**# Motivation and background for the project**

I started playing Dungeons & Dragons (D&D) a year ago. I have been wanting to play for a long time, I even had my own collection of dice required to play the game. However, I play D&D over the internet using something called a virtual tabletop, or VTT. There are scores of virtual tabletop applications to choose from like Roll20, Foundry, and Shard. The one I have been using for the last year is Fantasy Grounds. One feature that is common among virtual tabletop programs is dice rolling. Players roll dice virtually using realistic simulated dice.

**## Role of the dice in D&D**

Dice rolling is a part of Dungeons & Dragons and other tabletop role-playing games (RPGs) for a number of reasons.

- Dice provide a fair and impartial way to resolve actions in the game. This is important because it helps to ensure that the game is not biased in favor of any one player or character.

- Dice can be used to represent a wide range of different things in the game, from the outcome of a battle to the success of a skill check. This makes them a very versatile tool for the Dungeon Master (DM).

- Dice add an element of chance and unpredictability to the game. This contributes to the excitement and tension of the game. You never know what the outcome of a dice roll will be, and the outcome of a dice roll can have a significant impact on the game.

- Dice can add a sense of physicality and excitement to the game. Rolling dice can be a very satisfying experience, and it can help to immerse the players in the game world.

**#### Why do virtual tabletop applications go through the trouble of creating animated simulations of dice?**

**#### How are the simulations of dice rolling simulated, is it purely visual?**

**#### How is the sensory experience of rolling dice in the real world different from the experience of rolling dice using a virtual tabletop program?**

Why do VTTs go through the trouble of creating animated simulations of dice?

There are a few reasons why VTTs go through the trouble of creating animated simulations of dice. First, it can be more visually appealing than simply displaying the results of a dice roll. Second, it can help to create a more immersive experience for the players. Third, it can help to prevent cheating.

How are the simulations of dice rolling simulated?

VTTs use a variety of algorithms to simulate the rolling of dice. Some algorithms use a random number generator to produce a random number between 1 and the number of sides on the die. Other algorithms use a physics simulation to model the rolling of a real die.

How is the sensory experience of rolling dice in the real world different from the experience of rolling dice using a virtual tabletop program?

There are a few key differences between the sensory experience of rolling dice in the real world and the experience of rolling dice using a virtual tabletop program. First, the physical act of rolling dice can be more satisfying than simply clicking a button. Second, the sound of dice rolling can be more immersive than the sound of dice rolling on a computer screen. Third, the tactile sensation of dice rolling can be more satisfying than the visual sensation of dice rolling on a computer screen.

Overall, dice rolling is an essential part of D&D and other RPGs, and VTTs have done a good job of replicating the experience of rolling dice in the real world. However, there are some key differences between the two experiences, and some players may still prefer to roll dice in person.

Virtual tabletops (VTTs) offer several advantages for playing role-playing games (RPGs):

\*\*Accessibility:\*\* VTTs allow players to connect and play RPGs from anywhere in the world, eliminating geographical barriers and making it easier to find and join games. This is particularly beneficial for people who live in remote areas or have difficulty traveling to traditional gaming venues.

\*\*Flexibility:\*\* VTTs provide a flexible and customizable environment for playing RPGs. They allow Game Masters (GMs) to create and share maps, tokens, and other game assets, as well as automate many of the game's mechanics, such as rolling dice and tracking character sheets. This can save time and effort for GMs, allowing them to focus on storytelling and running the game.

\*\*Enhancement of Immersion:\*\* VTTs can enhance the immersion of RPGs by providing visual aids, such as maps, tokens, and sound effects. This can help players to better visualize the setting and the actions of their characters, leading to a more immersive and engaging gaming experience.

\*\*Community Building:\*\* VTTs often have built-in communities where players can connect, share resources, and find other players to game with. This can be a valuable resource for new players and can help to foster a sense of camaraderie among gamers.

VTTs have become increasingly popular among people who play RPGs. According to a recent survey, over 50% of RPG players now use VTTs to play their games. This popularity is likely due to the many advantages that VTTs offer, as mentioned above.

Here are some arguments you can use to convince your stakeholders that your software development team can make money by creating software add-ons and extensions for virtual tabletops:

\*\*The market for VTT software is growing rapidly.\*\* The popularity of VTTs is increasing, and this is leading to a growing market for VTT software and add-ons. This is a good opportunity for your team to develop and market their own VTT add-ons and extensions.

\*\*There is a demand for high-quality VTT add-ons and extensions.\*\* Many VTT users are looking for high-quality add-ons and extensions that can enhance their gaming experience. Your team can develop innovative and useful add-ons that will appeal to this demand.

\*\*VTT add-ons and extensions can be sold through a variety of channels.\*\* There are a number of different ways to sell VTT add-ons and extensions, including through online marketplaces, direct sales to VTT providers, and through fan communities. This gives your team a number of different options for reaching potential customers.

\*\*VTT add-ons and extensions can be a recurring revenue stream.\*\* Once your team develops a popular VTT add-on or extension, they can generate recurring revenue by offering updates and new features. This can be a very profitable business model.

In addition to these arguments, you can also provide your stakeholders with specific examples of successful VTT add-ons and extensions that have generated significant revenue. This will help to show them the potential for your team to create a successful business in this market.