

# Executive Summary

## Overview

Cash notes is a budget tracker written in SwiftUI designed to put you back in control of money. Users could conveniently write down every bill record like a notebook.

## Discussion

I find lots of bookkeeping applications in the market require us to count each record into a specific category in case of further track. But I am not able to make good use of it and consider that it would be better without the category option.

Cash notes is such an application that users don't need to get their payment into a specific category. Users could easily add, update and search their records after selecting the specific day, month or year via the date picker. Users could get spending visualization on the chart view. Cash notes support both Portrait and Landscape layout and are adaptive to various devices.

## Technical Details

1. Core data + SwiftUI - saving structured data
  - a. Set up a Core Data Model (Attributes, Relationships)
  - b. Save data
  - c. Update Data
  - d. Delete Data
2. Fetch from core data - @fetchrequest
  - a. NSSortDescriptor - Sort fetch results
  - b. Predicate - Dynamic fetch data
    - i. NSPredicate
    - ii. NSCompoundPredicate
  - c. Fetchrequest with an input instead of the fixed date (using children view to set up a fetchresults variable to pass view to parent view)
3. Calendar / Date
  - a. Calendar with custom size popover view
  - b. Date Picker / Month Picker/ Year Picker