

SE 3XA3: Development Plan

Ultimate Tic Tac Toe

Team 3, Tic Tac Toe
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Table 1: Revision History

Date	Developer(s)	Change
September 28	Pareek Ravi	Initial Setup
September 28	Pareek Ravi and Kunal Shah	Started on Development Plan
September 29	Kunal Shah	Team Meeting Plan, Team Communication Plan and Team Member Roles
September 29	Pareek Ravi	Proof of Concept Demonstration Plan , Gantt Chart
September 30	Kunal Shah	Technology , Git Workflow Plan
September 30	Kunal Shah	Coding Style and updated Technology
October 5	Kunal Shah	Changed Gantt Chart Location
December 5	Pareek Ravi	Made changes based on suggestions from Chris
December 7	Kunal Shah	Rev 1 Submission

Abstract

Ultimate Tic Tac Toe is a variation on the classic game of Tic Tac Toe. It is simply multiple games of Tic Tac Toe running simultaneously to make a classic game that often ends in a draw have an exciting ending.

1 Team Meeting Plan

Our Team will be meeting 4 times a week; twice during lab hours and twice outside of lab. Out of lab meetings will take place in a few locations such as Thode Library, Health Sciences Library, team member's homes or via online mediums such as Skype. During each meeting minutes will be taken down. This will recap what was done during the meeting, what we have done since the last meeting and what we plan to accomplish before the next meeting.

2 Team Communication Plan

All team communication about setting group meetings and project related communication will occur on the Facebook messenger group chat. Skype will be used to conduct "virtual" face to face meetings outside of lab. Git issues will be used for setting milestones, delegating tasks and reporting bugs in the program.

3 Team Member Roles

During every meeting one member (alternating) will be the meeting facilitator. Other roles are distributed as follows:

- Kunal: Developer, LaTeX Technology Expert, HTML, CSS Expert
- Pareek: Developer, Git Technology Expert, Gantt Expert, JavaScript Expert

4 Git Workflow Plan

Our team will be using a Master only git workflow. This means all code will be pushed to the master branch. Every milestone commit will be tagged with its predefined identifier. If code that is currently work in progress is pushed to the repository, it's commit message must indicate that with the string "WIP". If there is code that is not working, it must have a git issue linked to the commit.

5 Proof of Concept Demonstration Plan

The proof of concept demonstration will involve the fundamental game dynamics fully working. This will include the logic to determine if a move is valid, if a

player has taken control of one inner board and if a player has won the entire game. It will also have user inputs from the same local machine for up to 5 moves each.

6 Technology

Technologies that will be used include:

- Git - Project version control
- LaTeX - Document preparation system
- Javascript - Programming language for interactive effects within web browsers
- HTML - Standard language for World Wide Web sites.
- CSS - HTML Styling Language
- JsDoc - Documentation generation system
- Karma - Javascript Unit Testing system

7 Coding Style

The project shall be coded using [Google Javascript style guidelines](#).

8 Project Schedule

A [Gantt Chart](#) with a detailed breakdown of the milestones of this project.

9 Project Review

Looking back, the Ultimate Tic Tac Toe project was a success. The implementation matched the scope, requirements and all the features. The team was very pleased with the result as it was better than initially imagined. The development of the game was difficult at time, but hard work and perseverance ensured that the project was a success in the end. The team was also pleased with the documentation of the game. All the documents were clearly written in a structured form such that anyone can follow them. At the completion of the project, the team is content with the results achieved and will strive to continue to improve on the project.

One aspect of the project that could have gone smoother is the time management when it came to the documentation. Though the documentation was highly prioritized, the team would often be distracted by trying to make the game perfect. The use of the Gantt chart was helpful in allocating time for

each milestone, but in the future, it would be more beneficial if the Gantt chart allocated time for the documentation of each report.

The few features that the team would like to include are person vs person, person vs computer and score tracking. These are features that would make this project excellent, but these are updates that the team will release soon. Based on the goals set by the team at the start of the project, we are happy to say that we exceeded our expectations and would love to take on another project of this scale.