

Table 1: Revision History

Date	Developer(s)	Change
September 29, 2016	Puru Jetly	Intial changes
September 29, 2016	Karnvir Bining	Intial changes
September 29, 2016	Rehan Theiveehathanasan	Intial changes
December 8th, 2016	Puru Jetly	Final revision
December 8th, 2016	Karnvir Bining	Final revision
December 8th, 2016	Rehan Theiveehathanasan	Final revision

SE 3XA3: Development Plan

Pong Invaders

Team #10, Ben Ten
Rehan Theiveehathasan **theivers**
Karnvir Bining **biningk**
Puru Jetly **jetlyp**

1 Team Meeting Plan

When: 8 - 10:30 PM

Where: On skype or at Thode

Frequency: On Wednesday and Saturday

Experts:

Documentation: Karnvir Bining

Git: Rehan Theiveehathasan

LaTeX: Puru Jetly

Technology:

Java: All members

Rules for Agenda:

There will be a chair for each meeting. The person who is chair for the meeting will alternate on a week by week basis. The order for chair will be Karnvir, Puru, Rehan. Since there will be two meetings in a week, the first meeting will be open discussion, and the second one will be structured to address and finalize the issues from open discussion. In open discussion, the group will discuss what deliverables are due by next meeting and how many resources should be dedicated to each task. In the second meeting, the deliverables will be handed in, and if a deliverable was not complete more resources will be used to complete the deliverable before submission day.

2 Team Communication Plan

Majority of team communication will be done through facebook, and over text messaging. For certain git related problems we will communicate through git's

issue tracking and through well commented commits. This will allow for the team to stay on the same page even when communication between members is not direct. If a team member is unreachable for some reason an alternate contact will also be provided. In most cases this contact is a roommate, whom we can contact to resolve the issue.

Table 2: Team Communication Table

Name	Phone	Alt. Contact Name	Alt. Contact Phone
Puru J.	647 - 772 - 5409	Sebastian T.	647 - 378 - 7162
Rehan T.	647 - 993 - 8561	David H.	519 - 546 - 6165
Karnvir B.	647 - 717 - 6969	Ramanan R.	647 - 631 - 8566

3 Team Member Roles

Team Leader: Puru Jetly

Scribes: Karnvir Bining , Rehan Theiveehathanasan

* Scribes will alternate meeting by meeting

4 Git Workflow Plan

The centralized Git workflow will be used for developing Pong Invaders. This will allow all three developers for the game to be able to consistently update, and build the project while maintaining a modular design. Labels will be implemented through git tags, and are to be used to see when milestone commits are made. Milestones will be used to mark when new functionality, or significant updates are implemented. In tandem with labels, and milestones, issue tracking will be used to open issues for modules to be completed, to be debugged, and to keep track of what milestones need to be implemented still according to the Gantt chart.

5 Proof of Concept Demonstration Plan

Implementing the Pong Invaders into MVC architecture is not difficult, as all group members are familiar with this architecture. However after the implementation of Space Invaders, overlaying Pong may pose a difficulty. Such as having modules interfering with each other, and not having ample time to implement the new Pong modules. The main risk of the project will be whether or not our group can successfully blend the Pong objects into Space Invaders without either

breaking our implementation or attempting an overly time consuming method of implementation. The way this difficulty can be overcome is by modularizing the Space Invaders program, and by keeping ahead of schedule for the implementation of Space Invaders. Proof of our efforts will be displayed by ensuring that a functional Space Invaders can be demo-ed showing that the group has kept ahead of schedule. Along with, a well documented module guide to show the modularity of Space Invaders.

6 Technology

The programming language of choice for this project will be Java with Eclipse being the IDE of choice. Java was chosen specifically as the source code was also compiled in Java. Java code can also be run on any machine that currently has Java installed. Furthermore Junit is a powerful tool for testing and will thus be implemented within the Space Invaders project. Git will be used for versioning to keep track of the Pong Invader source code while it is being developed. Makefiles will also be used, they will be used to compile the source code, thus a bash terminal is necessary. Finally, all documentation for this project will be generated through Latex as it is versatile and well structured allowing for easy to read professional standard documentation.

7 Coding Style

Pong Invaders' coding style will follow standard Java naming conventions, as seen here: <http://www.oracle.com/technetwork/java/codeconventions-135099.html>. Pong Invaders will also use tabs instead of spaces, and have comments for every block of code or method. This coding style is easy to read, and very easy to follow.

8 Project Schedule

https://gitlab.cas.mcmaster.ca/biningk/Space_Invaders_10/blob/master/Doc/DevelopmentPlan/Pong_Invaders_Project_Schedule.pdf

9 Project Review

Pong Invaders will be implemented in the next 4 months to be a new twist on two classic arcade games, Space Invaders and Pong. Ben 10 will put its best foot forward to ensure all parts of the project are implemented in an efficient and timely manner as outlined in our gantt chart.