Dominic Drury

Budget Buddy

Budgeting for The EVERY person

A green robot with a sign on a clipboard

Description automatically generated

Table of Contents

[Document Revision History 2](#_Toc174209970)

[Project Overview 2](#_Toc174209971)

[Version 2](#_Toc174209972)

[Purpose 2](#_Toc174209973)

[Scope 2](#_Toc174209974)

[Requirements 2](#_Toc174209975)

[Functional 2](#_Toc174209976)

[Non-Functional 2](#_Toc174209977)

[Technical 2](#_Toc174209978)

[Design 2](#_Toc174209979)

[System Architecture 2](#_Toc174209980)

[User Interface Design 2](#_Toc174209981)

[Screens 3](#_Toc174209982)

[Fragments 3](#_Toc174209983)

[Database Design 4](#_Toc174209984)

[Development 4](#_Toc174209985)

[Development Environment 4](#_Toc174209986)

[Source Control 4](#_Toc174209987)

[Coding Standards 4](#_Toc174209988)

[Testing 4](#_Toc174209989)

[Testing Strategy 4](#_Toc174209990)

[Test Cases 4](#_Toc174209991)

[Test Results 4](#_Toc174209992)

[Deployment 4](#_Toc174209993)

[Deployment Process 4](#_Toc174209994)

[Versioning 4](#_Toc174209995)

[Release Notes 4](#_Toc174209996)

[Maintenance 4](#_Toc174209997)

[Support and Maintenance Plan 4](#_Toc174209998)

[Bug Reporting and Tracking 4](#_Toc174209999)

[Appendices 4](#_Toc174210000)

[Glossary 4](#_Toc174210001)

[References 4](#_Toc174210002)

[Additional Notes 5](#_Toc174210003)

# Document Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Author** | **Comments** |
| 0.0 | 08/04/2024 | Dominic Drury | Initial creation of document and addition of wireframes |
| 0.01 | 08/10/2024 | Dominic Drury | Completion of initial sections using a template |
| 0.02 | 02/24/2025 | Dominic Drury | Created rough draft of home screen that included title, add button, calculate button, income button, settings button, and recycler view. |
| 0.021 | 02/28/2025 | Dominic Drury | Created functionality for recycler view to display preset data and a drop down menu for selecting budget |
| 0.022 | 03/02/2025 | Dominic Drury | Made slight adjustments to the home screen UI that was added on 02/24/25. I added texts for income, expenses, and the money left. I also added a recycler view to display the percentile of the budget types. |
| 0.03 | 03/03/2025 | Dominic Drury | Created a database for budget items and adjusted recycler view to take the database data instead of provided hardcoded data |
| 0.031 | 03/07/2025 | Dominic Drury | Used database to get array list of bill types, fill budget percentile recycler view with list from bill types, and calculate the percentage of bills that each type take up. Calculated total of expenses from displayed budget. |
| 0.032 | 03/10/2025 | Dominic Drury | Added functionality to the add budget item button to allow for adding new items to the budget database, then updating the recycler views for the budget recycler view and budget percentiles. |
| 0.033 | 03/17/2025 | Dominic Drury | Added a variable to budget items for handling which budget is selected from the drop down and only displaying the budget items from that budget.  Added functionality to the Cancel button of add budget item. |
| 0.034 | 03/18/2025 | Dominic Drury | Added an add button for creating a new budget, created functionality for the button, and ensured that database updates appropriately when that new budget is populated, but does not save if that budget is left empty on close. |
| 0.035 | 03/20/2025 | Dominic Drury | Added functionality for a longItemClick on the budget currently being displayed and the option to delete that item is given to the user. If confirmed the database and both the budget and percentile recycler views are updated. Updated the SQLite db to accommodate for an added table of incomes. |
| 0.04 | 03/24/2025 | Dominic Drury | Created UI for income, updated database and validated CRUD functionality of incomes. Moved calculating expenses to happen whenever budget recycle view is loaded instead of being in onCreate. |
| 0.041 | 03/25/2025 | Dominic Drury | Added functionality to the income recycleview so that it displays the incomes for the budget currently being displayed. Added functionality for accessing a fragment to handle adding new incomes to the budget. |
| 0.042 | 03/31/2025 | Dominic Drury | Created UI for adding new incomes. Altered the logic for adding a new budget so that all fragments are removed when a new budget is added. |
| 0.043 | 04/02/2025 | Dominic Drury | Added functionality for deleting income items and updating totals both on the income fragment and the main activity. Added text views to image buttons to label each. |
| 0.05 | 04/03/2025 | Dominic Drury | Added sorting functionality to the budget item recycler view. Added sorting functionality to income recycler view. |
| 0.051 | 04/09/2025 | Dominic Drury | Created a custom class to force whole application to be set to light mode in order to ensure a consistent and clean UI. |
| 0.052 | 04/14/2025 | Dominic Drury | Got feedback on current UI, made adjustments like adding extra labels to buttons and recycler views and adjusting sizes of UI elements to reflect suggestions |
| 0.053 | 04/23/2025 | Dominic Drury | Updates account UI element to adding a new bill so that it displayed a dropdown menu of previously used accounts as well as maintaining its edit text functionality. |
| 0.054 | 04/24/2025 | Dominic Drury | Attempted to fix adding bill issue where it does not move up when keyboard is in use to prevent UI elements from being blocked. Solution to have the fragment move failed, so the solution of having the fragment be at the top center of the fragment container was used. I successfully adjusted the income UI to better display the columns without unnecessary white space in the vertical columns. |
| 0.06 | 04/25/2025 | Dominic Drury | I changed the edit text for bill types to be a drop down menu of preselected types of bills the user might use to make the budget percentile more valuable as well as improving the understanding of what that section is meant to mean. I set up the account part of the UI for adding new bills to display a full list of previously used accounts when the box is tapped and still show the keyboard so the user can easily type in an account if it isn’t a part of the list. I changed the due date UI to display the integer as a date (ex: 1st instead of 1). Restored functionality to the delete long click for the budget recycler view that would break when the list was sorted. |
| 0.061 | 05/05/2025 | Dominic Drury | Added input validation for adding a new bill to a budget.  Altered the adding income UI to have a drop down for the frequency so the user can choose from weekly, biweekly, monthly, or annually and the monthly income that is displayed and used is adjusted accordingly for the varying type of income. |
| 0.07 | 05/06/2025 | Dominic Drury | Added calculate UI, added functionality for a dropdown menu for dates of the next payday and added functionality to get day of the month from the phone system and displaying it as a date (1st instead of 1). |
| 0.071 | 05/08/2025 | Dominic Drury | Added functionality to calculate button that calculates the amount of money the user will have left in their account when the next payday comes around given the amount of money left in the account by iterating through the bills listed in the selected budget. Added a delete budget button and added logic for that button to delete whatever budget is currently selected or display a toast message if no budget is selected. |
| 0.08 | 05/12/2025 | Dominic Drury | Added a black border to all fragments to improve the look of the UI. Increased the height of the fragment container to cover the budget selector, add, and delete buttons. Now the income and settings pages will cover the inappropriate UI elements. Then I added padding to the rest of the fragments, so the buttons are not covered when appropriate. Added functionality to the delete all budgets on the settings page so that all budgets and all budget items can be deleted by user. |

# Project Overview

## Version

1.0

## Purpose

BudgetBuddy is a mobile application designed to assist in keeping track of a user’s budget, allow for users to share budgets with each other, and calculate the money a user has left after bills by taking the total amount due by the budget until the next payday and subtracting that from a given amount of finances that the user has.

## Scope

The scope of BudgetBuddy is to aid people in managing their finances, sharing budgets with people they share bills with, and helping to make sure that they do not spend money that should be saved for a bill.

# Requirements

## Functional

## Non-Functional

## Technical

# Design

## System Architecture

## User Interface Design

The user interface is made to be as simple and straightforward as possible. With financial issues being one of the biggest stress factors to begin with, this app seeks to help alleviate that stress from the first day of installation.

The main screens are:

* The home screen
* The Settings screen
* The Income screen

Fragments that will display over the home screen are:

* The add new bill screen
* The calculate screen

### Screens

A screenshot of a computer

Description automatically generated

### Fragments

A screenshot of a computer

Description automatically generated

A screen shot of a computer

Description automatically generated

## Database Design

# Development

## Development Environment

## Source Control

## Coding Standards

# Testing

## Testing Strategy

## Test Cases

## Test Results

# Deployment

## Deployment Process

## Versioning

## Release Notes

# Maintenance

## Support and Maintenance Plan

## Bug Reporting and Tracking

# Appendices

## Glossary

## References

Wireframes made using Draw.io

Initial Template for document gotten from combining online resources and previous coursework from SNHU

## Additional Notes