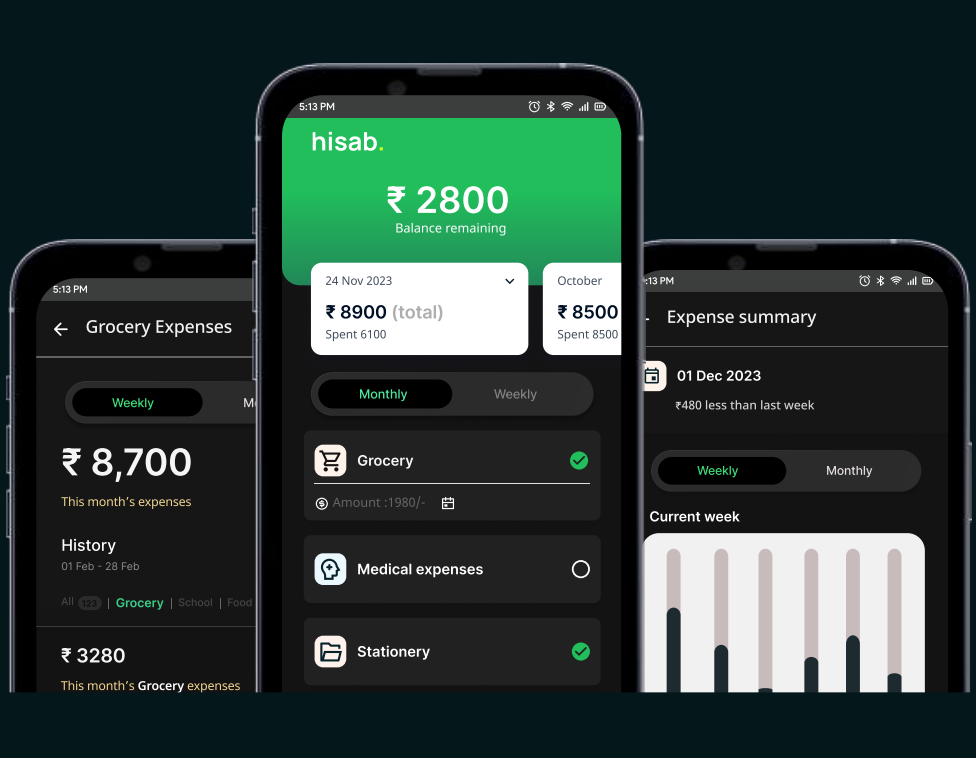
HISAB

• *Every transaction counts* •

hisab.



UX Case study | Task Duration- 3 days | Submitted by - Rupal Sharma

The Problem

Blue collar families in Tier 2 cities are constantly wondering where "all their money goes" by the 3rd week of every month. This forces them to seek soft/formal credit to cover ongoing expenses like school fees or unexpected expenses like hospitalisation - thereby pushing them further down in the debt cycle. How can we solve this without increasing their current monthly income?

Essentially get these families from "I don't know what's happening" to "I feel I am in control!"

Major key words-problems

- No control
- Debt cycle
- Credit seeking
- Constant-Dilemma
- Lack of knowledge
- Discomfort
- Feeling lost/ powerless

The Process

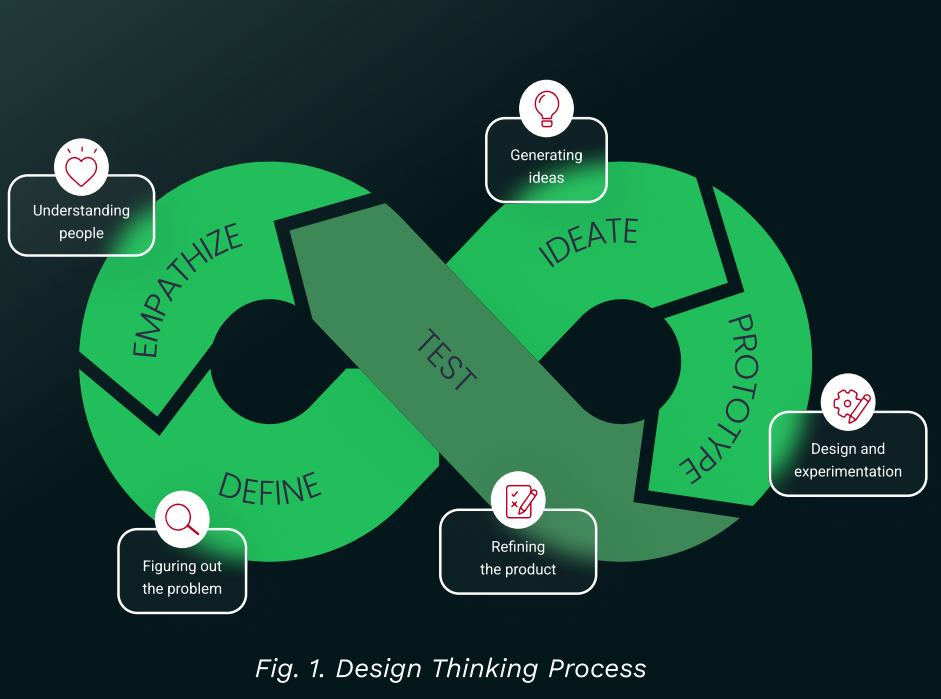


Fig. 1. Design Thinking Process

Discover/ Empathize	Define	Ideate	Design/ Prototype
• Desk/Secondary research • Primary Research: User Interviews • User Research (Thematic analysis)	• Persona map	• User flow • Card Sorting • Information Architecture	• Style Guide • Lo-Fidelity wireframes • High-fidelity wireframes

Discover

This step in the design process helps in **identifying** and **understanding the users** and **user needs** at a ground level. It will also help in identifying the **pain and gain areas**, opportunities and come up with a solution that can help navigate and solve the problem.

Secondary Research

Some of the main reasons behind the financial challenges faced by blue collar worker are:

- Informal Employment and Job Insecurity
  Reference: "Informal Employment in Developing Countries: Opportunity or Last Resort?" by Perry, Maloney, and Arias.
- Lack of Financial Literacy and literacy
  Reference: Financial Literacy and Financial Planning: Evidence from India by Cole, Sampson, and Zia.
- Limited Access to Formal Financial Services
  Reference: Access to Financial Services in India, Reserve Bank of India
- Low income results in no emergency funds

It is crucial to acknowledge the diverse socio-economic landscape in India, which results in a wide range of financial challenges for blue-collar workers. Moreover, these challenges may be intertwined, with one influencing another. This also poses as a necessary indicator to conduct a primary research in order to understand the financial challenges faced and the issues that may add fuel to the fire,

Primary Research

A comprehensive and diverse research approach was employed, taking into consideration the insights gained from secondary research as well as the specific information required from primary research.

User research focuses on understanding user behaviour, needs and motivations, pain areas, their thought process, through observation techniques and task analysis.

Method	Sample size	Sampling type
Ethnographic study- Semi-structured interview	12	Judgmental sampling

Ethnographic study- method triangulation

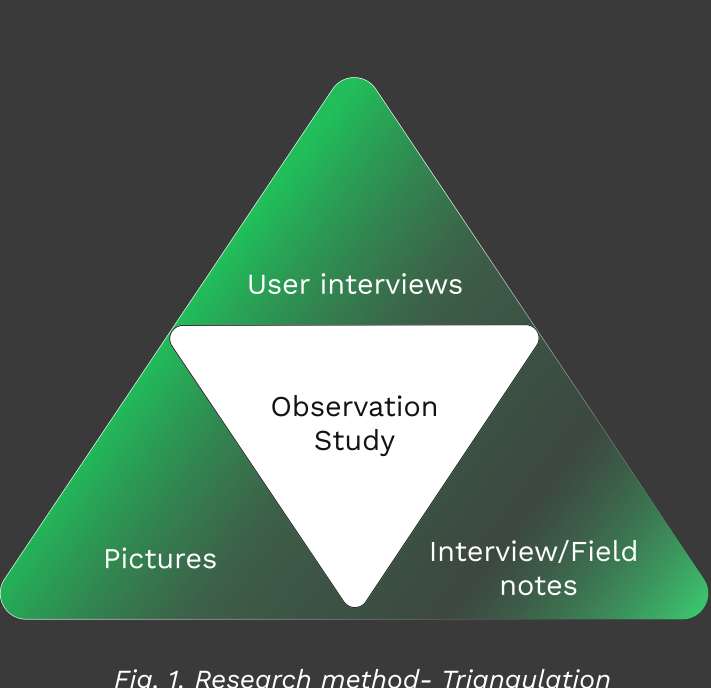


Fig. 1. Research method- Triangulation

Overall, the ethnographic study, combined with triangulation method and technology observations, enabled me to delve deep into the lives of the workers, understand their perspectives, uncover hidden insights, and ultimately aid in the development of targeted solutions that address their unique/ common challenges.

Interview Question:

I interviewed **12** people (Blue collar workers) who work at a school as security guards, cleaning staff and bus drivers/ conductors to understand the difficulties they face in their day to day life, while managing finance, etc. These interviews also helped in understanding and identifying the difference between what they were saying and what they were actually doing. Interview questions are as follows:

1. What is your name, age, occupation?
2. Tell me about your educational qualifications/ did you go to school?
3. Why did you quit studying? (If they quit)
4. How many members are there in your family and how many of those are working members?
5. Do you have your own house or do you stay on rent?
6. What are your daily expenses?
7. How much do you pay daily to travel to your workplace (incase you don't walk there)?
8. How old are your kids, do they go to school/college?
9. Which medium are they studying in (English medium or Hindi medium)
10. Which standard and how much is their school/college fees?
11. Do you pay the school/college fees every month, quarterly or every six months?
12. Do you pay the fees in cash or do you pay online ?
13. How does your day at work look like, what time do you leave home?
14. Do you get paid in cash or via bank account?
15. When you deposit(if they get paid in cash) / withdraw your salary from the bank (If they get paid via bank transfer) ?
16. What are your monthly family expenses?
17. Do you keep track of your expenses/ keep a record anywhere?
18. Do you have a keep a monthly spending budget?
19. Are you able to save any money ? If yes how much and at what intervals?
20. Incase you're in need of money, who would you reach out for help?
21. Have you taken any loan and how do you pay the debt?

A thematic analysis was done by transcribing the interviews and the interview responses:

Interview responses → Transcriptions → Codes → Themes → Findings

Interview Findings

- 9 out of 12 people were educated only up to 10th std. and the rest barely went to school.
- 7 out of 12 had 2 only earning members in the family
- Only 4 out of 12 people used online payment apps like Paytm, Phonepe,etc.
- Most of them live in rented houses
- 1-2 members of every family knew how to use a smart phone
- Only 3 out of 12 people kept track of their family expenses, noted them down in a diary
- Some of them knew about school scholarships and most of them paid in installments or borrowed to pay.
- Only 4 out of the 9 people regularly (or every two months) saved up to pay for their children's tuition fees
- Most of them withdrew salary in cash for expenses
- Some of them took loans, reason being marriage or medical expenses
- Most of them did not keep track of their expenses " Samajh nahi aata kaise kare"
- Ineffective management of finance
- End up spending more than what they earn due to no emergency fund, therefore keep borrowing money
- 4 out of 12 people had heart issue or had a family member with heart problems and therefore spent on medication.
- When in need they end up borrowing either from relatives or informal money lenders who charge a high rate of interest
- Saving money was an issue because of lower payscales and high expenses
- Relying on others to track expenses also resulted in improper finance management
- No track of expenses resulted in low or no funds towards the end of the month
- Some of them believed if the had the money with them then they'd end up overspending and therefore gave all of their money to some other member of the family who managed it.
- Only 3 out of the 12 people were able to save money every month.
- Most of them had Ration cards which they did not use
- Most of them had to work throughout the day even 10-12 hours to make ends meet resulting in poor health
- Most of them withdrew all of their salary at the starting of the month
- Out of 12, six were females and 5 of them relied on the male members of the family to manage/ keep track of their expenses, if the expenses were tracked at all

Key Insights

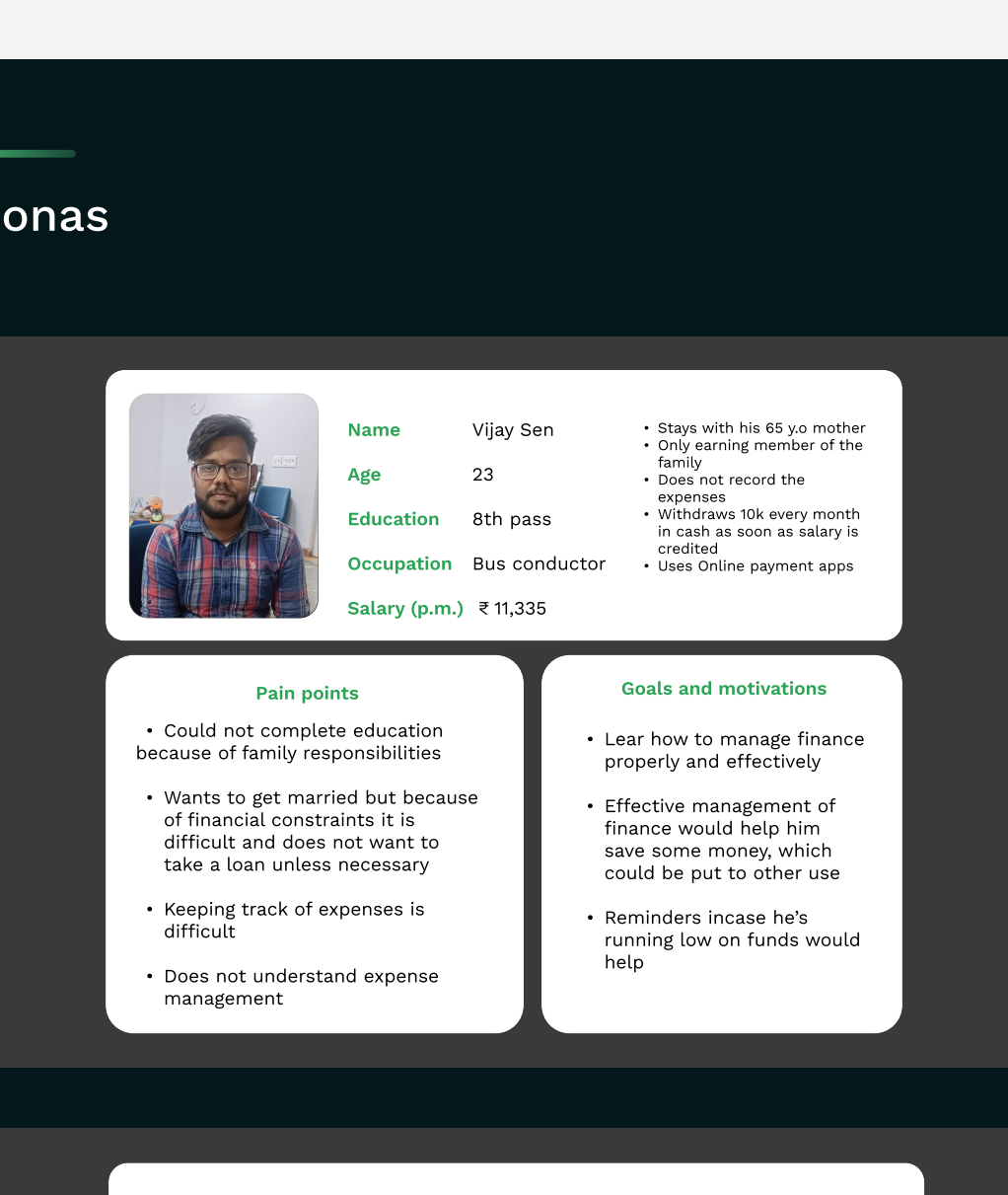
- Improper financial mangement
- Not keeping track of expenses resulting in shortage or no funds towards the end of the month
- Do not understand/ know about the importance of budgeting and effective finance management
- Absence of financial literacy
- No emergency funds
- Not using ration cards inspite of having them
- Borrowing from informal money lenders resulted in a lot of problems
- Withdrawing all of the monthly earning in one go resulted in wrongful spending
- Most females relied on the male members of the family to keep check of their family expenses
- Having no funds towards the end of month comes as a shock because expenses are not tracked

Define

This step in the design process helps in understanding the target audience and users better via methods like persona mapping, empathy mapping etc.

Personas

1.



Name: Vijay Sen
Age: 23
Education: 8th pass
Occupation: Bus conductor
Salary (p.m.): ₹ 11,335

- Stays with his 65 y.o mother
- Only earning member of the family
- Does not record the expenses
- Withdraws 10k every month in cash as soon as salary is credited
- Uses Online payment apps

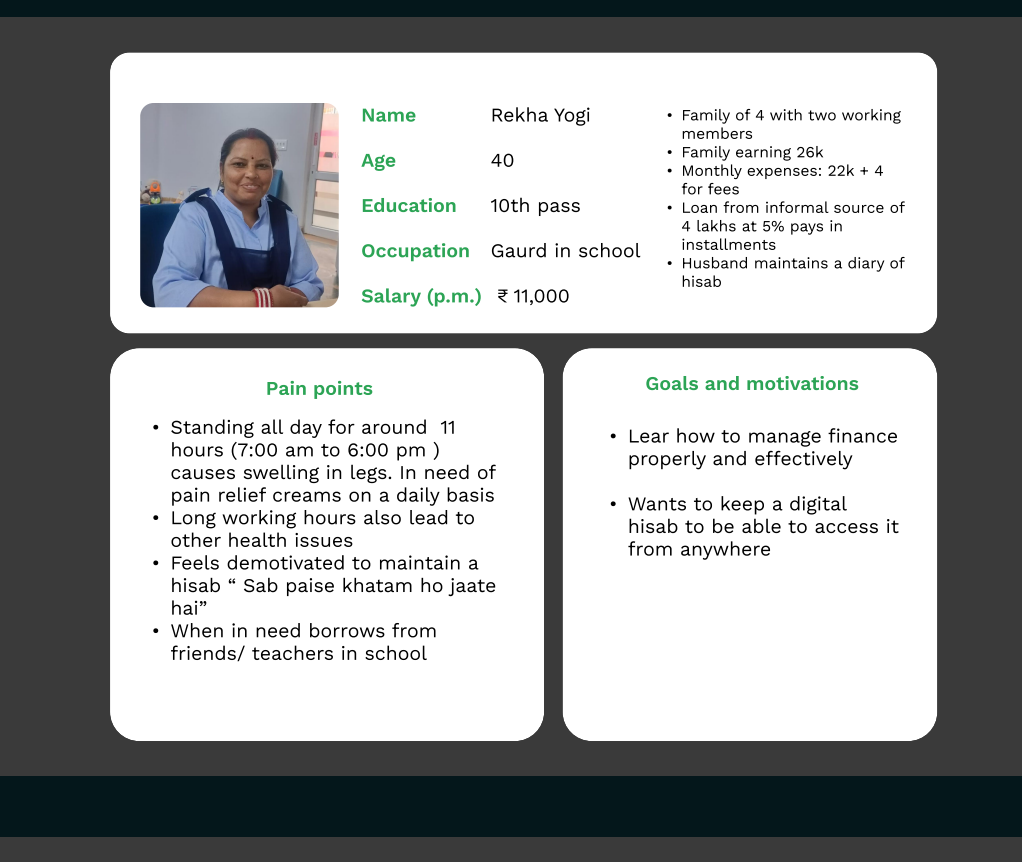
Pain points

- Could not complete education because of family responsibilities
- Wants to get married but because of financial constraints it is difficult and does not want to take a loan unless necessary
- Keeping track of expenses is difficult
- Does not understand expense management

Goals and motivations

- Lear how to manage finance properly and effectively
- Effective management of finance would help him save some money, which could be put to other use
- Reminders incase he's running low on funds would help

2.



Name: Rekha Yogi
Age: 40
Education: 10th pass
Occupation: Gaurd in school
Salary (p.m.): ₹ 11,000

- Family of 4 with two working members
- Family earning 26k
- Monthly expenses: 22k + 4 for fees
- Loan from informal source of 4 lakhs at 5% pays in installments
- Husband maintains a diary of hisab

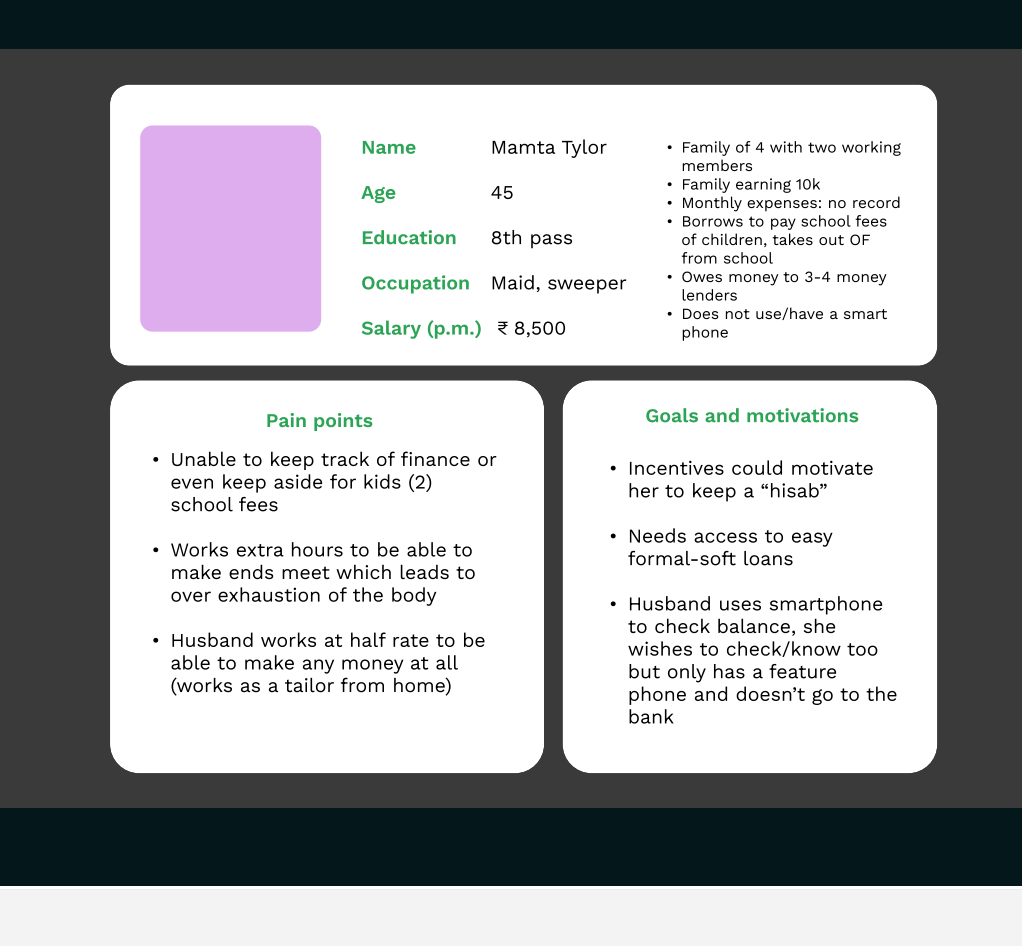
Pain points

- Standing all day for around 11 hours (7:00 am to 6:00 pm) causes swelling in legs. In need of pain relief creams on a daily basis
- Long working hours also lead to other health issues
- Feels demotivated to maintain a hisab " Sab paise khatam ho jaate hai"
- When in need borrows from friends/ teachers in school

Goals and motivations

- Lear how to manage finance properly and effectively
- Wants to keep a digital hisab to be able to access it from anywhere

3.



Name: Mamta Tylor
Age: 45
Education: 8th pass
Occupation: Maid, sweeper
Salary (p.m.): ₹ 8,500

- Family of 4 with two working members
- Family earning 10k
- Monthly expenses: no record
- Borrows to pay school fees of children, takes out OF from school
- Owes money to 3-4 money lenders
- Does not use/have a smart phone

Pain points

- Unable to keep track of finance or even keep aside for kids (2) school fees
- Works extra hours to be able to make ends meet which leads to over exhaustion of the body
- Husband works at half rate to be able to make any money at all (works as a tailor from home)

Goals and motivations

- Incentives could motivate her to keep a "hisab"
- Needs access to easy formal-soft loans
- Husband uses smartphone to check balance, she wishes to check/know too but only has a feature phone and doesn't go to the bank

Proposed Solutions

Keeping in mind various constraints pertaining to the users, the aim is to target both the category of users who have a smart phone and the ones who do not have a smart phone.

The solution is a " **Finance tracking** " and "**Alerting** " **application** (for the ones who have a smartphone) and **a system** (for the ones who use a feature phone)

Constraints and Important points to consider

- Recognizing that a significant portion of the intended users falls within the Next Half Billion (NHB) category, the solution must be crafted with considerations such as low education levels, a simplified interface for minimal cognitive load, multilingual capabilities, etc.
- In many cases, the primary earners in the family may not possess a smartphone. However, it can be expected that at least one family member, often the younger generation, will have a smartphone. Consequently, this application is designed solely for recording and monitoring finances; it does not support monetary transactions such as payments or receipts.

Style guide

Font

Fonts like Inter and Noto Sans Devanagari have been used in the main UI screens. These fonts are simple and can be **converted into various different languages** since the application has to be **multilingual**, keeping the target audience in mind.

Aa

Inter — Aa Bb Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm Nn Oo Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz

Noto Sans Devanagari — Aa Bb Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm Nn Oo Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz

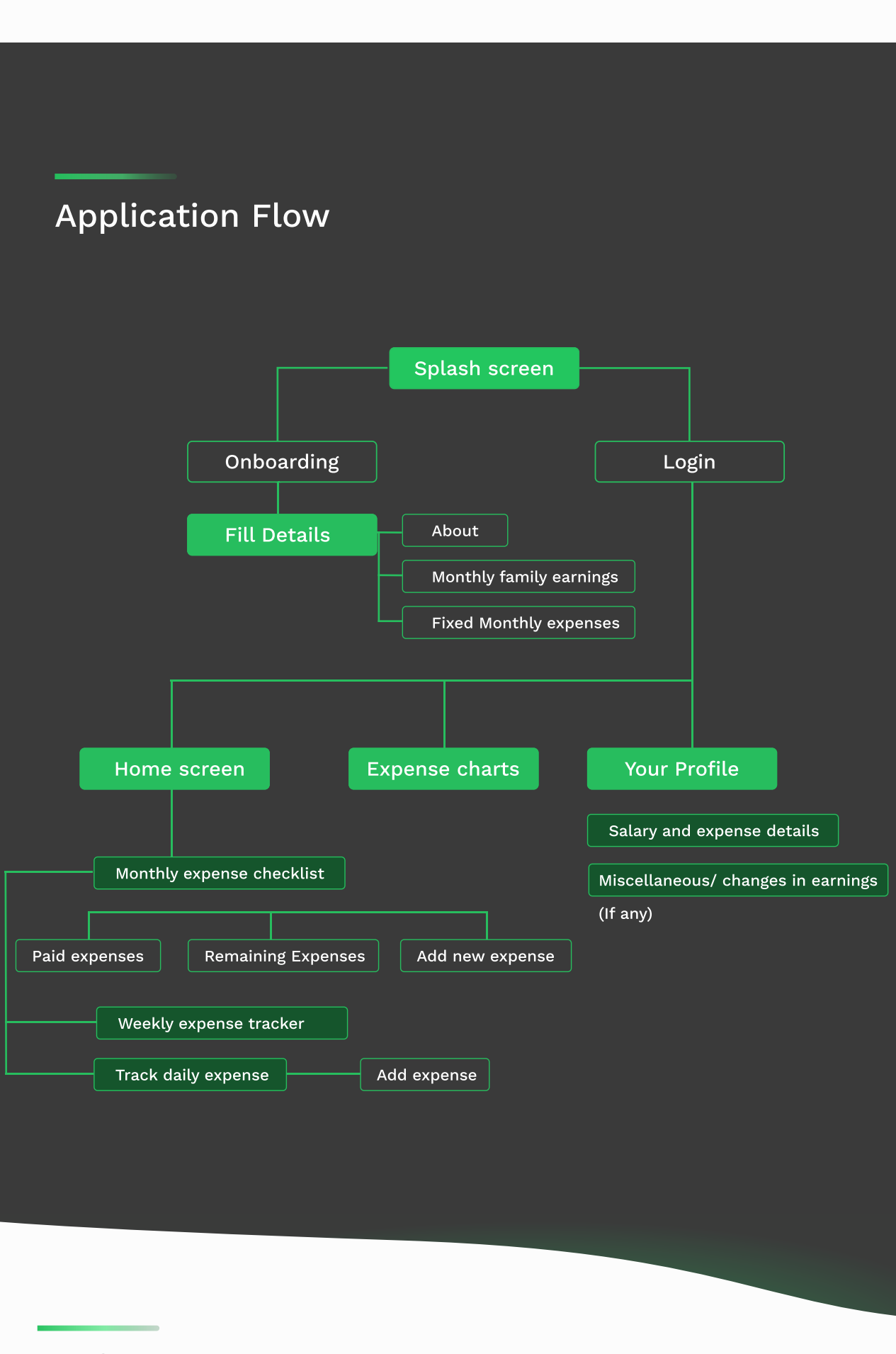
Colors

04171B
0BC60B
FFFFFF
8C8C8C
E51414

Designing for a finance- expense tracking up, the colors were carefully selected to give the feel of " hare note". Green was chosen because it is often associated with finance and it symbolizes growth, prosperity and stability.

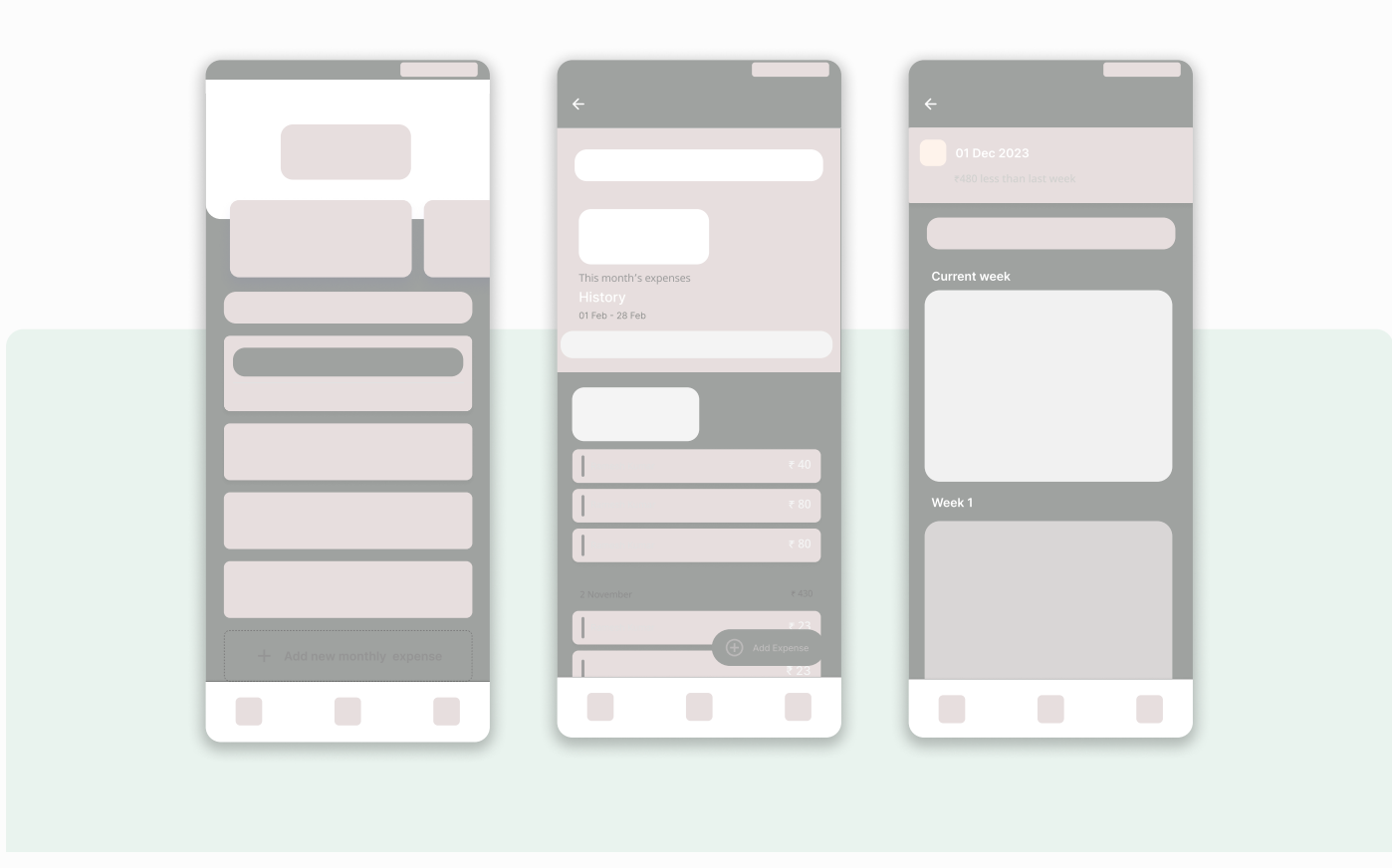
Line icons

Application Flow



Lo-fidelity screens

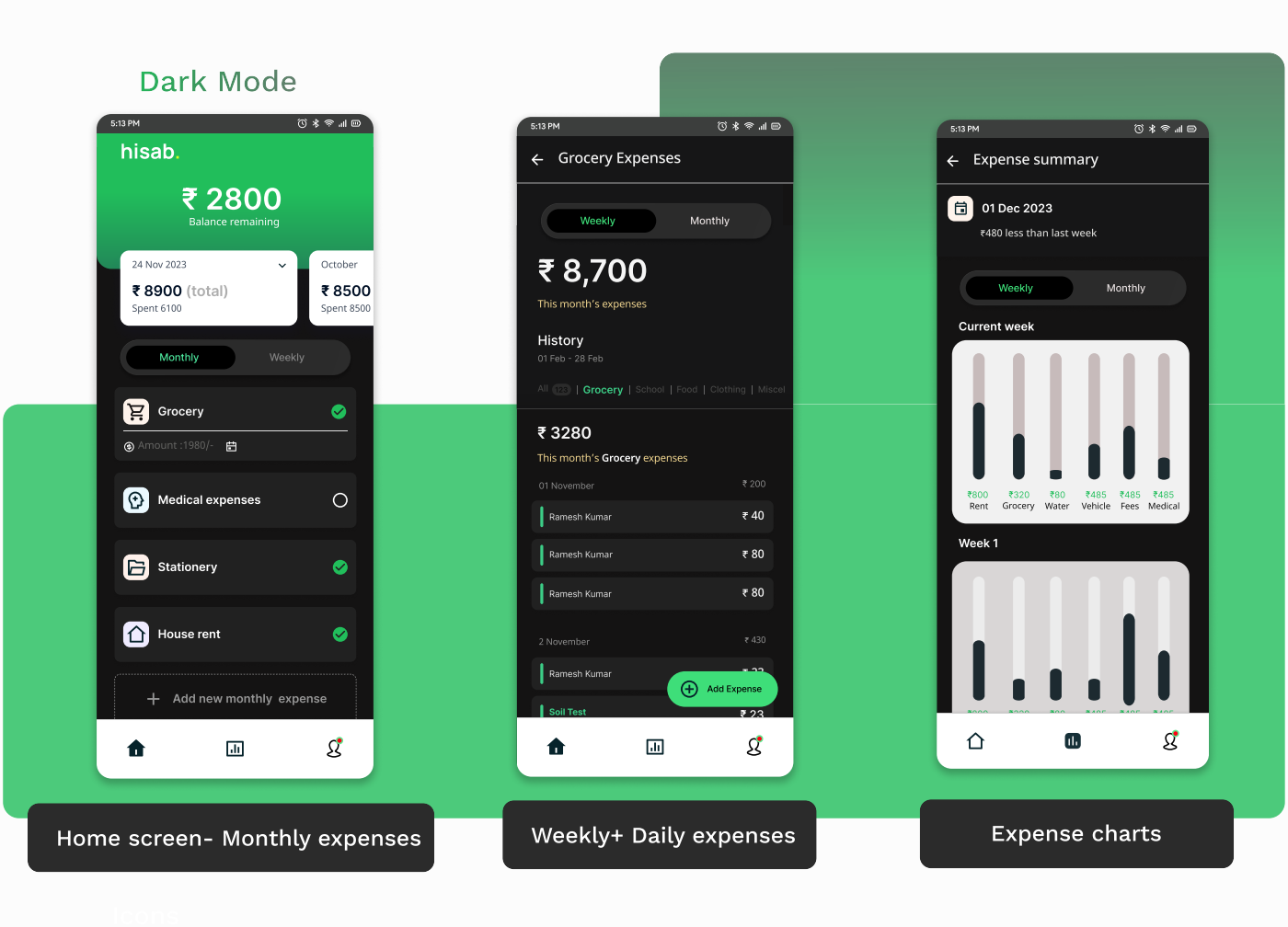
Lo-fi wireframes have been made to understand the placement of UI elements and features. They also act as a basic framework for the final High fidelity screens



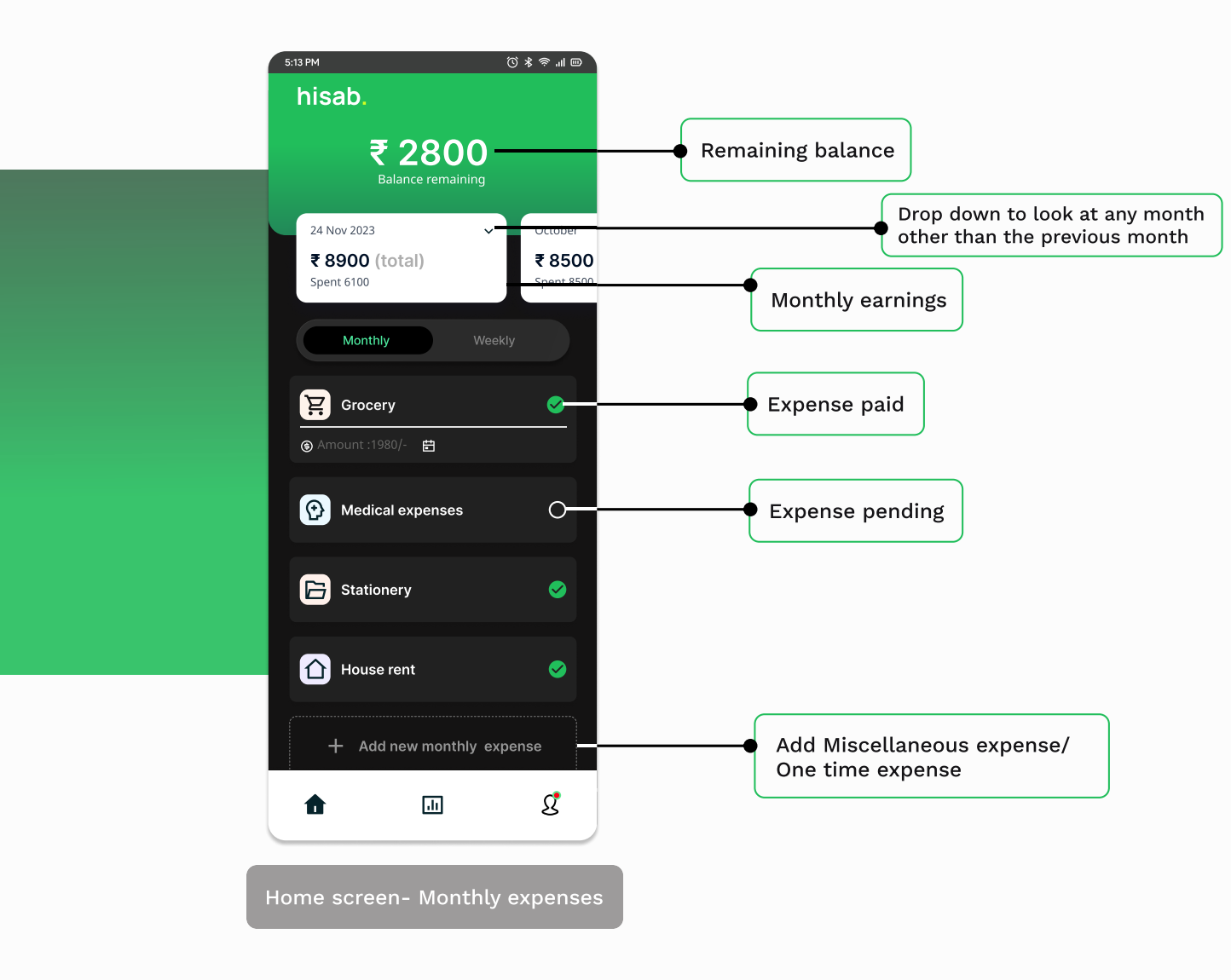
High Fidelity screens

Final UI screens (Both in Light and dark mode)

Dark Mode

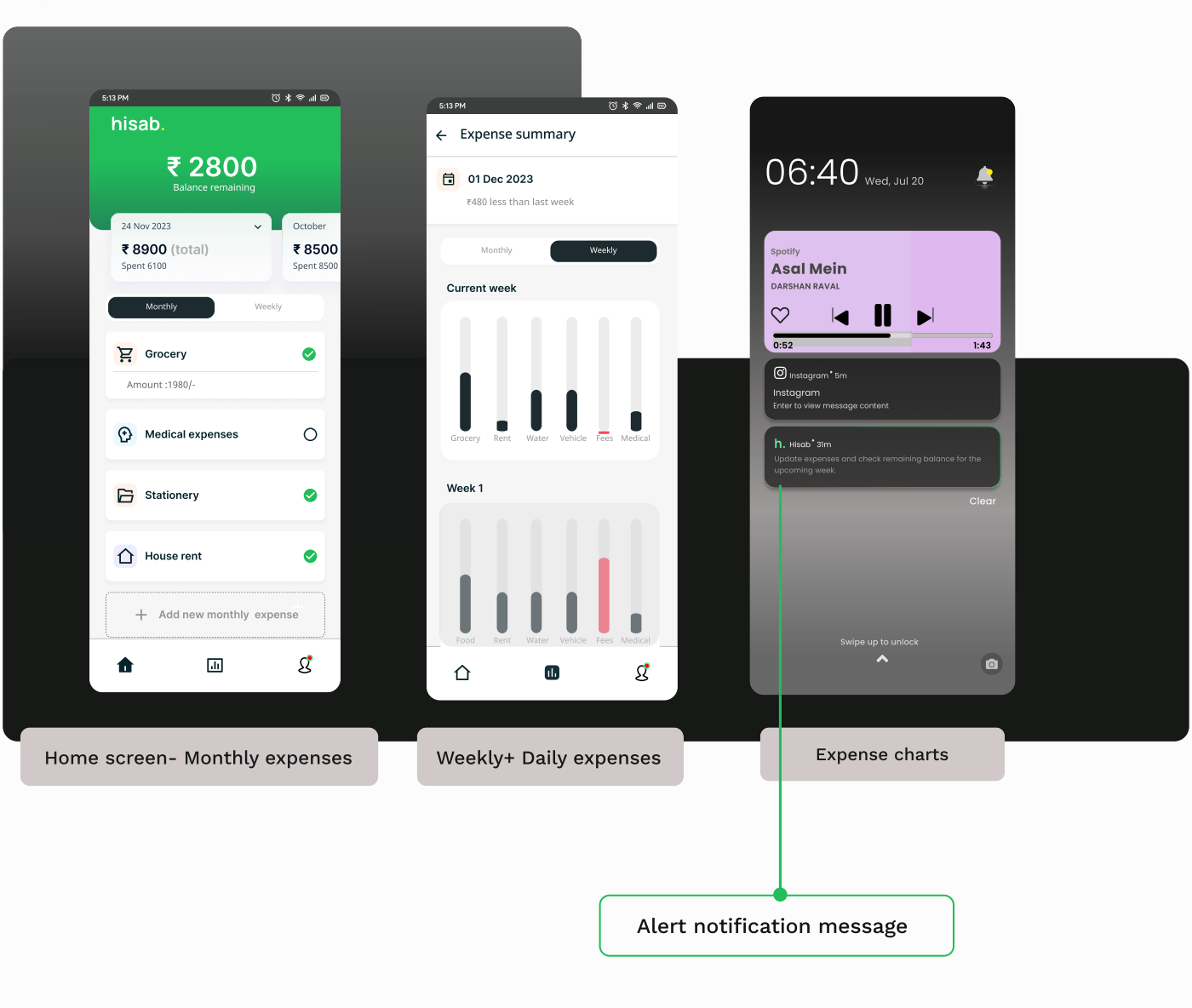


Home screen- Monthly expenses | Weekly+ Daily expenses | Expense charts


Remaining balance
Drop down to look at any month other than the previous month
Monthly earnings
Expense paid
Expense pending
Add Miscellaneous expense/ One time expense

Home screen- Monthly expenses

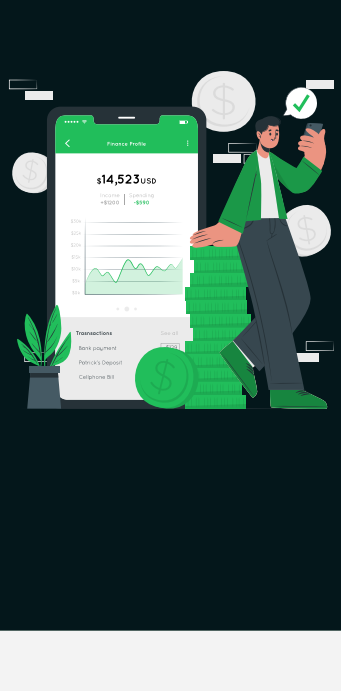
Light Mode



Home screen- Monthly expenses | Weekly+ Daily expenses | Expense charts

USP of the application

- Simple to use
- Tracking expense will enable them to manage finance effectively
- No scope of financial fraud because the application only enables the user to add and track their expenses
- Instruction videos while onboarding- seamless experience
- Multilingual interface



A system - those who have feature phones

The user just needs to send an Sms with the expense name and amount spent to a toll free number xyz, every time they spent any money . Towards the end of three weeks they will get a report of their expenses and alert messages to alert them about their remining balance etc and where they spend, how much. This will keep them informed about they spending, further enabling them to manage their limited finance effectively.

The process

Note: this is a raw idea and with more research a proper idea can be formulated

Send an sms with your monthly salary at the starting of the month → Keep sending expense messages " Chawal Rs. 50" every time any transaction is done → Towards the end of three weeks you will get Alert messages and a report of your expenses via SMS.

How does this help the firm and the users?

Startup can **collaborate** with a small finance bank and help these people get soft credit eg RS.2000/- etc on the basis of the **data** collected → If they return this money on time , then the bank can consider them for soft loans upto a certain limit (eg- 1-2 Laks) etc.

This will also help the user in getting a proper credit score, which they did not have because most of their expenses were done in cash.

Thank you