

mapER

Hackathon 2024 - Team 3



Agenda

- 01** Overview
- 02** Project goal and vision
- 03** Core requirements
- 04** Features
- 05** Tech stack
- 05** Demo
- 06** Pricing model & running cost
- 07** Conclusion

Overview

Challenge

- Difficulty integrating systems due to lack of documentation and visual representation.
- Inaccurate proposal drafting.
- Increased pre-sales overhead for system assessments.
- Slower project start due to time-consuming assessments.
- Unclear understanding of system complexity.

Consequences

- Prolonged learning curves, project delays, client dissatisfaction.
- Loss of potential profits from misquoted projects.
- Misalignment with client needs and scope.
- Increased pre-sales effort, reducing efficiency.

Goals and Vision



Automate System Assessments

Generate a Knowledge Base

Simplify System Connectivity

**Improve Understanding of
System Complexity**

Identify and Mitigate Risks

CORE REQUIREMENTS

- Production of Entity Relationship Diagram (ERD) for better understanding of user's own data
 - Table structure
 - Columns and data types
 - Relationships between tables
- Table descriptors
- Integration of SQL databases & CSV files



Features



Interactive ERD



**Ability to save
image to
machine**



**ERD history
stored in
database**



**Multi-tenant
authentication**



**User
Management**

TECH STACK



Azure SQL Database



Azure OpenAI



Azure Function App



Azure App Service

PRICING MODELS

	Project Hours	BA/PM Hours w/o Tool	BA/PM Hours with Tool	Hourly Rate	Total Cost w/o Tool	Tool Cost/ Percentage	Revenue Generated By Product	Total Cost with Tool	Savings
S	80	15%	10%	€ 90	7,200	100	100	6940	260
	150	15%	10%	€ 90	13,500	100	100	12925	575
M	151	15%	10%	€ 90	13,590	1%	135.9	13046.4	544
	300	15%	10%	€ 90	27,000	1%	270	25920	1,080
L	301	12%	7%	€ 90	27,090	1.5%	406.35	26141.85	948
	600	12%	7%	€ 90	54,000	1.5%	810	52110	1,890
XL	601	10%	5%	€ 90	54,090	2%	1081.8	52467.3	1,623
	1000	10%	5%	€ 90	90,000	2%	1800	87300	2,700
XXL	1001+	8%	4%	€ 90	€ 90,090	2.5%	2252.25	88738.65	1,351
	1500	8%	4%	€ 90	€ 135,000	2.5%	3375	132975	2,025

RUNNING COST

Microsoft Azure Estimate

Your Estimate

Service category	Service type	Custom name	Region	Description	Estimated monthly cost
Compute	App Service		West Europe	Basic Tier; 1 B1 (1 Core(s), 1.75 GB RAM, 10 GB Storage) x 730 Hours; Windows OS; 0 SNI SSL Connections; 0 IP SSL Connections; 0 Customised Domains; 0 Standard SLL Certificates; 0 Wildcard SSL Certificates	€49.19
Compute	Azure Functions		West Europe	Consumption tier, Pay as you go, 128 MB memory, 5,000 milliseconds execution time, 10,000 executions/mo	€0.00
AI + Machine Learning	Azure OpenAI Service		West Europe	Language Models, Standard (On-Demand), GPT-4o-Global-Deployment-128K, 10,000 x 1,000 input tokens, 10,000 x 1,000 output tokens	€179.69
Databases	Azure SQL Database		West Europe	Elastic Pool, DTU Purchase Model, Basic Tier, 50 eDTUs: 5 GB included storage per pool, 100 DBs per pool, 1 Pool(s) x 730 Hours, 5 GB Storage, RA-GRS Back up Storage Redundancy, 0 x 5 GB Long Term Retention	€66.14
Support			Support		€0.00
			Licensing Program	Microsoft Customer Agreement (MCA)	
			Billing Account		
			Billing Profile		
			Total		€295.02

CONCLUSION & FUTURE IMPROVEMENTS

- DB Hosted on MySQL or NoSQL for cheaper running cost
- Risk Assessment & Mitigation recommendations
 - Identification of potential data issues
 - Notifications/logs to inform user
 - Automatic resolving of simple yet tedious issues
- Integrations with further data sources, Azure and otherwise
- AI Integration - lots of work invested but issues faced in integration



THANKYOU

Any Questions?

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