Risk Analysis - Munchora

Prob: 1 (low), 5 (*high*)

Impact: 1 (*low*), 5 (*high*)

Factor = *Prob * Impact*

ID	Name	Description	Prob	Impact	Risk Factor	Mitigation	Responsible	Status Date	Follow-up Date	Status
R1	Technical & Operational	**System Outages & Performance Issues:** The site goes down or is unusably slow. Users' recipes or lists are lost or corrupted.	4	4	16	Implement monitoring. Horizontal/vertical scaling.	Alexander Christensen	2025-11-4	Weekly	Initial
R2	Technical & Operational	**Solo Project:** Munchora is unavailable due to illness, burnout, or other reasons. The project grinds to a halt.	4	3	12	Well-structured code base and architecture. Using versioning control, clear commit messages.	Alexander Christensen	2025-11-4	Weekly	Initial

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R3	Technical & Operational	**Technical Debt & Scalability**: Quick ad-hoc fixes accumulate, making the codebase unmaintainable.	2	5	10	Well-structured code base and architecture. Using versioning control, clear commit messages. Coding standards and principles (DRY, SOLID).	Alexander Christensen	2025-11-4	Weekly	Initial
R4	Security & Privacy	**Data Breach & Privacy Failure**: User data (emails, passwords, shopping lists) is exposed. GDPR/Privacy violation.	4	3	12	Never store plain-text passwords. Regular dependency vulnerability scanning (brakeman). Use HTTPS. Have a clear, simple Privacy Policy.	Alexander Christensen	2025-11-4	Weekly	Initial

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R5	Security & Privacy	**API Key Compromise**: Keys for the AI service, database, or email service leaked -> unauthorized use and large bills.	3	5	15	Never hardcode API keys. Use environment variables.	Alexander Christensen	2025-11-21	Weekly	Initial
R6	Security & Privacy	**Injection & XSS Attacks**: Malicious code is injected into shared lists or recipes, affecting other users.	3	3	9	Parameterized queries for database access. Sanitize and validate all user input on the backend.	Alexander Christensen	2025-11-21	Weekly	Initial
R7	Business & Legal	**AI-Generated Content Liability**: AI generates a recipe that is harmful and a user gets sick.	5	2	10	Comprehensive Terms of Service and conditions: "AI-generated recipes are suggestions. Always use	Alexander Christensen	2025-11-21	Weekly	Initial

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						your judgment regarding food safety..."				
R8	Business & Legal	**Intellectual Property Infringement**: AI generates a recipe that is a copy of a copyrighted recipe from a famous chef or website.	3	3	9	A clear Terms of Service stating users are responsible for the content they generate and that the platform is a tool, not a publisher, is crucial.	Alexander Christensen	2025-11-21	Weekly	Initial
R9	Business & Legal	**Monetization & Financial Failure**: Project cannot cover its costs (API fees, hosting).	4	4	16	Calculate precisely monthly costs. Limit user signups and recipe generations.	Alexander Christensen	2025-11-21	Weekly	Initial

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R10	Product & Market	**Low User Adoption / Product-Market Fit**: The app doesn't solve a real problem effectively enough to attract and retain users.	5	5	25	Talk to potential users before and during development. Prepared to pivot features based on feedback.	Alexander Christensen	2025-12-7	Weekly	Initial
R11	Product & Market	**Scope creep and UX Failure**: Munchora is confusing, too many features, and users don't understand how to use the AI or shared lists.	3	4	12	Build a clean, intuitive UI. Use analytics to see where users drop off.	Alexander Christensen	2025-12-7	Weekly	Initial
R12	Technical & Operational	**AI Market Crash:** Risk that commercial AI providers fail, shut down, or become unaffordable,	3	3	9	Develop a contingency plan for self-hosting an open-source LLM.	Alexander Christensen	2025-12-7	Monthly	Initial

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		leaving Munchora without access to recipe-generation capabilities. May require self-hosting an LLM, increasing cost and operational complexity.				Benchmark small performant models, prepare hosting infrastructure, and design the AI layer to be provider-agnostic.				

Risk Matrice

	1 - Negligible	2 – Minor	3 – Moderate	4 – High	5 – Very High
5 – Very Likely		R7			R10
4 – Likely			R2, R4	R1, R9	
3 – Possible			R6, R8, R12	R11	R5
2 – Unlikely					R3
1 – Very Unlikely					