

Team Name: **Android FLASHians**

Team members:

1. 22BCE9119 - Pushadapu Lalitha Sahithi
2. 22BCE9732 - Gosula Sruthi
3. 22BCE9783 - Mohammad Farheen Naz
4. 22BCE9993 - Shaik Apsar Safiya

Problem Statement

- In today's fast-paced world, managing personal finances effectively has become increasingly challenging.
- Most people rely on manual tracking methods like notes, spreadsheets, or memory, which are prone to errors, forgetfulness, and lack of real-time insights.
- Without a streamlined and visual tool to monitor income, expenses, and savings, individuals often lose control over their financial habits and struggle to make informed spending decisions.

Solution: **Xpensor**

- An easy-to-use Android app that helps users track daily expenses and incomes, view real-time balances, and manage their finances effortlessly through a clean, intuitive dashboard.

Features:

- Add transactions (expense/income) with optional description
- Update or delete any transaction
- Search transactions by name or description
- Sort transactions from newest to oldest and vice versa
- Real-time dashboard showing total balance, income, and expenses
- Floating Add Transaction button
- Toast messages for transaction actions
- Clean, user-friendly UI with splash screen and custom icon

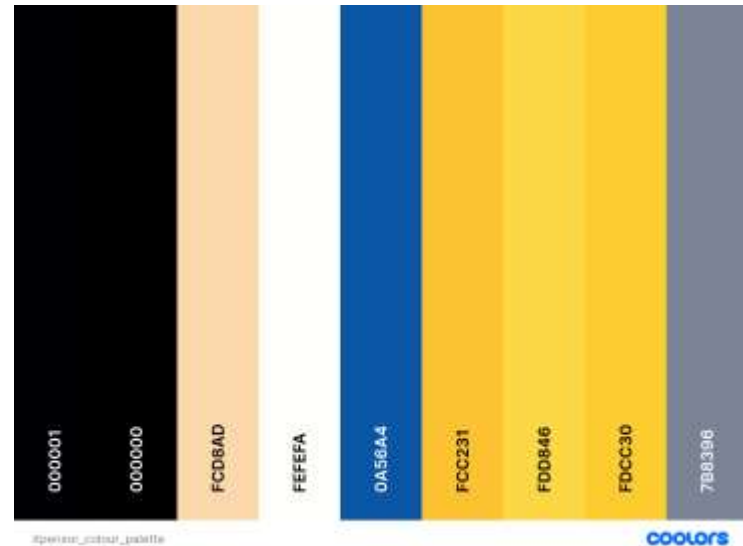
App Icon & Colour Palette

App Icon:



Resource: Figma

Colour Palette:



Resource: Colors

Concepts Used

XML Layout Concepts:

- ConstraintLayout — Position elements flexibly using constraints
- LinearLayout — Vertical stacking for scrollable content
- ScrollView — Enables vertical scrolling for long forms
- CoordinatorLayout — For Material FAB & Snackbars
- Material Components
- MaterialCardView — Transaction & dashboard cards
- MaterialButton — Add, Update, Delete transaction buttons
- FloatingActionButton — Add new transaction
- TextInputLayout + TextInputEditText — Form fields with validation
- AutoCompleteTextView — Label dropdown
- RadioGroup & RadioButton — Expense/Income selection
- RecyclerView — Display transaction list
- Toolbar — Custom title bar
- ImageButton — Close and sort actions
- TextView — Labels, amounts, dates
- Drawable Icons — EditText icons
- app:cardCornerRadius, app:cardElevation — Card styling
- app:layout_constraintXXX — Constraints
- android:inputType — Keyboard types

Kotlin Code Concepts:

- View Binding — Access views easily
- Room Database — Entities, DAO, Database
- ViewModel + LiveData — Observe data changes
- ListAdapter + DiffUtil — RecyclerView updates
- RecyclerView Adapter — Custom adapter
- Intent Passing — Data between activities
- MaterialDatePicker — Date selection
- AutoCompleteTextView — Labels dropdown
- Snackbar — Quick messages
- Companion Objects — Constants
- SafeArgs / putExtra — Data passing
- String & Number Formatting — Currency format

Future Scope

- Add monthly and yearly expense reports with graphical charts.
- Integrate cloud sync using Firebase Firestore for multi-device access.
- Include voice-based transaction entry and real-time notification reminders.

Team Member Contributions

Pushadapu Lalitha Sahithi

- Designed app screens using XML layouts
- Implemented Room Database setup and entity classes
- Created ViewModel and LiveData integration

Shaik Apsar Safiya

- Developed Add Transaction and Update Transaction features
- Handled form validations and MaterialDatePicker integration
- Worked on dashboard balance calculations

Gosula Sruthi

- Created RecyclerView and custom TransactionAdapter
- Integrated ListAdapter with DiffUtil for efficient updates
- Designed splash screen and custom app icon using Figma

Mohammad Farheen Naz

- Implemented sorting of transactions by date (newest to oldest & vice versa)
- Developed search functionality for transactions
- Integrated Snackbar and Toast feedback messages
- Prepared the presentation slides