Risk Management Report

Commerce Bank Web Application

March 14th, 2021

Team Members

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Document Control

Change History

Revision	Change Date	Description of changes
V1.0	3/14/2021	Initial release

Document Storage

This document is stored in the project's Git repository at:
https://github.com/UMKC-CS451R-Spring-2021/semester-project-group-3-commerce.

Document Owner

William Keke is responsible for developing and maintaining this document.

Identified Risks

Rank	Risk	Probability of Loss	Size of Loss	Risk Exposure
1	WebApp does not consistently connect to the database.	Moderate	Catastrophic	Extreme Risk
2	Password fails to encrypt before entering the database.	Unlikely	Major	High Risk
3	Developers need to practice more with ASP.NET than initially expected.	Almost Certain	Minor	High Risk
4	Documented hours of effort expected for tasks are inaccurate.	Likely	Minor	High Risk
5	Forget to encrypt/hide connection string.	Unlikely	Major	High Risk
6	Accidentally pushing an unfinished/fundamentally flawed build to master.	Rare	Major	High Risk
7	Not enough budget or time to deliver a finished product.	Rare	Major	High Risk
8	Product fails to meet the expectations of the customer.	Rare	Catastrophic	High Risk
9	Requirements change too often and delay development.	Unlikely	Moderate	Moderate Risk
10	More web-pages are needed than initially expected.	Unlikely	Moderate	Moderate Risk
11	Differing naming, styling, or scripting conventions among web-pages.	Almost Certain	Negligible	Moderate Risk
12	Application front-end isn’t properly tested on all device viewports resulting in unwanted visual artifacts.	Moderate	Negligible	Low Risk
13	Project team approaches problems with an anti-pattern response.	Unlikely	Negligible	Low Risk

Risk Response Plan

Risk ID: 1	**Title:** *Improper database connection*	**Origination Date:** *3/13/2021*
Status: *Contingent*		**Originator:** *Benaiah Kilen*
Description: *This risk refers to the probability that the web application will improperly connect to the database. The consequences of this risk include: failure to connect to the database and its contents, an inability to carry out tasks within the application (logging in, notifying users, etc.), and failure to deliver a functioning product.*		**Assessment:** *Qualitative* **Probability:** *Moderate* **Consequences:** *Catastrophic* **Risk Exposure:** *Extreme Risk*
Owner: *Zach Gharst, Benaiah Kilen*		
Risk Response Alternatives: *Extensive testing to ensure the connection string is properly defined and the database's server is open to connect to. Would require us to re-analyze how we connect to the database, and at worst would require us to re-analyze most of our code.* *Integrating the required tables in a different way than we had used initially. Requires effort to research and implement a new method, and we are at risk of the new method not working/being compatible.*		
Risk Response Plan (Activities & Milestones)		
Date	**Actions**	**Responsibilities**
3/13/2021	*Run tests on project to ensure that database is connected. Make adjustments if not.*	*Tester - Runs tests to check if database is connected.* *Project Manager - calls emergency meeting if needed* *Database Administrator & Developers - Make any needed adjustments to fix issues*
End of each iteration	*Recheck that database still connects to frontend of application. Immediately address if not.*	*Tester - Runs tests to check if database is connected.* *Project Manager - calls emergency meeting if needed* *Database Administrator & Developers - Make any needed adjustments to fix issues*
Plan Status		
Date	**Status**	
3/13/2021	*Currently no issues with database connection*	
Resources: *Project team*		

<table>
<tr><td>Risk ID: 2</td><td>Title: Password fails to encrypt before entering the database.</td><td>Origination Date:
03/13/2021</td></tr>
<tr><td colspan="2">Status: Identified</td><td>Originator: Atticus Parris</td></tr>
<tr><td colspan="2" rowspan="4">Description:

User’s password fails to encrypt before entering database. Causes user privacy to become vulnerable. Puts user at risk of having personal information stolen.</td><td>Assessment: Qualitative</td></tr>
<tr><td>Probability: Unlikely</td></tr>
<tr><td>Consequences: Major</td></tr>
<tr><td>Risk Exposure: High Risk</td></tr>
<tr><td colspan="3">Owner: Zach Gharst, Benaiah Kilen</td></tr>
<tr><td colspan="3">Risk Response Alternatives: Monitor database contents. Create tests to ensure password encryption.</td></tr>
<tr><td colspan="3">Risk Response Plan (Activities & Milestones)</td></tr>
<tr><td>Date</td><td>Actions</td><td>Responsibilities</td></tr>
<tr><td>03/13/2021</td><td>On implementation of passwords being hashed into the database, tests are performed to ensure that the process works as intended.</td><td>Database Administrator - properly implement password hashing
Tester - run tests to ensure password hashing works properly</td></tr>
<tr><td></td><td></td><td></td></tr>
<tr><td colspan="3">Plan Status:</td></tr>
<tr><td>Date</td><td colspan="2">Status</td></tr>
<tr><td>3/13/2021</td><td colspan="2">Password hashing has not been implemented yet</td></tr>
<tr><td></td><td colspan="2"></td></tr>
<tr><td colspan="3">Resources: Database Administrator, Tester</td></tr>
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