

# **1. INTRODUCTION**

## **1.1 OVERVIEW**

A personal finance management apps come with a range of features that can help you manage your money more efficiently. They allow you to create a budget and track your spending, categorize expenses, and set financial goals. By using a personal finance management app, you can take control of your finances, improve your financial literacy, and make informed decisions about your money.

## **1.2 PURPOSE**

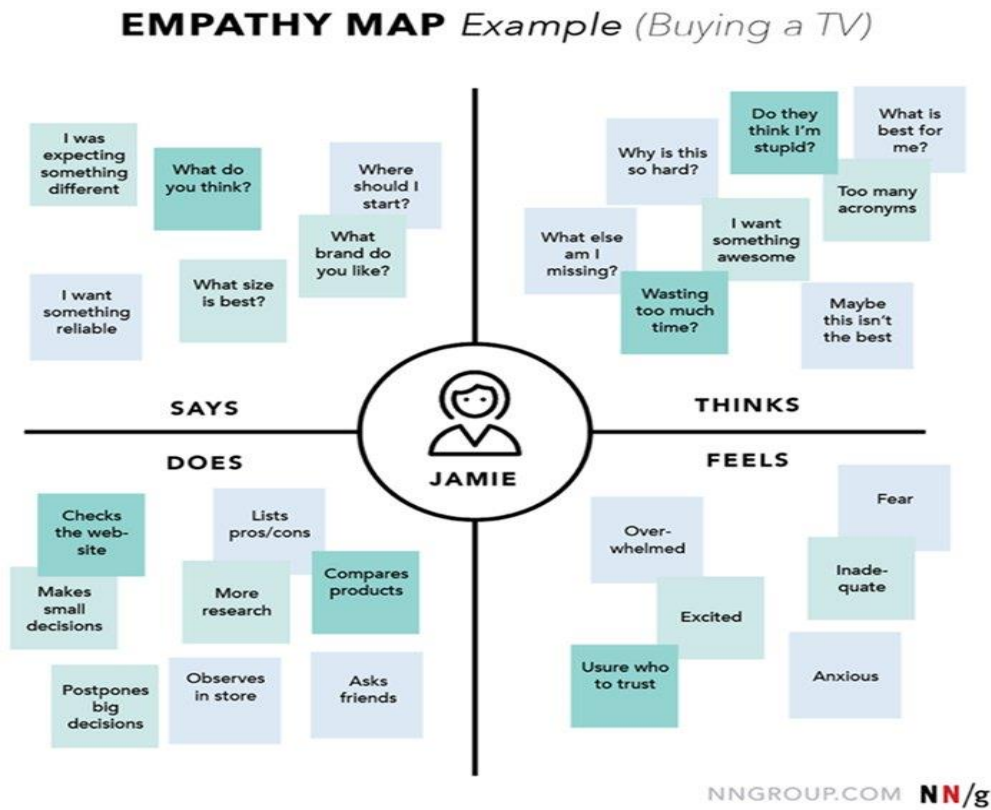
The purpose of a personal finance management app is to help individuals track their expenses, budget their money, and plan for their financial goals . It provides users with a clear understanding of their spending patterns and helps them make informed decisions about their finances.

The app also offers customized tools that allow users to create and manage their budgets, set savings goals, and monitor their progress towards achieving their financial objectives.

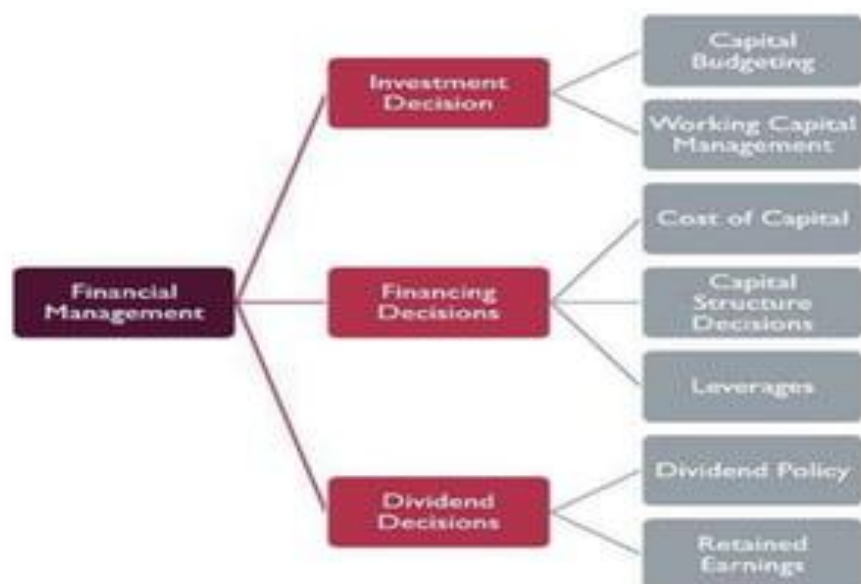
Ultimately, the app enables individuals to take control of their finances, manage their debts, and build a secure financial future.

## 2. PROBLEM DEFINITION & DESIGN THINKING

### 2.1 EMPATHY MAP

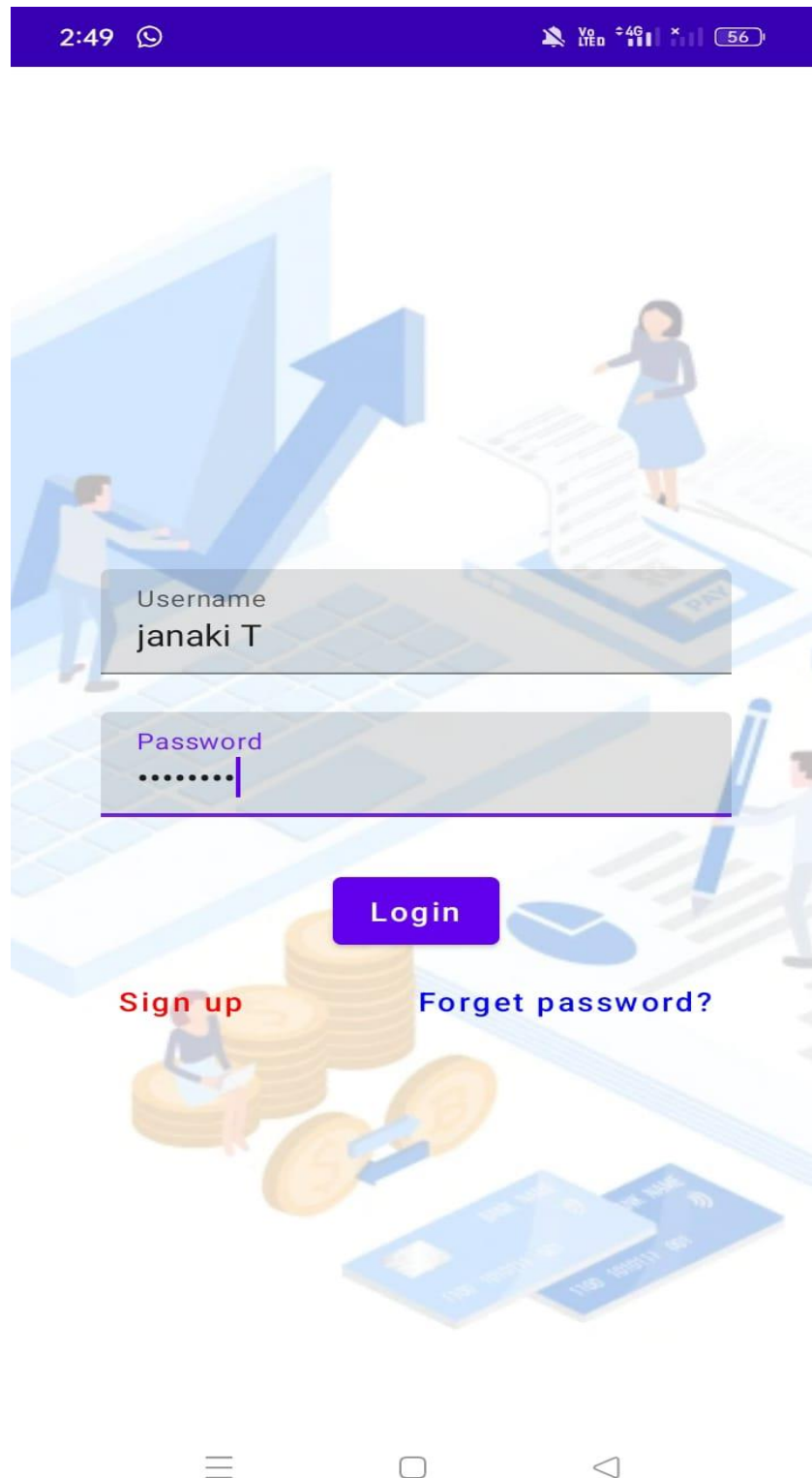


### 2.2 IDEATION & BRAINSTROMING MAP



### 3. RESULT

#### LOGIN PAGE



8:04



# Welcome To Expense Tracker



Add  
Expenses

Set Limit

View  
Record



8:03

27

Item Name

Item Name  
orange

Quantity of item

Quantity  
2kg

Cost of the item

Cost  
240

Submit

Add Expenses

Set Limit

View Record

## VIEW RECORDS

8:04



# View Records

Item\_Name: fruits  
Quantity: 2kg  
Cost: 240

Item\_Name: fruits  
Quantity: 2kg  
Cost: 240

Item\_Name: orange  
Quantity: 2kg  
Cost: 240

Item\_Name: orange  
Quantity: 2kg  
Cost: 240

Add  
Expenses

Set Limit

View  
Record



8:03



## Monthly Amount Limit

Set Amount Limit

1000

Set Limit

Remaining Amount: 40

Remaining Amount: 1000

Remaining Amount: 1500

Remaining Amount: 1500

Remaining Amount: 1500

Remaining Amount: 1500

Remaining Amount: 1500

Remaining Amount: 1500

Remaining Amount: 1500

Remaining Amount: 1500

Remaining Amount: 1000

Add  
Expenses

Set Limit

View  
Record



## **4. ADVANTAGES & DISADVANTAGES**

### **4.1 ADVANTAGES**

1. A personal finance management app can help you keep track of how much money you are spending on various things so that you can make adjustments to your spending habits.
2. Many personal finance apps offer insights into your spending habits, such as how much you spend on groceries or entertainment each month.
3. Personal finance apps are often very easy to use, saving you time and effort compared to tracking expenses manually.
4. By tracking your expenses and offering insights into your spending habits, a personal finance app can help you save money over time.
5. Many personal finance apps provide reminders for you to pay bills or to stick to your budget.

### **4.2 DISADVANTAGES**

1. Some personal finance apps may not have adequate security measures in place to protect your personal and financial information.
2. Since personal finance apps rely on users to input data, there is a risk of errors being made in the information entered.
3. Even with the help of a personal finance app, managing your finances still requires time and effort.
4. Some personal finance apps may not offer all of the features and functionality that you need.
5. Some personal finance apps may require a subscription or charge fees for certain features.



## **5. APPLICATION**

1. The app allows users to set budgets for various categories such as groceries, rent, and entertainment. Users can track their spending against those budgets.
2. The app enables users to track their expenses by linking their bank accounts and credit cards to the app.
3. Users can rest assured that their financial with the app

## **6. CONCLUSION**

Personal finance management apps can be an effective tool to track and manage your finances. They offer a range of features that simplify the process of budgeting, saving, investing and tracking expenses. It is important to choose an app that suits your individual needs and preferences in order to achieve financial success.

## **7. FEATURE SCOPE**

A personal finance management app should allow users to create and track their budget. It should enable users to monitor their expenses by categorizing them and keeping a log of them. The app should allow users to access their financial data from multiple devices. The app should ensure the security and privacy of user data through encryption, two-factor authentication.

## 8. APPENDIX

### A. SOURCE CODE

```
package com.example.expensetracker

import android.annotation.SuppressLint
import android.content.Context
import android.content.Intent
import android.os.Bundle
import android.widget.Toast
import androidx.activity.ComponentActivity
import androidx.activity.compose.setContent
import androidx.compose.foundation.layout.*
import androidx.compose.material.*
import androidx.compose.runtime.*
import androidx.compose.ui.Alignment
import androidx.compose.ui.Modifier
import androidx.compose.ui.graphics.Color
import androidx.compose.ui.platform.LocalContext
import androidx.compose.ui.text.font.FontWeight
import androidx.compose.ui.text.style.TextAlign
import androidx.compose.ui.unit.dp
import androidx.compose.ui.unit.sp

class AddExpensesActivity : ComponentActivity() {
    private lateinit var itemsDatabaseHelper: ItemsDatabaseHelper
    private lateinit var expenseDatabaseHelper: ExpenseDatabaseHelper
    @SuppressLint("UnusedMaterialScaffoldPaddingParameter")
```

```

override fun onCreate(savedInstanceState: Bundle?) {

    super.onCreate(savedInstanceState)

    itemsDatabaseHelper = ItemsDatabaseHelper(this)
    expenseDatabaseHelper = ExpenseDatabaseHelper(this)

    setContentView (

        Scaffold(

            // in scaffold we are specifying top bar.

            bottomBar = {

                // inside top bar we are specifying

                // background color.

                BottomAppBar(backgroundColor = Color(0xFFadbf4),

                    modifier = Modifier.height(80.dp),

                    // along with that we are specifying

                    // title for our top bar.

                    content = {

                        Spacer(modifier = Modifier.width(15.dp))

                        Button(

                            onClick =
{startActivity(Intent(applicationContext,AddExpensesActivity::class.java))},

                            colors = ButtonDefaults.buttonColors(backgroundColor = Color.White),

                            modifier = Modifier.size(height = 55.dp, width = 110.dp)

                        )

                    }

                    Text(

                        text = "Add Expenses", color = Color.Black, fontSize = 14.sp,

                        textAlign = TextAlign.Center

                    )

```

```
}
```

```
Spacer(modifier = Modifier.width(15.dp))
```

```
Button(  
    onClick = {  
        startActivity(  
            Intent(  
                applicationContext,  
                SetLimitActivity::class.java  
            )  
        )  
    },  
    colors = ButtonDefaults.buttonColors(backgroundColor = Color.White),  
    modifier = Modifier.size(height = 55.dp, width = 110.dp)  
)  
{  
    Text(  
        text = "Set Limit", color = Color.Black, fontSize = 14.sp,  
        textAlign = TextAlign.Center  
    )  
}
```

```
Spacer(modifier = Modifier.width(15.dp))
```

```
Button(  
    onClick = {  
        startActivity(  
            Intent(  
                applicationContext,  
                SetLimitActivity::class.java  
            )  
        )  
    },  
    colors = ButtonDefaults.buttonColors(backgroundColor = Color.White),  
    modifier = Modifier.size(height = 55.dp, width = 110.dp)  
)  
{  
    Text(  
        text = "Set Limit", color = Color.Black, fontSize = 14.sp,  
        textAlign = TextAlign.Center  
    )  
}
```

```

        Intent(
            applicationContext,
            ViewRecordsActivity::class.java
        )
    )
},
colors = ButtonDefaults.buttonColors(backgroundColor = Color.White),
modifier = Modifier.size(height = 55.dp, width = 110.dp)
)
{
    Text(
        text = "View Records", color = Color.Black, fontSize = 14.sp,
        textAlign = TextAlign.Center
    )
}

}

)

}

) {
    AddExpenses(this, itemsDatabaseHelper, expenseDatabaseHelper)
}

}

}
}
}

```

```

@SuppressLint("Range")

```

@Composable

```
fun AddExpenses(context: Context, itemsDatabaseHelper: ItemsDatabaseHelper,  
expenseDatabaseHelper: ExpenseDatabaseHelper) {
```

```
    Column(  
        modifier = Modifier
```

```
        .padding(top = 100.dp, start = 30.dp)
```

```
        .fillMaxHeight()
```

```
        .fillMaxWidth(),
```

```
        horizontalAlignment = Alignment.Start
```

```
    ) {
```

```
        val mContext = LocalContext.current
```

```
        var items by remember { mutableStateOf("") }  
        var quantity by remember { mutableStateOf("") }  
        var cost by remember { mutableStateOf("") }  
        var error by remember { mutableStateOf("") }
```

```
        Text(text = "Item Name", fontWeight = FontWeight.Bold, fontSize = 20.sp)
```

```
        Spacer(modifier = Modifier.height(10.dp))
```

```
        TextField(value = items, onValueChange = { items = it },
```

```
            label = { Text(text = "Item Name") })
```

```
        Spacer(modifier = Modifier.height(20.dp))
```

```
        Text(text = "Quantity of item", fontWeight = FontWeight.Bold, fontSize = 20.sp)
```

```
        Spacer(modifier = Modifier.height(10.dp))
```

```
        TextField(value = quantity, onValueChange = { quantity = it },
```

```
            label = { Text(text = "Quantity") })
```

```
Spacer(modifier = Modifier.height(20.dp))
```

```
Text(text = "Cost of the item", fontWeight = FontWeight.Bold, fontSize = 20.sp)
```

```
Spacer(modifier = Modifier.height(10.dp))
```

```
TextField(value = cost, onChange = { cost = it },  
    label = { Text(text = "Cost") })
```

```
Spacer(modifier = Modifier.height(20.dp))
```

```
if (error.isNotEmpty()) {  
    Text(  
        text = error,  
        color = MaterialTheme.colors.error,  
        modifier = Modifier.padding(vertical = 16.dp)  
    )  
}
```

```
Button(onClick = {  
    if (items.isNotEmpty() && quantity.isNotEmpty() && cost.isNotEmpty()) {  
        val items = Items(  
            id = null,  
            itemName = items,  
            quantity = quantity,  
            cost = cost  
        )  
    }  
})
```

```
val limit= expenseDatabaseHelper.getExpenseAmount(1)
```

```

        val actualvalue = limit?.minus(cost.toInt())

        // Toast.makeText(mContext, actualvalue.toString(), Toast.LENGTH_SHORT).show()

        val expense = Expense(

            id = 1,

            amount = actualvalue.toString()

        )

        if (actualvalue != null) {

            if (actualvalue < 1) {

                Toast.makeText(mContext, "Limit Over", Toast.LENGTH_SHORT).show()

            } else {

                expenseDatabaseHelper.updateExpense(expense)

                itemsDatabaseHelper.insertItems(items)

            }

        }

    }) {

        Text(text = "Submit")

    }

}

}

```