  - INCOME (Depth 1)
  - OUTGO (Depth 1)
  - TOTAL (Depth 1)
  - GOAL (Depth 1)

Account Book - Income Menu

- Buttons
  - Arrows(UP, DOWN, LEFT, RIGHT) buttons
  - OK button
  - Right menu button to go to Main menu

- STATUS
  - STATUS: INCOME (Depth 1)
  - MAX item index: 5
  - BACK button: go to MAIN

- SUB MENUs
  - PAINTINGS (Depth 2)
  - JEWELY (Depth 2)
  - SMALL ITEMS (Depth 2)
  - CLOTHS (Depth 2)
  - FABRICS (Depth 2)

Account Book - Writing Menu
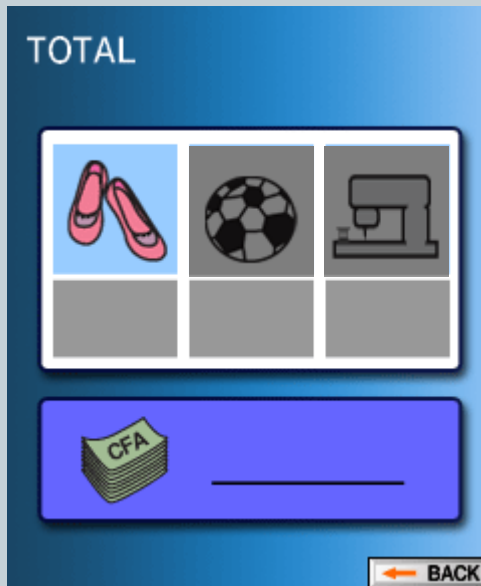

- Buttons
  - OK button to save money
  - Left menu button to go to Main menu
  - Right menu button to go to previous menu

- STATUS
  - STATUS: INCOME_WRITING
  - MAX item index: 1
  - BACK button: go to INCOME
  - MAIN button: go to MAIN

- SUB MENUs
  - NONE

- NO text box
  - I should write and erase number using "drawString" method.

Account Book - Outgo Menu

- Buttons
  - Arrows(UP, DOWN) buttons
  - OK button to save money and go to Total menu
  - Right menu button to go to previous menu

- STATUS
  - STATUS: OUTGO (Depth 1)
  - MAX item index: 5
  - BACK button: go to MAIN

- SUB MENUs
  - NONE

- NO text box
  - I should write and erase number using "drawString" method.

Account Book - Total Menu

- Buttons
  - Right menu button to go to previous menu

- STATUS
  - STATUS: TOTAL (Depth 1)
  - BACK button: go to MAIN

- SUB MENUs
  - NONE

- Progress bar has 38 steps for each 3 item

Account Book - Goal Menu

- Buttons
  - Arrows(UP, DOWN) buttons
  - OK button to save money and go to Main menu
  - Right menu button to save money and go to Main menu

- STATUS
  - STATUS: GOAL (Depth 1)
  - BACK button: go to MAIN

- SUB MENUs
  - NONE

- NO text box
  - I should write and erase number using "drawString" method.