**Project Sponsor** (Who wants it?)   
– The most logical champion is the city’s Community Development Department. They already handle neighbourhood programs, green initiatives, and community engagement and have budget for tech projects that bring people together. Local HOA management firms and neighborhood boards would back it too, since happier, connected residents mean fewer disputes and higher property values.

**Business Need** (Why do they want it?)   
– This request needs to happen because neighbors (including me/us) waste money and space buying gear. think power tools, camping equipment or specialty kitchen gadgets they hardly ever use. At the same time, those same items sit unused down the street. Facebook and Nextdoor groups exist, but they’re clunky, unreliable, and people often ghost each other. Without a better system, residents miss out on cost savings, greener living, and real neighborly connections.

**Business Requirements** (What will it do?)   
– At a high level, NeighborShare must let users:

* Create and verify an account (photo ID or any government issued ID)
* List items with photos, descriptions, and availability windows
* Search by item type, date range, and location
* Match lenders and borrowers automatically, then schedule pickup/return
* Exchange messages and send reminders before pickups
* Handle deposits securely and track simple “insurance” info
* Rate and review both users and items
* Give community admins a dashboard for monitoring and enforcing rules
* Run smoothly on both web and mobile (iOS/Android)

*Small note: we’ll want user feedback early to tweak matching logic and reminder timing.*

**Business Value** (Why is it worth doing at all?)   
– This section needs to consist of two separate lists, as noted below:

**Tangible Value**

* Families could save $500–$1,200 a year by borrowing instead of buying
* Neighborhood desirability and thus property values could rise 3–8%
* Transaction fees (2–5%) or premium memberships might pull in $8K–$15K/year for a 500-household community
* Reduced clutter lowers home storage costs
* Stronger neighbor watch may cut petty theft claims

**Intangible Value**

* Neighbors get to know each other, strengthening social bonds
* Neighborhood gains an eco-friendly reputation
* Structured sharing builds trust and goodwill
* A modern, tech-forward image attracts new residents
* A sense of community resilience and pride grows over time

**Special Issues or Constraints** (Things out of our control that may impede us)

* **Liability & Insurance**: Who’s on the hook if someone gets hurt or an item breaks? We’ll need legal counsel and possibly an insurance partner.
* **Privacy & Safety**: Handling IDs and location data means complying with provincial privacy laws.
* **Integration Limits**: Tying into HOA (HomeOwners Association) software or city websites may require custom APIs or middleware and that depends on cooperation from those vendors.
* **Seasonality & Geography**: Snow blower requests in July? Unlikely. We’ll need to account for seasonal demand shifts and city vs. suburb usage patterns.
* **Community Buy-In**: Some neighborhoods may resist sharing personal items so early outreach and trust-building workshops are critical.

**Create a Micro-Feasibility Analysis**

**Technical Feasibility – Can we build it?**

*Describe your Familiarity with Functional Area*: We’ve used apps like Nextdoor, Facebook Marketplace, Airbnb, and local tool libraries, so we get community-based sharing. To strengthen our know-how, we’ll:

* Interview HOA board members and early adopters
* Study case studies (NeighborGoods, Peerby)
* Run a small pilot in one neighborhood before full rollout

*Describe your Familiarity with Technology*:

* **Mobile App Development (iOS/Android):** Basic familiarity - **Medium Risk** - Plan: Online course + hands-on tutorial projects
* **Responsive Web Development:** Intermediate knowledge - **Low Risk** - Plan: Pair programming with experienced developer
* **SQL Database Management:** Limited experience - **High Risk** - Plan: Database workshop + find a mentor for complex queries
* **Payment Gateway Integration:** Minimal experience - **High Risk** - Plan: Practice with Stripe/PayPal sandbox environments
* **Geolocation APIs:** Basic understanding - **Medium Risk** - Plan: Study API documentation + build small prototype
* **Cloud Hosting Services:** Introductory knowledge - **Medium Risk** - Plan: Complete AWS/Azure beginner tutorials
* **Security & Authentication:** Limited experience - **High Risk** - Plan: Security bootcamp + code review sessions
* **Push Notification Systems:** Minimal experience - **Low Risk** - Plan: Test notification libraries and demos

*Project Size*:   
This is a medium-large project:

* 3–4 developers + 1 UI/UX specialist over 8–12 months
* Multiple user roles (lender, borrower, admin)
* Integration with payment, mapping, notification services
* Ongoing community support and bug fixes

*Compatibility*:

* Must hook into existing HOA databases and websites via APIs
* Comply with PCI DSS for payment processing
* Run on latest two versions of iOS and Android
* Sync user data without violating privacy rules
* Work with both email/SMS gateways and in-app notifications

**Economic Feasibility (Will it pay off?)**

**Development & Operating Costs**

* Initial build: $75K–$100K
* Yearly hosting & support: $15K–$20K
* Onboarding & marketing: $10K–$15K

**Benefits Analysis**

* Direct fees: $8K–$15K/year (500 active households)
* Community savings: $250K–$600K/year in avoided purchases
* Property value boost: 2–4% bump in home prices

**Break-Even**

At current rates, we’d recoup the upfront costs in about 18–24 months. After year 3, ROI should look really strong, especially as operations stabilize.

Organizational Feasibility: If you build it, will people use it?

*Strategic Alignment*:   
This project ties into key municipal goals:

* Sustainability by cutting waste
* Community Engagement through neighbor interaction
* Smart City initiatives that use tech to improve quality of life

*Stakeholder Analysis*: Consider the people who will benefit from this project and describe how/why the end result will be valuable to them. At a minimum, consider:

* Project Champion(s) -
  + Community Development Department (primary)—they track engagement metrics and need visible wins.
  + HOA Boards (secondary)—fewer disputes and happier homeowners reduce their workload.
* Senior Management –
  + Municipal leaders gain public-relations wins with minimal long-term staff input.
  + HOA firms can tout higher satisfaction scores to justify fees.
* Users –
  + *Lenders* get social kudos, a bit of extra income, and security through deposits.
  + *Borrowers* save money, avoid clutter, and enjoy local convenience.
  + *Occasional Users* benefit seasonally with almost zero commitment, plus a friendlier street.

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| |  |  |  |  | | --- | --- | --- | --- | | **MGMT 1223 - Systems Development 1 - Assignment #2** | | | | |  | **Team Member Names:Nischal Shrestha Kasula** |  |  | |  | 3 = Yes, 2 = Somewhat, 1 = Barely, 0 = No | Self | Prof | |  | **Totals** | 99 | 0 | | **Submission Logistics (Yes or No, each prompt is all or nothing)** |  |  |  | |  | Was the rubric submitted with partner names and self-assessment completed? | 15 |  | |  | Was the assigned system request template used? | 15 |  | |  | Do the combined elements cohesively describe the project? | 15 |  | |  |  |  |  | | **System Request** | |  |  | | **Project Sponsor(s)** |  |  |  | |  | Is the project sponsor a real person that is likely to recognize the strong business need for this system? | 3 |  | |  | Is the position and department of the project sponsor accurately identified? | 3 |  | |  | Does the portfolio of the chosen sponsor(s) effectively match the scope of the project? | 3 |  | |  |  |  |  | | **Business Need** |  |  |  | |  | Does the section effectively communicate the reason(s) why this request is being created? | 3 |  | |  | Is the language and formatting used clear and concise? | 3 |  | |  | Is the content of this section confined entirely to describing the business need and nothing else? | 3 |  | |  |  |  |  | | **Business Requirements** |  |  |  | |  | Does the section effectively communicate what the proposed system must be capable of at a high level? | 3 |  | |  | Is the language and formatting used clear and concise? | 3 |  | |  | Is the content of this section confined entirely to describing the business requiremend and nothing else? | 3 |  | |  |  |  |  | | **Business Value** |  |  |  | |  | Does the section provide a reasonable amount of tangible (quantified and measured easily) benefits (value) the business can expect from with this system? | 3 |  | |  | Does the section provide a reasonable amount of intangible (intuitively believed, hard-to-measure) benefits (value) the business can expect from with this system? | 3 |  | |  |  |  |  | | **Special Considerations or Constraints** |  |  |  | |  | Does the section provide meaningful information regarding special considerations that do not fit within the above sections? | 3 |  | |  |  |  |  | | **Feasibility Analysis** | |  |  | | **Technical Feasibility - Familiarity with (Business) Functional Area** |  |  |  | |  | Does this section describe explicitly how familiar the authors are, or or not, with the business functional area of the project? | 3 |  | |  | Is the language and formatting used clear and concise? | 3 |  | |  | Does the section provide a brief but meaningful rationale for how the authors will attain the necessary skillset to improve familiarity with the business area beyond their personal experience? | 3 |  | |  |  |  |  | | **Technical Feasibility - Familiarity with Technology** |  |  |  | |  | Does this section describe explicitly how familiar the authors are, or or not, with the technical knowledge necessary for the project? | 3 |  | |  | Is the language and formatting used clear and concise? | 3 |  | |  | Does the section provide a brief but meaningful rationale for how the authors will attain the necessary skillset to improve familiarity with the required technology? | 3 |  | |
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