

# Azure migration costs calculator with embedded AI

## Software Test Report

CS 4850 - Section 02 – Fall 2024

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Roles	Name	Major responsibilities	Contact
Project owner	Capstone		
Team leader	Kunal Shenoi	Organize meetings, monitor progress, and submit deliverables. Develop and implement testing protocols.	678-779-4770
Team members	Graham Allen	Developer - Developing back-end AI integration, implementing Azure/AWS API calls, and database connections. Assisting in front-end UI/UX development	770-841-6718
	Angel Hernandez	Developer - Designing and implementing a user-friendly interface, while assisting with backend and AI integration and development	770-318-5359
	Yvan Ngah	Documentation - Creating, maintaining, and ensuring the accuracy of all technical documentation.	171haden@gmail.com
Advisor / Instructor	Sharon Perry	Facilitate project progress; advise on project planning and management.	770-329-3895



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## Summary

The purpose of testing is to ensure that the Migration Cost Calculator meets functional, performance, security, and usability requirements. Testing includes functional, integration, performance, and security testing to validate that all user requirements are met and that the application operates reliably under various conditions.

## Test Summary

Test Completed

Requirement	Pass/Fail	Severity
Create Account	Pass	High
Login	Pass	High
Logout	Pass	High
Session Timeout	Pass	High
Report Generation	Pass	High
Report Export	Pass	Medium
Azure Pricing Integration	Pass	High
API Error Handling	Pass	High
Chat History	Pass	Low
Cost Calculation Accuracy	Pass	High
Consistency Testing	Pass	High
Browser Compatibility	Pass	Medium
API Rate Limit Handling	Pass	High
Data Input Validation	Pass	Medium
Delete Old chats	Pass	Medium
Website routes	Pass	High
Security (SQL Injection)	Pass	High
Stress Testing	Pass	High
Concurrent users	Pass	High
Screen Resolution adjustments	Fail	Low
Error Messages	Pass	Low
Performance Testing	Pass	High
Deleting all chats	Pass	Medium
Start with at least one chat	Pass	Medium
New chat	Pass	High
Execute inputs with an enter	Pass	Low

### Test Metrics

Test Metrics	Count
Test Cases Planned	26
Test Cases Executed	26
Test Cases Passed	25
Test Cases Failed	1

## Testing Approaches

### Total Bugs

- Total Defects Identified: 1

### Status of Bugs

- Open: 0
- Closed: 1
- In Progress: 0

## Severity Breakdown

### High Severity

- Count: 0
- Description: High-severity defects directly impact application functionality and user experience.

### Medium Severity

- Count: 0
- Description: Medium severity issues are impactful but do not hinder core functionality and may only happen under specific situations.

### Low Severity

- Count: 1
- Description: Low-severity issues do not affect application functionality and will be addressed once medium and high-severity issues have been fixed.

## Testing Environment

- Operating Systems: Windows, macOS, Linux.
- Browsers Tested: Chrome, Firefox, Safari, Edge.

- Tools Used: GitHub Issues for bug tracking, Google Docs for documentation, GitHub Actions for CI/CD.

## **Final Recommendations**

- Prioritize resolving high-severity issues impacting the core functionality.
- Implement performance optimizations to address any potential latency issues.
- Review and address remaining low-severity UI issues post-deployment.