Athennian 2019-2020 Capstone Project

Risk Management Plan

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# **Introduction**

This project is considered a low risk project. The completion is not mission critical to Athennian, and there are no significant vulnerabilities which the project might expose the existing Athennian system to further risk. However, there still exist moderate and low level risks which must be must be identified, monitored, and mitigated.

The purpose of this risk management plan is to identify which risks are most impactful, and the mitigation strategies that the student team has identified to manage them. A risk monitoring system will also be setup and integrated with Athennian’s process.

# **Risks Identified**

### Priority 1: Maintenance, upgrades, and debugging upon project completion

Due to the development primarily being performed by the student team, Athennian will not have an expert to maintain, upgrade, and debug our feature upon completion. This will be mitigated through cross training for Athennian developers and appropriate documentation of the code.

**Probability: 7/10  
 Impact: 4/10  
 Severity: 28/100 (medium)**

### Priority 2: Code divergence and incompatibility with the main branch

This was a known issue in one of the previous student capstone projects sponsored by Athennian. Code divergence would incentivize Athennian to reject our changes. The protocol of regular updates to master and Quality Assurance through distinct phases will mitigate this risk.

**Probability: 3/10  
 Impact: 9/10  
 Severity: 27/100 (medium)**

### Priority 3: Incompatibility of requested features with standard Google Docs API

Due to domain specific requests from Athennian’s clientele and target audience, the Google Docs API might not be able to support certain features requested by Athennian. This will be mitigated through documentation of such features and research of other future potential integrations with the Google Docs document workflow.

**Probability: 5/10  
 Impact: 4/10  
 Severity: 20/100 (medium)**

### Priority 4: Development risks with development on a Windows machine

Recently, Athennian has transitioned all of their developers to develop on Macbook Pros. One of the student team developers will be developing on a Windows computer. Due to the lack of documentation and support for Windows and Linux Subsystems, this might cause undue delays and development tool incompatibilities. This will be mitigated through documenting the setup process for Windows machines and resources from the Athennian team for onboarding.

**Probability: 10/10  
 Impact: 1/10  
 Severity: 10/100 (low)**

### Priority 5: Word Online contract condition risk

For Athennian’s current use and integration with Word Online, the contract has terms related to competing options for word editing. In this case, the manner in which Google Docs is implemented through design, functionality, or features, might violate the mentioned contract. Athennian has begun the mitigation of this risk through reviewing their contract. Further access to the details of this contract of the student team and project management will be important to continue this mitigation.

**Probability: 1/10  
 Impact: 8/10  
 Severity: 8/100**

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# **Risk Monitoring**

Since the student team are not experts on specific risks, each student will monitor all risks, instead of having one Risk Manager for each. This way, we can capture any issues with three minds instead of just one.

During the bi-weekly project team meeting we will discuss the status of risks relevant in the current phase. Risks and their statuses will be recorded in our ‘Team Meeting Notes’ document. This will allow the industry partners to be aware of the risks and provide their feedback on the status when presented.

In our weekly team meetings we will discuss risks as they approach on the project schedule, we will record any updates, identification of trigger conditions, and documentation of results in our meeting notes.

Risk monitoring will be a continuous process throughout the life of this project.

# **Risk Mitigation and Avoidance**

**Maintenance, upgrades, and debugging upon project completion**

Mitigation against this risk will be to do a cross training session with the rest of Athennian team so they are aware of the work behind the implementation of Google docs integration. This way when we are no longer developing/ have completed our implementation, Athennian can support any maintenance, upgrades and debugging requests after the fact.

**Code divergence and incompatibility with the main branch**

The students will be working together to make changes to the google docs aspect of the code. This way there will little to no merges needed. For the merge to the main branch, there will be a protocol which will include discretion from the product manager when committing those changes. We will have smaller incremental changes within our phases so any incompatibility can be pinpointed more easily.

**Incompatibility of requested features with the standard Google Docs API**

To ensure that the out of box Google Docs API fits right with the existing Athennian system, we will research all requested features are already included. If any features are not included, we will document this and either include it into our scope, or add it to the feature list Athennian may want to add in later releases.

### Development risks with development on a Windows machine

Development using windows will be done through Windows Ubuntu subsystem to avoid

**Risk Register**

The Risk Register for this project is a log of all identified risks, their probability and impact to the project, the category they belong to, mitigation strategy, and when the risk will occur. The register was created through the initial project risk management meeting led by the project manager. During this meeting, the project team identified and categorized each risk. Additionally, the team assigned each risk a score based on the probability of it occurring and the impact it could potentially have. The Risk Register also contains the mitigation strategy for each risk as well as when the risk is likely to occur.

Based on the identified risks and timeframes in the risk register, each risk has been added to the project plan. At the appropriate time in the plan—prior to when the risk is most likely to occur—the project manager will assign a risk manager to ensure adherence to the agreed upon mitigation strategy. Each risk manager will provide the status of their assigned risk at the bi-weekly project team meeting for their risk’s planned time frame.

The Risk Register will be maintained as a Google Sheets file to be shared in a communication channel with Athennian. The associated team meeting notes will also be referenced and linked on the Risk Register Spreadsheet.