KASPER – ID2 PROCESS DOCUMENTATION

SOFTWARE DEVELOPMENT TEAM:

Project Manager: Tushita Patel

Dev Lead: Kristof Mercier

Test Lead: Jeremy Liau

Build Manager: Christopher Mykota-Reid

Developers: Gaurav Arora, HaoMelody Ma, Dylan Prefontaine, Melody Zhao

Test Team: Christopher May, Ryan Tetland

Documentation: Arianne Butler

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# 1.0 Task Assignments

**Dev Team**

**Test Team**

**Documentation**

# 2.0 Activity Log

<https://github.com/CMPT371Team1/Documentation/tree/master/ActivityLog-Individual>

# 3.0 Peer Reviews

# 4.0 Client Communication

# 5.0 Risk Assessment

Introduction

Changes to the formal risk assessment from ID1 include new risks and re-evaluated risks. Risks are divided into two categories – technical and non-technical. Technical risks are related to the construction and design of our code. Non-technical risks relate to team management, such as group structure and client communication. For each risk identified, this risk assessment will provide probability of occurrence, estimated severity, possible scenarios, and mitigation and contingency plans.

## Technical Risks

5.1 Machine Issues

**Probability:** 1.0

**Loss:** 0.5

**Scenario:** A member of the development or test team experiences technical problems resulting in either permanent or temporary loss of their laptop. This risk was inspired by the difficulties experienced when one of our development teams most active members experienced significant problems with his laptop. This resulted in his inability to access the software necessary for building our app. Because all members of the development and test teams work on their own laptops, this risk is both significant and likely.

**Mitigation:** Software relevant to the construction of our project must be made available on the Spinks machines. Our team has spoken with Merlin and requested NodeJs, Cordova, and Ionic 2. Our team now has access to the required software on most of the computers in lab S311. Members are now able to work on the project at any time, without relying on their own machines.

**Contingency Plan:** Team members are now able to work on the machines in S311. If more software is later required for development or testing, the affected group member will set up pair programming sessions until the issue can be resolved. For this ID, our team moved the development deadline forward one day in order to make up for lost time. This puts extra pressure on our test team and we aim to avoid this solution in future.

5.2 Too Little Code for Bug Party

**Probability:** 0.7

**Loss:** 0.2

**Mitigation:** This risk is difficult to mitigate because the amount of code written depends on the tasks to complete for ID2.

**Contingency Plan:** The bug party currently scheduled for Saturday February \_\_ will be postponed until later in the week. This will allow the dev team to continue implementation and build up a more significant code base.

5.3 Issues Using New Test Tools

**Probability:** 0.7

**Loss:** 0.2

**Mitigation:** Extensive research of various test tools should be carried our before any attempt at using them. Online tutorials on sample code can be followed by the test team before use on the project.

**Contingency Plan:** Solving unresolved issues with required test tools will be given priority, but in the meantime, manual testing can be performed instead.

5.4 Problems with Protractor

**Probability:** 1.0

**Loss:** 0.5

**Scenario:** This risk was inspired by problems experienced by the test team. While setting up end to end tests, the send keys functionality was not working as expected. The test team was unable to fill the app’s text fields with pre-set values for automated testing.

**Mitigation:** Research should be conducted to solve the problem so that automated testing can be implemented.

**Contingency Plan:** If this problem cannot be fixed for a period of time, or at all, testers will input values manually. This is an unfavourable solution that will only be exercised if absolutely necessary.

5.5 Compatibility Issues

**Probability:** 0.6

**Loss:** 0.2

**Scenario:** Due to our app’s ability to run on multiple platforms, it will be more challenging to implement extensive testing on all of them.

**Mitigation:** Testing will be as thorough as possible on each platform. This might involve testing on multiple operating systems, or using multiple browsers. By doing this we aim to identify platforms that are incompatible with our app.

**Contingency Plan:** If a platform is not compatible, research and testing will be performed to identify the origin of the problem. If the issue is unresolvable, the group manager will inform the client and document the app’s inability to work on the platform(s).

5.6 Problems with Unit Testing Framework for Python Server

**Probability:** 0.3

**Loss:** 0.3

**Scenario:** The unit tests for the backend server side of the project cannot be automated.

**Mitigation:** Research will be conducted to determine if it is possible to run unit test scripts automatically through the build server using TravisCI.

**Contingency Plan:** If unit testing cannot be automated for the server side of the project, manual test will be run instead.

## Non-Technical Risks

5.7 Unable to Complete ID2 Tasks

**Probability:** 0.9

**Loss:** 0.1

**Scenario:** Our team is hoping to accomplish many tasks for ID2. With only twelve days in total, we are anticipating that some tasks will need to be put off until ID3. Not all assigned tasks are expected to be completed this ID. Instead, the goal is to complete as many as possible

**Mitigation:** Our team will focus on strong group communication and setting reasonable goals.

**Contingency Plan:** This risk is expected to materialize this ID. All tasks not completed will take priority in ID3.

5.8 Build Master Becomes Busy

**Probability:** 0.8

**Loss:** 0.3

**Scenario:** Our build manager Chris Mykota-Reid has specific knowledge of our build. It is likely that he will experience busy periods where he is unable to contribute to the project for a period of time.

**Mitigation:** Our group has designated a vice build master Gaurav. Gaurav will shadow and pair program with Chris periodically. This way, two members understand the build instead of one.

**Contingency Plan: A vice build master, Gaurav, has been named since ID1.**

5.9 Group Communication Issues

**Probability:** 0.8

**Loss:** 0.6

**Scenario:** A group member becomes busy and is unable to attend various meetings or stay in communication on Slack. The affected group member may have knowledge pertaining to the continuation of the project.

**Mitigation:** Slack is being used for communication about the project. All team members are required to check Slack at least once per day, as well as perform frequent online stand-ups. This allows the team to set up meetings, pair programming sessions, and hold other communications regarding the project.

**Contingency Plan:** If someone is not communicating effectively with the group, then the team leads will contact the group member and encourage better communication. Stand-up meetings on Slack will help the leads keep track of each group member’s progress.

5.7 Team Members Fail to Document Work Accurately

**Probability:** 0.7

**Loss:** 0.3

**Scenario:** A team member is more concerned about finishing their work than documenting what they did. This could also arise from the assumption that everyone understands what needs to be completed, but there is a lack of communication regarding who is doing what.

**Mitigation:** Individual work logs are now set up on Google Spread Sheets. The grades associated with these work logs will hopefully provide incentive to keep them updated.

**Contingency Plan:** If there is a lack of documentation, past work sessions will be documented as accurately as can be remembered. A Document Lead, Arianne, has been assigned since ID1. It is her responsibility to ensure that all documentation is present, updated, and of high quality. She is also in charge of compiling and editing all documentation.

## Materialized Risks

The following section will describe the process of dealing materialized risks. Each risk will be accompanied by a description, a plan for resolution, and its effects on the project.

Client Became Unavailable

**Description**: During ID2, our stakeholder, Conrad, cancelled one of our weekly meetings. Our project manager, dev lead, and various other group members have been meeting with Conrad every Thursday evening to go over progress, requirements, and project issues. These meetings are important because they allow for the planning and organization of our project, ensuring the client is receiving the desired product.

**Resolution**: Contact was maintained with Conrad via email and the team proceeded with the project based on our best understanding of the requirements.

**Effects**: The loss of our weekly client meeting had major effects on our project. Certain work was carried out that our client wanted changed. This meant refactoring completed work, costing valuable time.

Group Communication Issues

**Description**: Due to group member absences during ID2, there was a lack of communication of goals between members of the development team. The dev team planned to set up and polish the user interface, but some team members wanted to do back end development. While these tasks were both valuable and necessary, they were not part of the agreed upon goals for ID2.

**Resolution**: Due to the lack of communication, our team has implemented a Stand-Up channel on Slack, where group members are required to communicate both what they are currently working on, and what they plan to do in the future.

**Effects**: Communication issues set us back slightly in ID2 and caused the group to take these issues seriously.

Team Members Fail to Document Work Accurately

**Description**: There were concerns that documents produced by various team members were not being properly managed.

**Resolution**: Arianne is now full time document manager for our group.

**Effects**: Arianne is no longer on the development team, and the dev team will need to organize themselves accordingly.

Completing All Tasks for ID2

**Description:** Certain tasks taken on during ID2 were not completed by the development deadline.

**Resolution**: ID2 tasks not completed will be given priority in ID3.

**Effects**: ID3 will be heavier due to carry over from ID2.

# 6.0 Meeting Notes and Minutes

<https://github.com/CMPT371Team1/Documentation/blob/master/Meetings/371-MeetingNotes.docx>

# 7.0 Pair Programming Sessions

<https://github.com/CMPT371Team1/Documentation/blob/master/Meetings/Pair%20Programming%20sessions>