Table 1: Revision History: Development Plan

DATE	DEVELOPER	WORK	REVISION
Jan 31, 2020	Shengchen, Zhou	Text	0
Jan 31, 2020	Yanting, Cao	Text	0
Jan 31, 2020	Chris, Fu	Text	0

Group 309: Development Plan

Yanting, Cao	Chris, Fu	Shengchen, Zhou
400067576, caoy31	400084178, fus13	400050783, zhous20

Jan 31, 2020

1 Team Meeting Plan

All meetings are expected to happen in mills library.

For each meeting, the appropriate time for each members should be around a hour for them to declare each member's 'homework'.

February 2nd and February 7th, the team should discuss about Requirements Document Revision 0, make clear roles, merge existing work and hand in the result.

February 9th and February 13rd, the team should discuss about upcoming Proof of Concept Demonstration, each team member should have a united opinion on each part of project.

February 23rd and 27th, the team should discuss about Test Plan and prepare for Test Plan Revision 0. Each members should take their test part and communicate their plan.

March 8th and March 12nd, the team should prepare for Design Document Revision 0.

March 11st and March 15th, the team is going to prepare for Revision 0 Demonstration. They should have their opinion of the demonstration be consistent.

March 25th, March 29th and April 1st, April 5th, the team get ready for Final Demonstration and Final Documentation. They should be clear with the project and the code, prepare for any question of the project.

2 Team Communication Plan

The team is going to use social media to communicate and meet offline if needed.

Communication between member helps them familiar with other members' work, which helps improve the project and better arrange each person's responsibility.

3 Team Member Roles

Team Leader: Shengchen Zhou

Leader Responsibility

1. Contact team members to arrange team meeting for communication.
2. Check team members' work progress and maintain team log book in order to keep things updated.
3. Review the work before final submission and negotiate with team members if needs to make further modification.

Principal person for documentationrevision:

Chris Fu

Principal person for Git repository management:

Shengchen Zhou

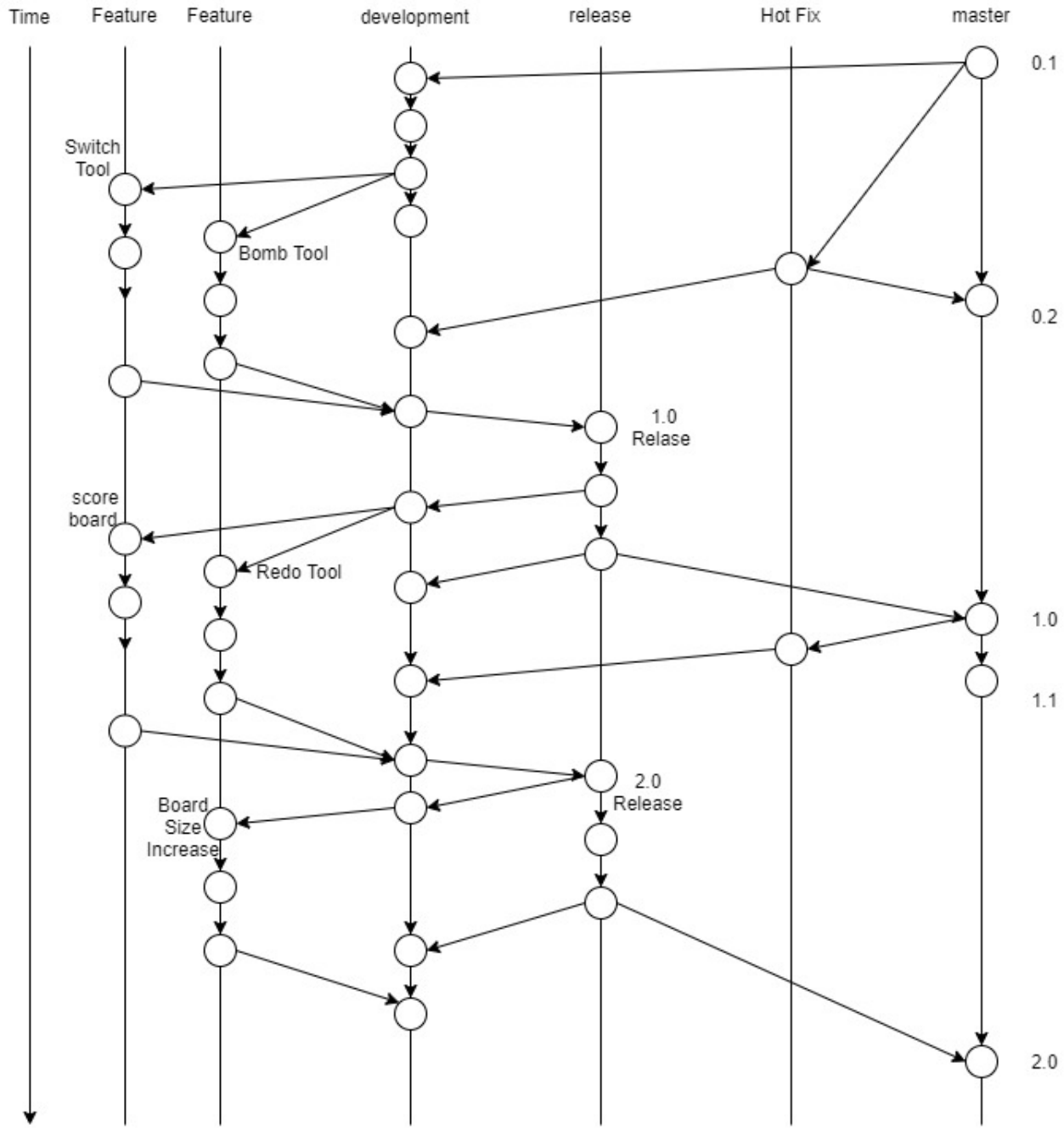
Principal person for LaTex format editor:

Yanting Cao

Software development main role division:

1. Function manager: Shengchen Zhou
2. Requirement analyst: Chris Fu
3. Software technologist: Yanting Cao
4. Software developer: Chris Fu
5. Software tester: Shengchen Zhou

4 Git Workflow Plan



5 Proof of Concept Demonstration Plan

Most significant Risk

Our game implementation does not involve much risks. The only possible risk is after it is released to online website, a huge amount of users accessing requests might lead to the host serve crash once it reaches to a certain limit.

Difficulty of implementation

The most difficult part of the implementation is appropriately reorganizing the source code of the game and being well-known with the software architect design of different sections to re-develop the project. The source code of the game contains a great number of lines and complex structure, which might make code optimization a challenge for us.

Difficulty of Testing

The coding language we are going to use is JavaScript. We have several years of JAVA programming experience and J-Unit test implementation. Although we are half-new to JavaScript, we should be able to finish the testing with knowledge acquired in past courses, especially 3S03 software testing.

Difficulty of installing a library

Installing a library to satisfy the program is not difficult. All libraries used in original source code is installed and most of them are what we have used before. The new features we planned to add do not require new libraries currently.

Portability

Portability will not be a concern because the user interface is made through website. Any user with access to a commonly-used web browser should have no issue to use our product.

6 Technology

URL for original project

`https://github.com/gabrielecirulli/2048`

Programming language

JavaScript, CSS, HTML

Preference on IDE

Visual Studio Code, Sublime

Testing framework planning to use

Jasmine

Tools for editing document

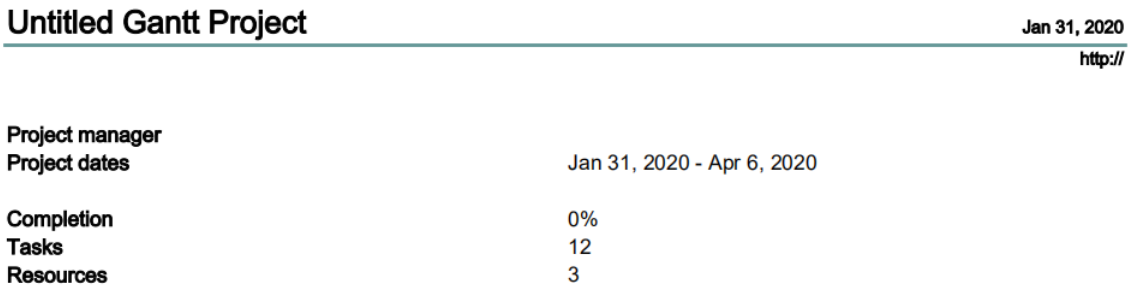
Overleaf

7 Coding Style

With the aim to improve collaboration and code quality, we will be following Google's coding standards for source code programming. Coding style code document citation listed below:

`https://google.github.io/styleguide/htmlcssguide.html`
`https://google.github.io/styleguide/jsguide.html#jsdoc-top-file-level-comments`

8 Project Schedule



Untitled Gantt Project

Jan 31, 2020

2

Tasks

Name	Begin date	End date
Development Plan	1/31/20	1/31/20
Requirements Document Revision 0	2/7/20	2/7/20
Proof of Concept Demonstration	2/14/20	2/14/20
Test Plan Revision 0	2/28/20	2/28/20
Technology learning	2/28/20	3/19/20
Coding	2/28/20	3/27/20
Design & Document Revision 0	3/13/20	3/13/20
Revision 0 Demonstration	3/16/20	3/16/20
Usability test	3/25/20	3/25/20
Usability test	3/27/20	3/27/20
Final Demonstration	3/30/20	3/30/20
Final Documentation	4/6/20	4/6/20

Untitled Gantt Project

Jan 31, 2020

3

Resources

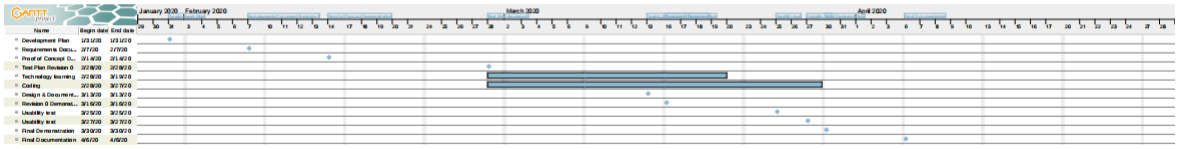
Name	Default role
Shengchen Zhou	function manager
Chris Fu	software developer
Yanting Cao	software technologist

Untitled Gantt Project

Jan 31, 2020

4

Gantt Chart

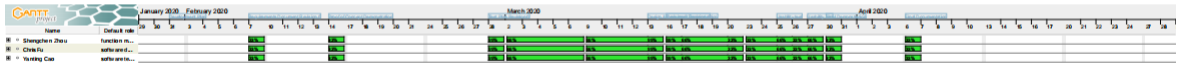


Untitled Gantt Project

Jan 31, 2020

5

Resources Chart



9 Project Review