

University of Asia Pacific

Course title: Software Engineering Lab

Course Code: CSE 314

Sohoj Biniyog

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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:

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

Break-even Potential: With only 500 monthly active users investing \overline{\pi}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:

- o 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

- Real problem in Bangladesh
- > Two-sided win-win model
- ➤ Simple tech stack (easy to build)

Weaknesses

- > Trust issues between strangers
- > Initial low user base
- > No full legal framework for equity funding

Opportunities

- Can grow into a real startup
- ❖ Potential to partner with NGO
- ❖ Can add mobile app for wider reach

Threats

- Fraud risk from fake pitches
- * Regulatory or legal changes
- Larger competitors may enter later

Survey Questionaries

Survey link:

https://docs.google.com/forms/d/e/1FAIpQLSfAiYievoA-oTadrmZZVBV0ZFKNVW4ld2Pzv2f0UPqyqnkfaA/viewform?usp=header

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?
 - o Yes / No
- 2. Which investment range do you feel comfortable with?
 - \circ Less than 5500, 5500 51,000, 51,000 55,000, More than 55,000
- 3. How often would you prefer to invest?
- 4. What motivates you to consider Halal investments?
 - o Ethics, Profit, Simplicity, Religious Value

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

How much do you agree with the following statements?

o I am comfortable using mobile/web apps for financial transactions.

- o I am interested in investing in ethical (halal) businesses.
- o I trust platforms that show transparency and real-time updates.
- o I would prefer investing in small, verified local businesses (SMEs).
- o 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 Questionaries

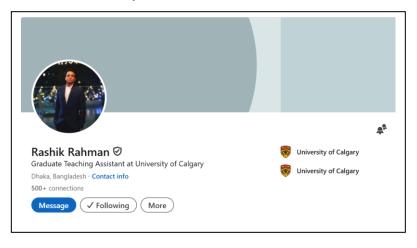
Semi-Structured Questions:

- 1. What is your first impression of a platform like "Sohoj Biniyog".
- 2. What would motivate you to trust a platform like "Sohoj Biniyog"?
- 3. Which tech stack (language/frameworks/tools) would you personally use to build a scalable MVP for this platform, and why?
- 4. What would be your biggest concern if you were investing in a project like this from both a tech and business angle?
- 5. What advice would you give to a student team trying to turn this project into a real product or startup?

Interview Process

Interviewee:

Name: Rashik RahmanRole: University Lecturer



Thematic Analysis:

1. What would motivate you to trust a platform like "Sohoj Biniyog"?

It's a great idea. It helps students and small businesses connect in a halal way. Many people need this.

2. What would motivate you to trust this platform?

I need to see verified SMEs, secure contracts and real-time updates.

3. Which tech stack (language/frameworks/tools) would you personally use to build a scalable MVP for this platform, and why?

I'd use Django for backend, React or Flutter for frontend, PostgreSQL for database, and Railway or AWS for hosting.

4. What would be your biggest concern if you were investing in a project like this — from both a tech and business angle?

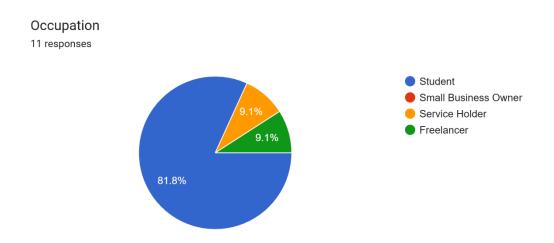
Tech concern: data security. Business concern: user trust and fake SMEs.

5. What advice would you give to a student team trying to turn this project into a real product or startup?

Start small, talk to users early, build trust, and keep it simple. Get a mentor or advisor if possible.

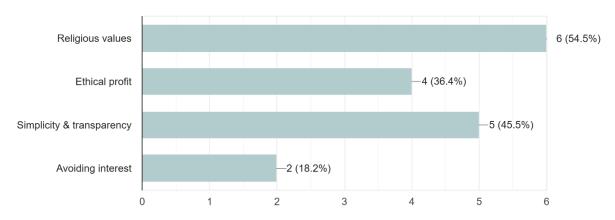
Survey Results & Summary

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



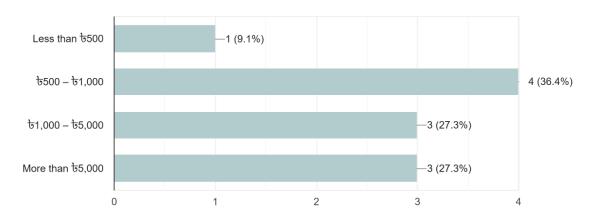
The majority (81%) of respondents were students, with the remaining being service holders (9%) and freelancers (9%). This shows that students are highly engaged and interested in investment opportunities.



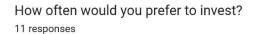


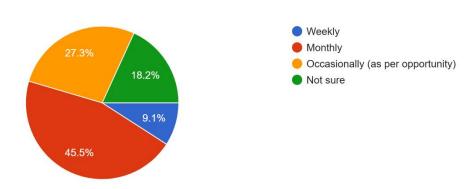
Respondents cited **religious values** and **ethical practices** as the top motivations for choosing halal investments. This highlights the importance of maintaining **visible Shariah compliance**, **transparency**, **and ethical models** in the platform to meet user expectations and build trust.

Which investment range do you feel comfortable with? (Select all that apply) 11 responses



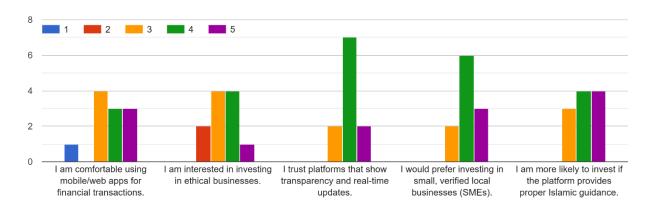
Most participants preferred to invest in the range of **5500–51,000**, with some willing to go up to **55,000**. This confirms the need for a **low-barrier entry system**, making investing accessible to students and the middle-income group.





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

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.

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

Requirement Analysis

Functional Requirements:

Must-Have

- 1. Users must be able to register and log in
- 2. Users must select a role (entrepreneur/investor)
- 3. Entrepreneurs must be able to submit business pitches
- 4. Investors must be able to browse and search pitches
- 5. Investors must be able to express interest in investing
- 6. Admin must approve pitches before they go public
- 7. Users must be able to message each other
- 8. Auto-generate profit-sharing agreement
- 9. Dashboard showing investment status
- 10. Pitch rating/review system

Nice-to-Have

- 1. User badges (verified, trusted, etc.)
- 2. Email or SMS notifications
- 3. Mobile app support (future)
- 4. PDF export for reports
- 5. Revenue tracker

- 6. Filter by category/location
- 7. Chat support bot
- 8. Multi-language support
- 9. Secure file upload
- 10. Commenting on pitches

Non-Functional Requirements:

- 1. The app must be Shariah-based at all levels.
- 2. System should support 1000+ concurrent users.
- 3. Response time must be \leq 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).