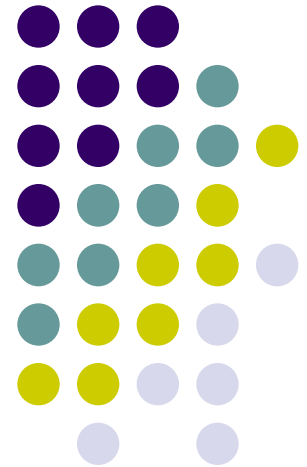# Ubiquitous and Mobile Computing
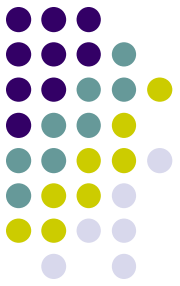# CS 528: *Final Project Report*

Zhaojun Yang
Kuang Xiong
Tengyang Jia

Computer Science Dept.
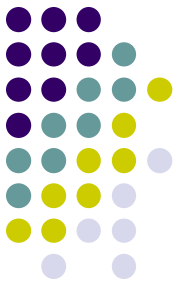*Worcester Polytechnic Institute (WPI)*

Motivation

A recent study found that the average woman, in the course of her lifetime, spends *almost one year* standing in front of her closet deciding what to wear.

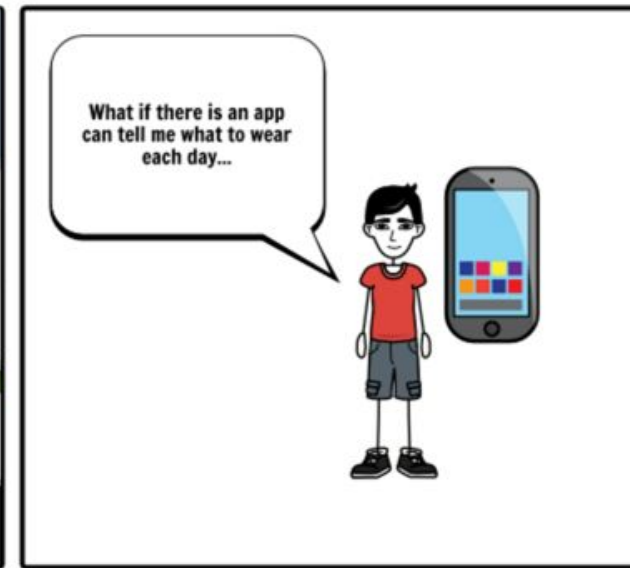What if there is an app can help people manage their closet...
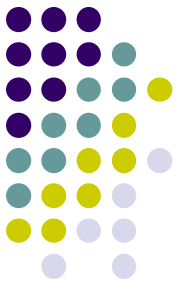
Motivation-Tengyang's story

Related Work

- *People's clothing behaviour according to external weather and indoor environment*
- *Book of Colors: Matching Colors, Combining Colors, Color Designing, Color Decorating*
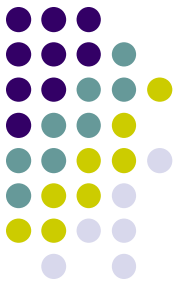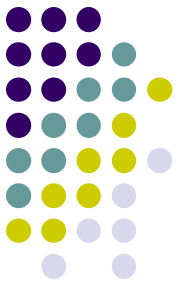- *App: Closet+ an iOS app*
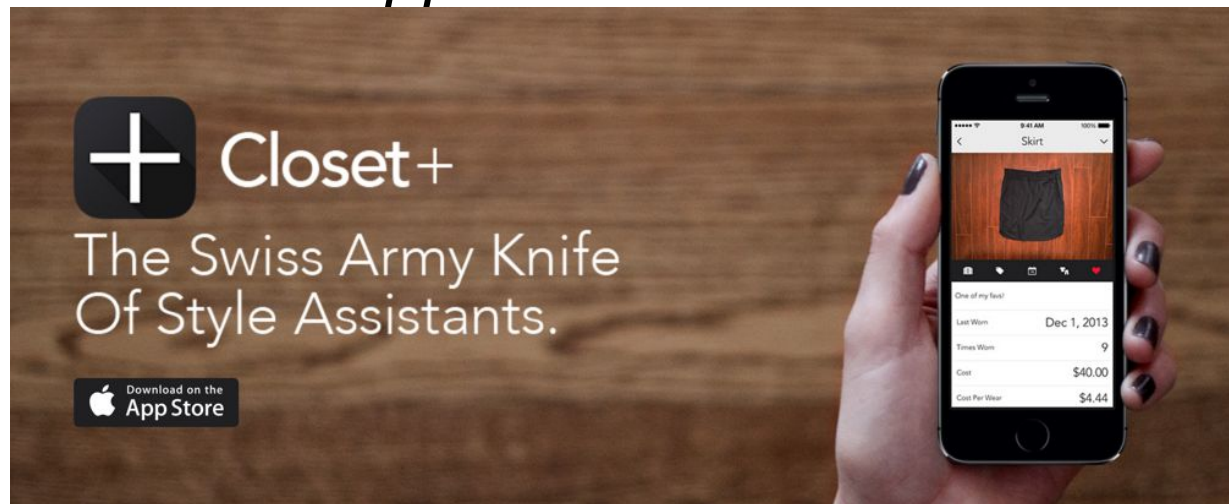
Features Overview

- Weather
  - OpenWeatherMap api
- Schedule
  - Formal / casual
- Virtual Closet
  - Help manage outfits
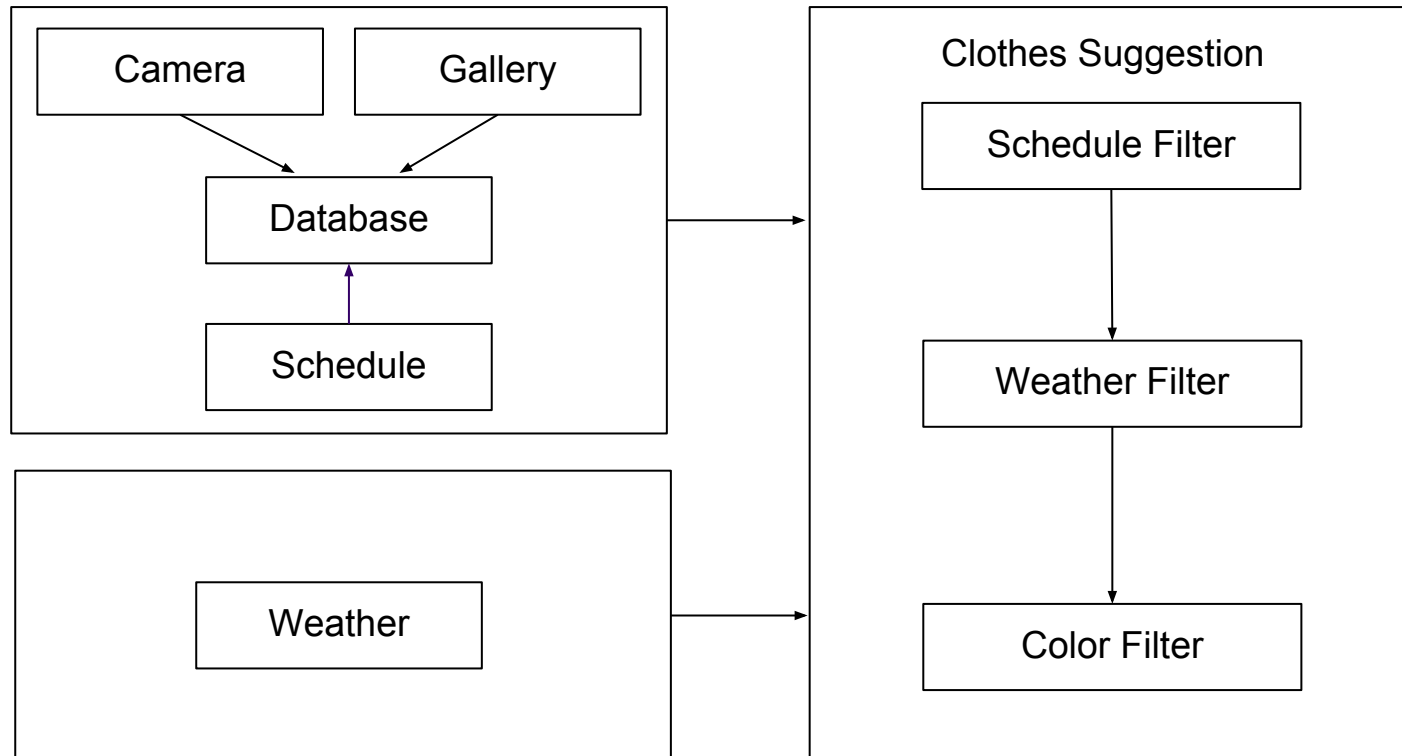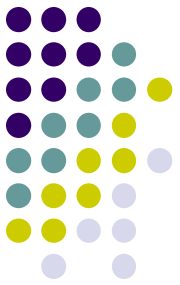 - Classification
  - Color, type, style

Architecture

Methodology - suggesting algorithm

Clothes Manager

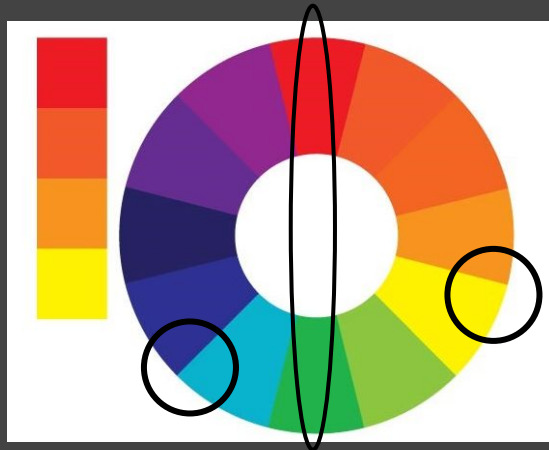| Schedule Filter	work: +100
↓	
Weather Filter	warm:+30
↓	
Color Filter	color with pants_1:+30 color with pants_2:+40
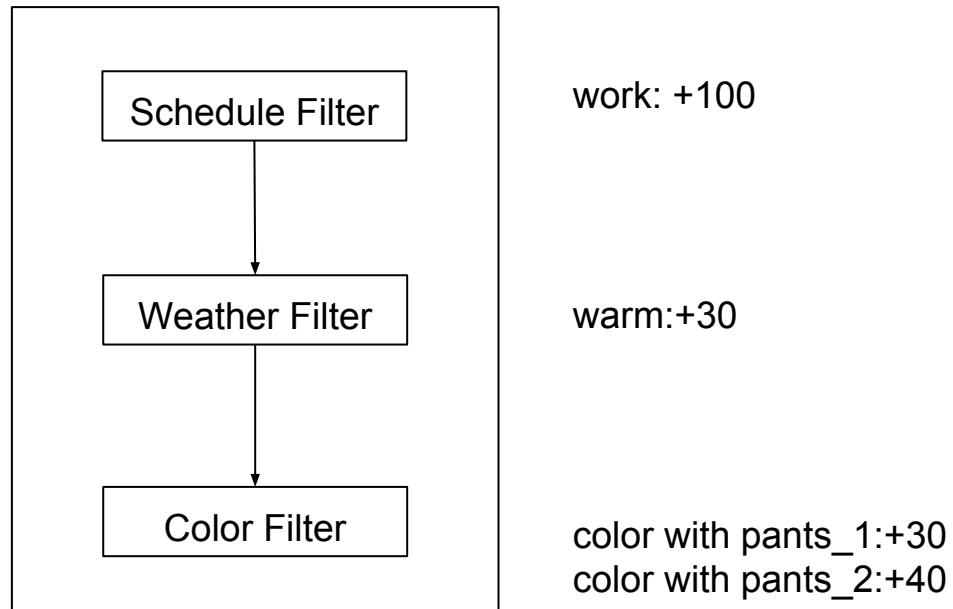
Return the clothes matching plan with the highest score.

Methodology - color filter
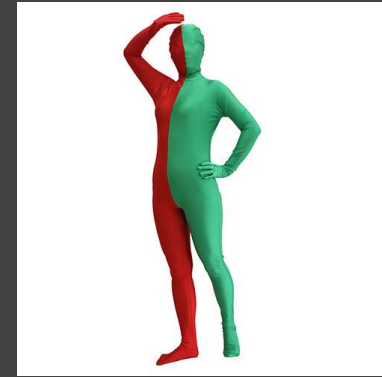
Ugly

harmonious and beautiful

Methodology - color filter
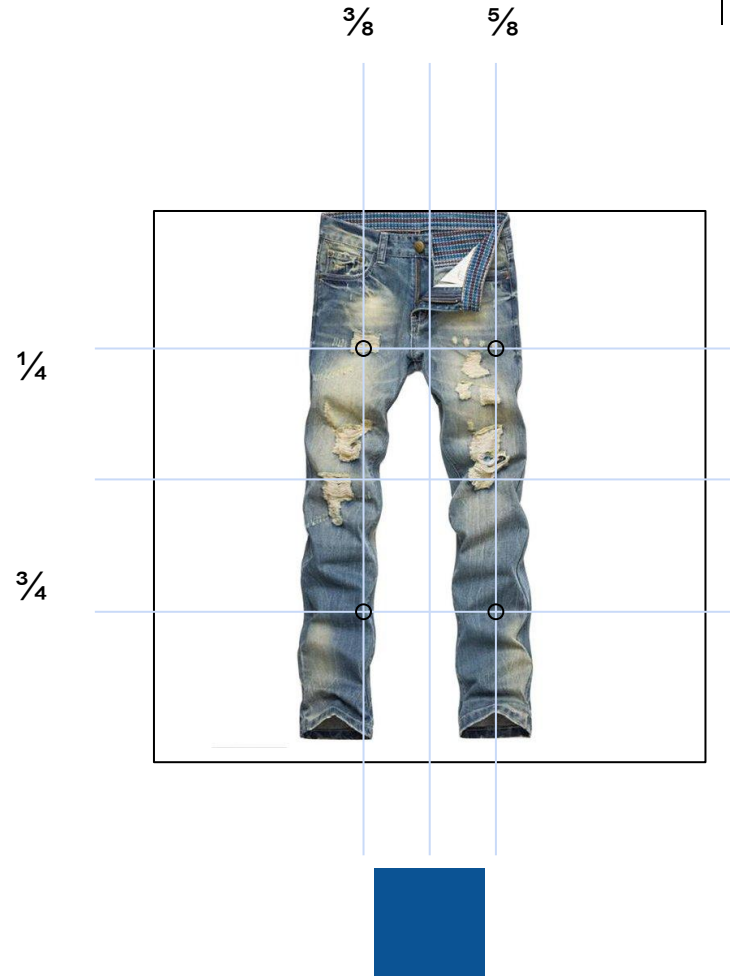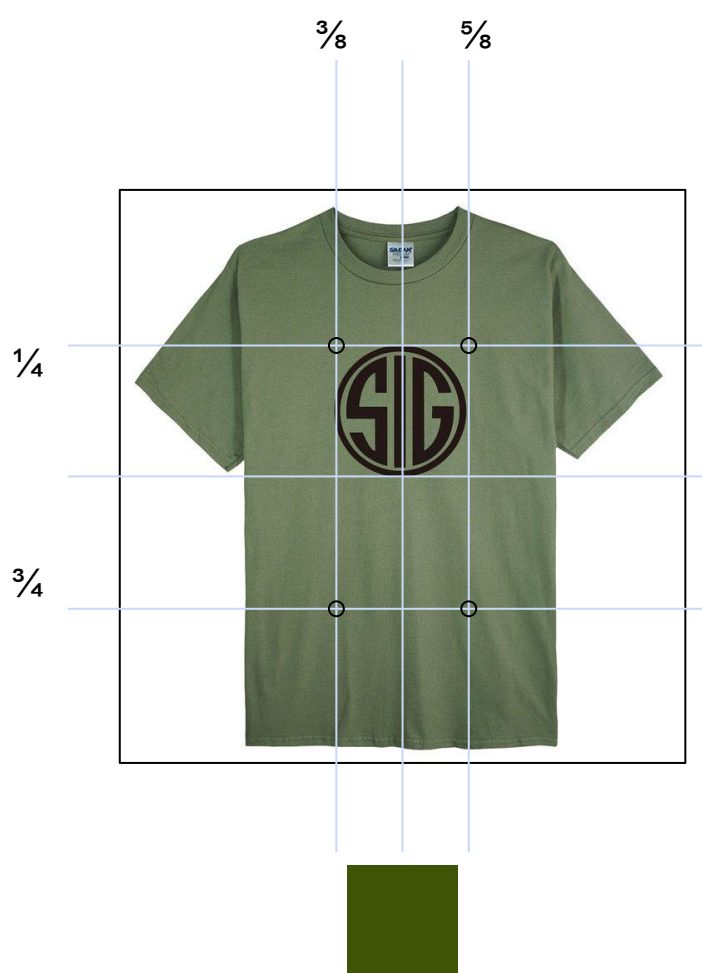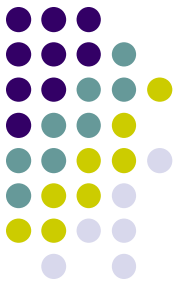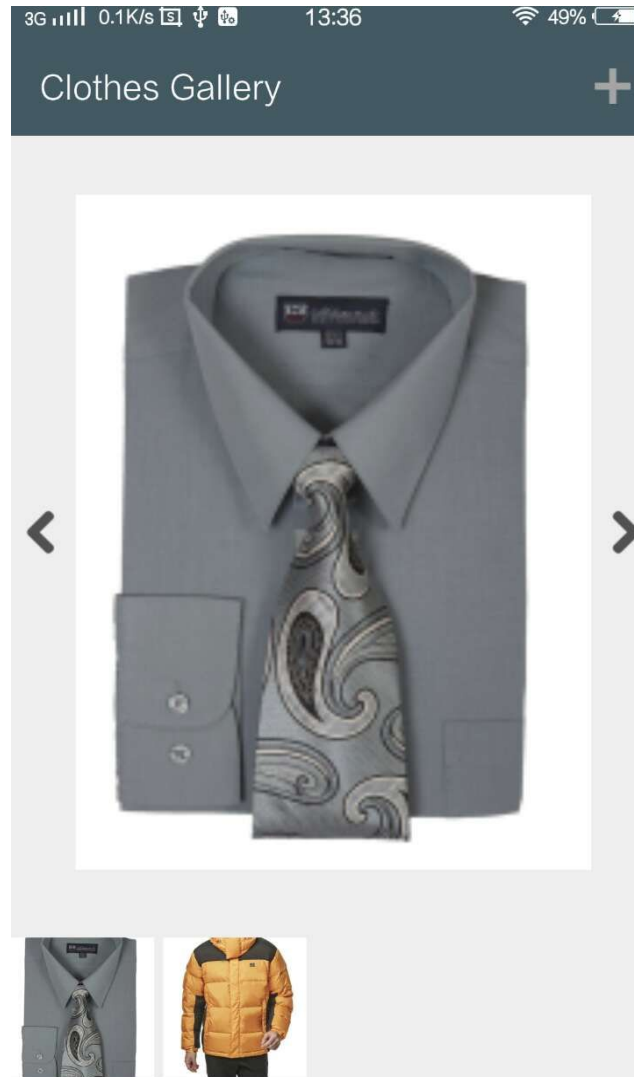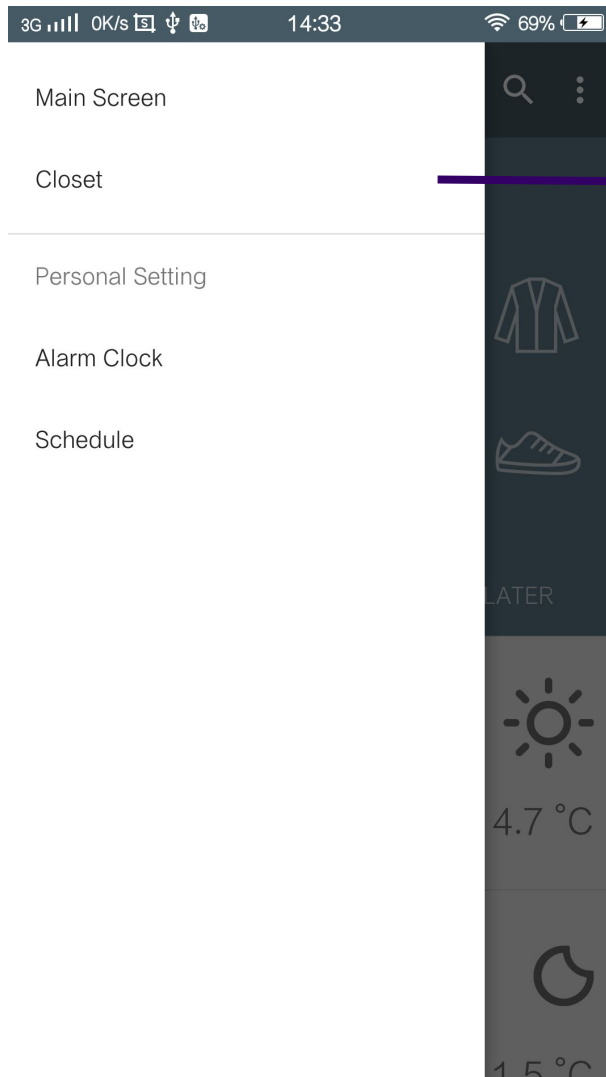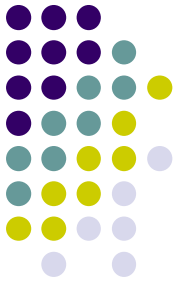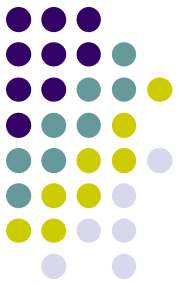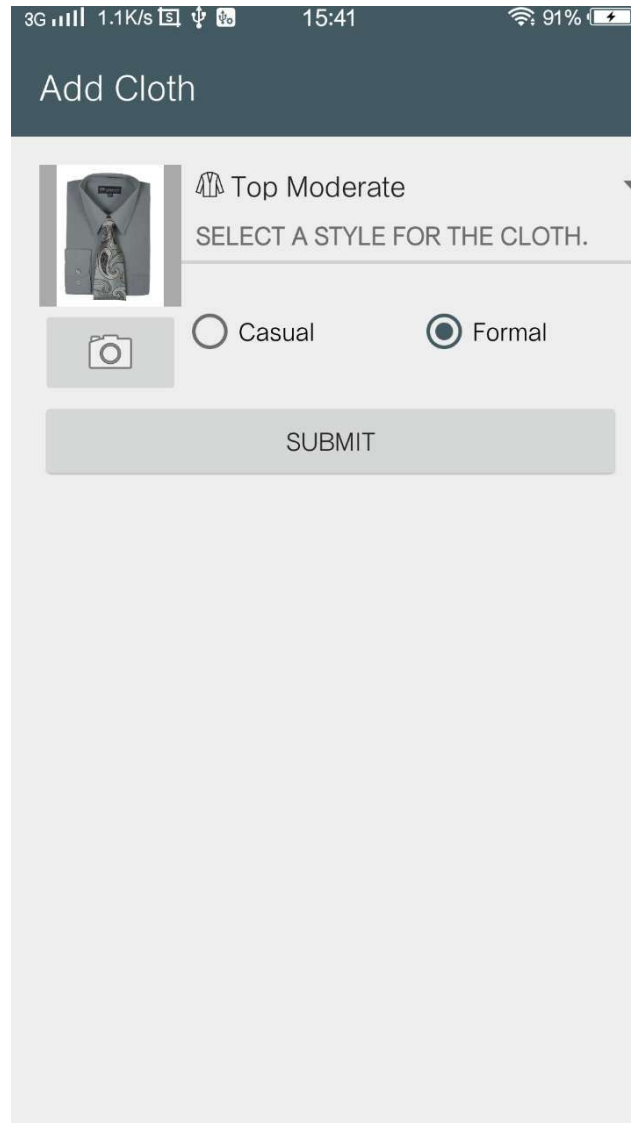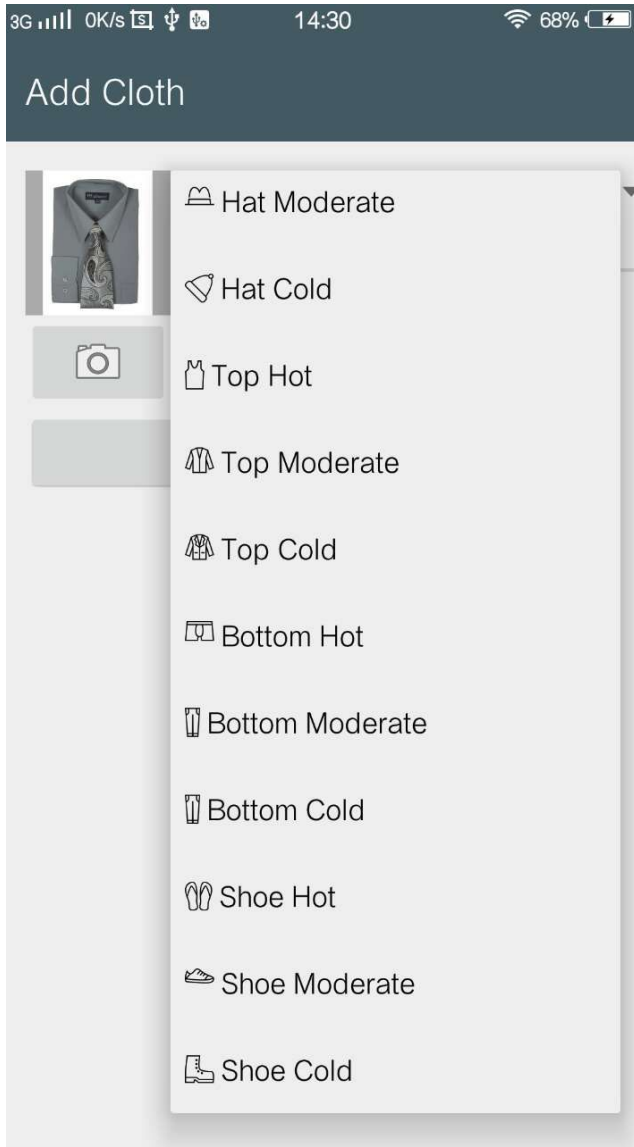

Average colors of four sampling points
and calculate the distance between the colors of different clothes
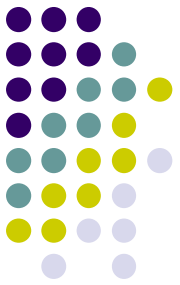
Implementation

Implementation: Closet

Implementation: Schedule

Implementation: Alarm
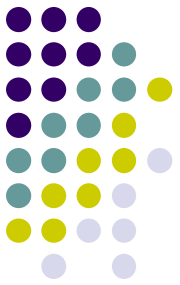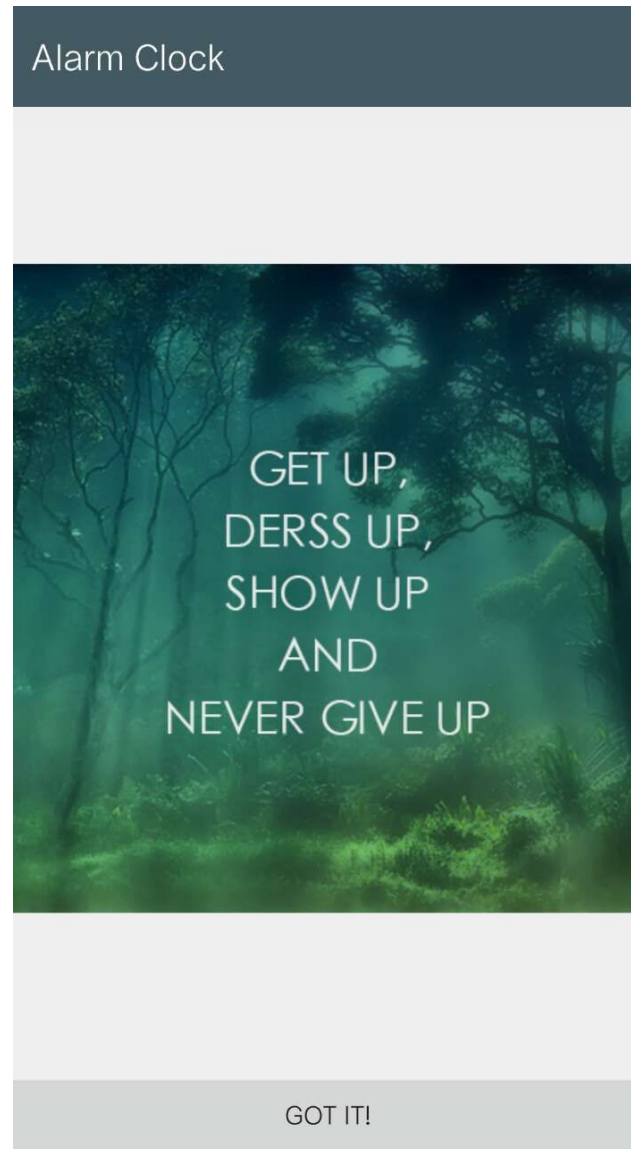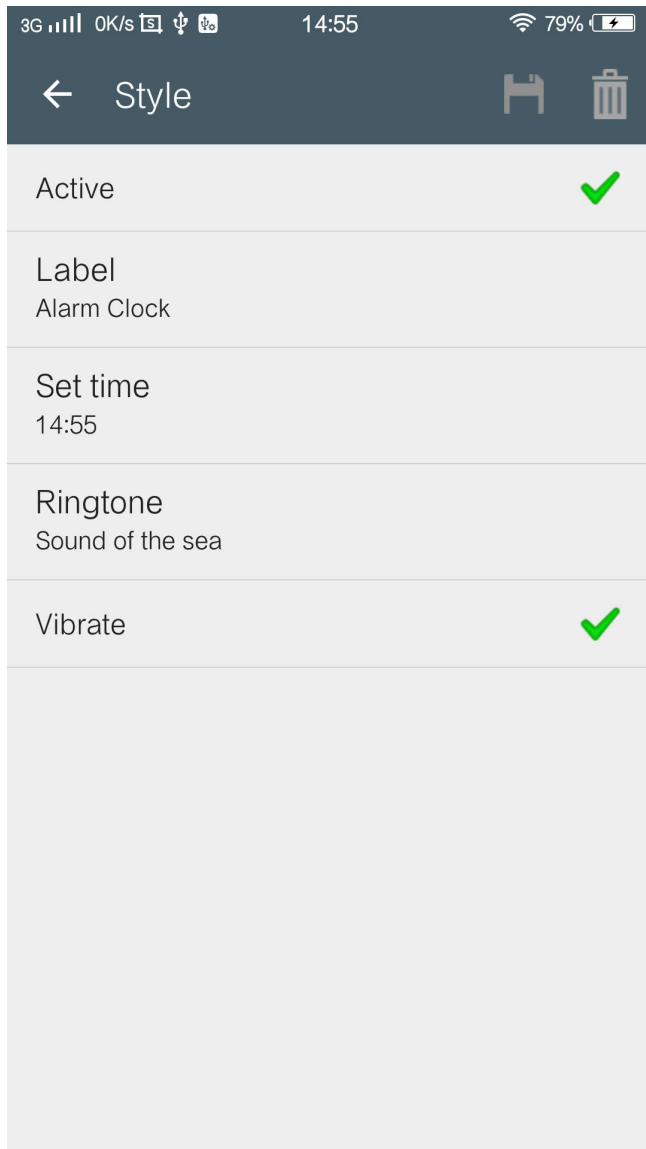
Implementation: Weather
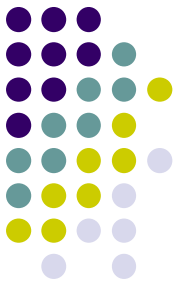
Evaluation

- User study: user satisfaction

Question?