Problem Statement and Goals
SFWRENG 4G06

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Table 1: Revision History

Date	Developer(s)	Change
Date1	Name(s)	Description of changes
Date2	Name(s)	Description of changes
...	...	...

1 Problem Statement

1.1 Problem

Games are a staple of entertainment and are used to bring people together for both competition and fun. There can often be a desire to share the experience of playing a game with someone but meeting can be hard or impossible in-person and so having an online version of popular games allows for such opportunities. One such game is the game of Yahtzee, which while it does have online versions, are limited to the classic rule-set and do not allow for variants to be designed and played. Yahtzee is a game many know yet is not often played, yet by leveraging the most interesting game mechanics and creating different variants, we could reinvigorate the genre while paying homage to the original. As developers, we are aiming to create an environment in which Yahtzee and Yahtzee variants can be designed and played with some preset rule-sets to be used as a starting-off point. This would allow for both the classic game as well as different variants of it, such as using 8-sided dice, to be played with a friend online.

1.2 Inputs and Outputs

In terms of interacting with the game, two players will exist and have the ability to interact with the current game state, allowing them to make decisions based on game events. The game state will be presented through a visual user interface displaying different elements of the game, including the dice and points system(s).

1.3 Stakeholders

1.4 Environment

The game will be run on Windows 10 devices and be run with an internet connection to enable online multiplayer. One of the players would act as the host with the other connecting such that they can play in real-time with an online connection.

2 Goals

3 Stretch Goals

4 Challenge Level and Extras

Through the implementation of not just a single Yahtzee game variant, but by implementing a system where the user can create a custom game variant and connect to another online player to play it, we are achieving the advanced challenge level. We would also provide some pre-set game variants that have been tested and were found to be more fun than others.

Some optional implementation elements we could aim for would be to implement local multiplayer and even singleplayer gamemodes.

We will include extra elements to aid in better developing our game and allow us to design for a fun gaming experience, as we wish this game to not be just a capstone project, but a game we can be proud of and put out into the world. Following industry practices in game development, we wish to use focus groups and surveys to direct the game's development to cater to the stakeholders and the supervisor.

Appendix — Reflection

The purpose of reflection questions is to give you a chance to assess your own learning and that of your group as a whole, and to find ways to improve in the future. Reflection is an important part of the learning process. Reflection is also an essential component of a successful software development process.

Reflections are most interesting and useful when they're honest, even if the stories they tell are imperfect. You will be marked based on your depth of thought and analysis, and not based on the content of the reflections themselves. Thus, for full marks we encourage you to answer openly and honestly and to avoid simply writing "what you think the evaluator wants to hear."

Please answer the following questions. Some questions can be answered on the team level, but where appropriate, each team member should write their own response:

1. What went well while writing this deliverable?

2. What pain points did you experience during this deliverable, and how did you resolve them?

3. How did you and your team adjust the scope of your goals to ensure they are suitable for a Capstone project (not overly ambitious but also of appropriate complexity for a senior design project)?