



University of Asia Pacific

Course title: Software Engineering Lab

Course Code : CSE 314

Team Members

Shahriar Alam Shimul	22201227
Salman Nur Ramim	22201239
Tahsin Sheikh	22201243

Submitted To :

Noor Mairukh Khan Arnob

Lecturer

Department of Computer Science & Engineering

University of Asia Pacific

Table of Contents

- Feasibility Analysis
 - Technical Feasibility
 - Economic Feasibility
 - Operational Feasibility
 - Social and Environmental Impact
 - SWOT Analysis
- Survey Questionnaires
 - Demographic Section
 - Multiple Choice
 - Likert Scale
 - Open-ended
- Interview Questionnaires
- Interview Process
- Survey Results & Summary
- Requirement Analysis

Feasibility Analysis

Technical Feasibility:

- **Frontend Technologies:** HTML, CSS and Java Script.
- **Backend Framework:** Python, Django.
- **Database System:** MySQL.
- **Hosting:** Railway (free/low-cost hosting).
- **API Integrations:** Mobile financial service, APIs like **bKash, Nagad, Rocket, Upay** will be integrated for payment functionality.
- **Security & Compliance:** Two-factor authentication.

Economic Feasibility:

Initial Development Cost: Minimal due to open-source tools and student-led development.

Revenue Model:

- Service fee from successful investments (e.g., 2–3%)
- Subscription or tiered services for SMEs (e.g., verified listing, promotion)
- Affiliate or partnership programs with halal finance institutions

Break-even Potential: With only 500 monthly active users investing ₳1000/month, the platform can generate self-sustaining income.

Operational Feasibility:

- **User Adoption:** Increasing smartphone and mobile internet usage in Bangladesh make it easy to reach the target audience.
- **Ease of Use:** The UI/UX will focus on simplicity, multilingual support (Bangla + English), and clear investment terms.
- **Human Resources:** Development and maintenance can initially be handled by a small team (3–5 people), scaling later as needed.
- **Training & Support:** In-app educational modules and support chatbots will reduce the need for constant manual support.

Legal Feasibility:

To ensure full legality and compliance, the platform must operate under national and Islamic regulations:

- Profit-sharing contracts will be used instead of interest-based returns.
- A Shariah advisory board or validator group will oversee SME listings and investment models.
- Transactions must comply with Bangladesh Bank guidelines for mobile financial services (MFS).
- Proper documentation, identity verification (NID/passport), and AML/KYC protocols will be followed.

Swot Analysis:

Strengths

- Shariah-based model (interest-free)
- Student-friendly and low-barrier investment
- Easy mobile and web access

Weaknesses

- Requires high trust from users in financial and religious compliance
- Might face legal bottlenecks without fintech licensing
- Needs strong SME verification process

Opportunities

- ❖ Rising demand for ethical finance in Bangladesh
- ❖ Untapped student and rural investor market
- ❖ Can scale regionally with right partnerships

Threats

- ❖ Competing conventional platforms with more funds and visibility
- ❖ Potential public mistrust due to misuse of “Shariah-compliant” labeling
- ❖ Regulatory changes in fintech laws may slow down scaling

Survey Questionnaires

Demographic Section:

- Age: [Under 18], [18–25], [26–35], [36–45], [46+]
- Occupation: [Student], [Business Owner], [Service Holder], [Other]

Multiple Choice:

1. Have you ever invested in any platform?
 - Yes / No
2. Which investment range do you feel comfortable with?

- Less than ₪500, ₪500 – ₪1,000, ₪1,000 – ₪5,000, More than ₪5,000
- 3. How often would you prefer to invest?
- 4. What motivates you to consider Halal investments?
 - Ethics, Profit, Simplicity, Religious Value

Likert Scale (1=Strongly Disagree, 5=Strongly Agree):

How much do you agree with the following statements?

- I am comfortable using mobile/web apps for financial transactions.
- I am interested in investing in ethical (halal) businesses.
- I trust platforms that show transparency and real-time updates.
- I would prefer investing in small, verified local businesses (SMEs).
- I am more likely to invest if the platform provides proper Islamic guidance.

Open-ended:

- What features or services would you like to see in a small investment platform like Sohoj Biniyog?
- What concerns would stop you from using such a platform?

Interview Questionnaires

Basic Info:

- Name:
- Role: (e.g., SME owner, student)
- Experience with digital finance:

Semi-Structured Questions:

1. Can you briefly describe your current role and experience in the software industry?
2. What is your first impression of a platform like “Sohoj Biniyog” — which connects small entrepreneurs with micro-investors or partners for profit sharing?
3. What would motivate you to trust a platform like "Sohoj Biniyog"?
4. Which tech stack (language/frameworks/tools) would you personally use to build a scalable MVP for this platform, and why?
5. What would be your biggest concern if you were investing in a project like this — from both a tech and business angle?
6. What advice would you give to a student team trying to turn this project into a real product or startup?

Interview Process

Interviewee 1:

- **Name:** Farzana Akter
- **Role:** SME Owner (Home-based clothing business)
- **Insights:** Prefers halal sources of investment. Seeks low-risk models and easy-to-understand profit-sharing.

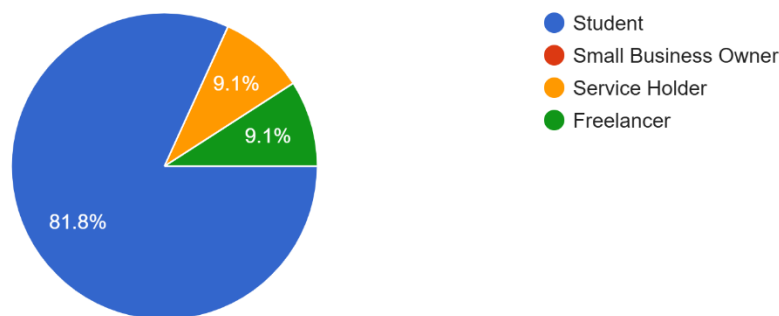
Thematic Analysis:

- **Common Themes:** Trust, ease of use, religious alignment
- **Surprises:** High interest in educational content and risk transparency
- **Actionable Insight:** The app must include learning modules and robust verification systems.

Survey Results & Summary

We surveyed 11 participants to evaluate challenges in our project. Key findings are visualized below:

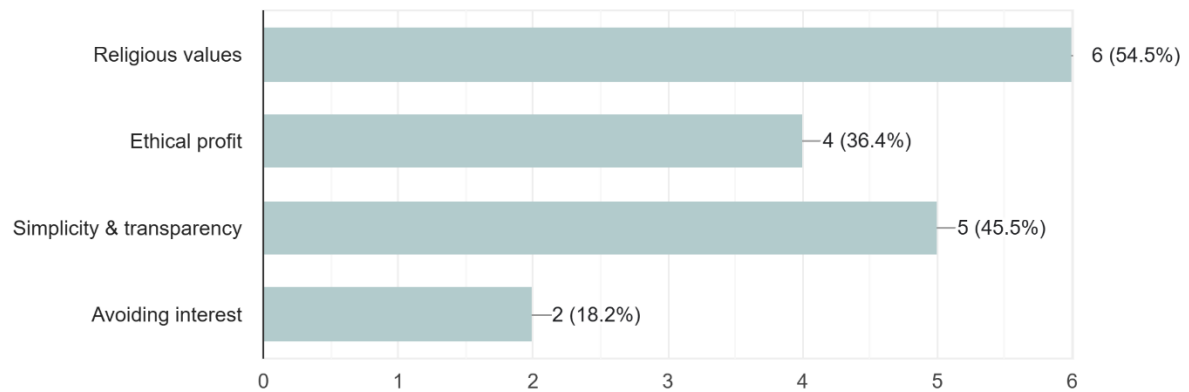
Occupation
11 responses



The majority (81%) of respondents were students, with the remaining being service holders (9%) and freelancers (9%). This shows that students are highly engaged and interested in investment opportunities.

What motivates you to consider Halal investments? (Select all that apply)

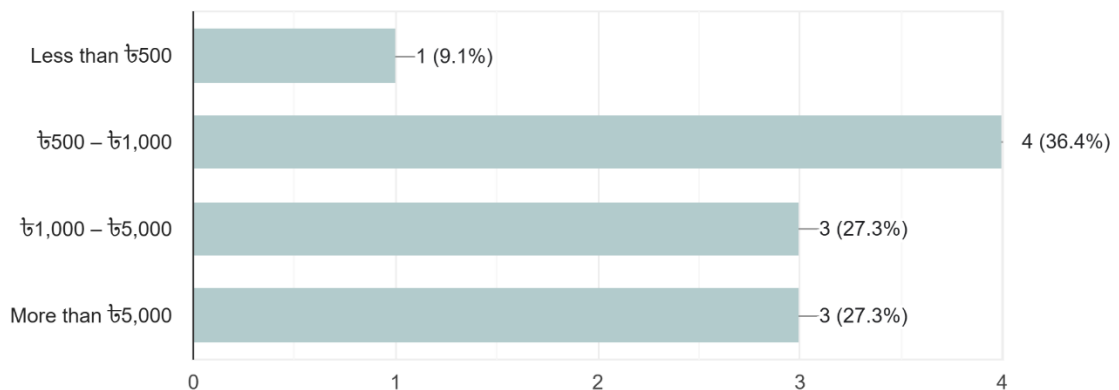
11 responses



Respondents cited **religious values** and **ethical practices** as the top motivations for choosing halal investments. This highlights the importance of maintaining **visible Shariah compliance, transparency, and ethical models** in the platform to meet user expectations and build trust.

Which investment range do you feel comfortable with? (Select all that apply)

11 responses

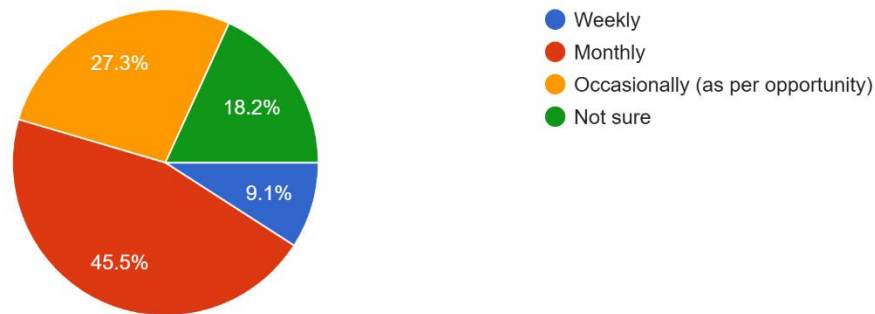


Most participants preferred to invest in the range of **₹500–₹1,000**, with some willing to go up to **₹5,000**.

► This confirms the need for a **low-barrier entry system**, making investing accessible to students and the middle-income group, aligning perfectly with the "Sohoj" (easy) philosophy.

How often would you prefer to invest?

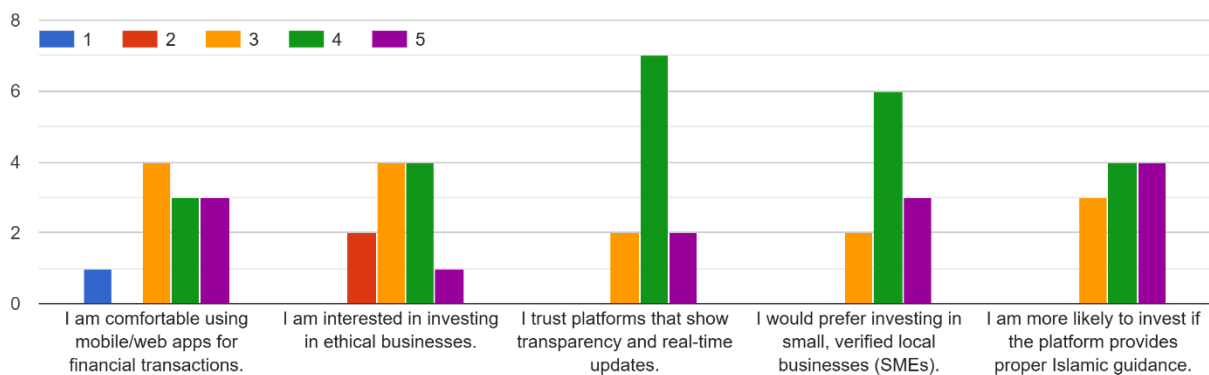
11 responses



A significant portion of users preferred **monthly or occasional** investments rather than frequent or high-volume contributions.

► This suggests that the platform should offer **flexible plans** with recurring investment options and **reminders**, allowing users to stay consistent while investing within their capacity.

How much do you agree with the following statements? Please click that if your answer is: Rate from, Strongly Disagree= 1, Disagree = 2, Neutral = 3, Agree = 4, Strongly Agree = 5



Participants largely agreed (scoring 4 or 5) on comfort with mobile/web apps, trust in transparent platforms, and willingness to invest in small, local SMEs.

► This validates the core design focus: the platform must offer a **clean UI/UX**, real-time profit visibility, and **verified SME listings** to gain long-term user trust.

What features or services would you like to see in a small investment platform like Sohoj Biniyog?

11 responses

Easy money withdrawal
Halal investment,good security.
Give KYC verification for user & verify their info by direct call
Give proper guidelines about policy
Weekly updates
Ability to know where my money is being spent or used to earn the interest
No
More profit
Customer support

What concerns might stop you from using such a platform?

11 responses

I will need strong verification and transparency before investing.
Trust
Transaction problems
Trust issues
Money londering or lost of trust
Lack of investment
Transaction failure
Whether it is halal or haram
No

Requirement Analysis

Functional Requirements:

1. Users can register via email or phone.
2. Users must verify identity with NID/passport.
3. Investors can browse verified SME profiles.
4. SMEs can submit funding requests.
5. Admin can approve or reject SME listings.
6. Users can invest a minimum amount (e.g., ₳500).
7. App will show ROI/profit-sharing percentage.
8. Users receive investment updates via email/SMS.
9. A Shariah board can review and certify listings.
10. Payment gateway (bKash/Nagad) integrated.
11. Users can view transaction history.
12. Admin can deactivate suspicious accounts.
13. Investors can withdraw returns after maturity.
14. SMEs must upload necessary documents.
15. Search/filter function for SME types (food, tech, etc.)
16. User dashboard showing investment summary.
17. Ratings and reviews for SMEs.
18. In-app support/chat feature.
19. Mobile push notifications for updates.
20. Investment contract digitally signed and stored.

Non-Functional Requirements (10 examples):

1. The app must be Shariah-based at all levels.
2. System should support 1000+ concurrent users.
3. Response time must be < 3 seconds per request.
4. Platform must use HTTPS and secure login.
5. App should be 99.9% available (uptime).
6. Mobile app should work on Android and iOS.
7. Reports auto-generated monthly for each investor.
8. App UI must be accessible for visually impaired users.
9. Data must be backed up daily.
10. Multi-language support (Bangla, English).