**Project Proposal**

​​WordleBot for Discord revolutionizes the beloved word puzzle game Wordle by integrating it into Discord servers. This adaptation enhances accessibility and introduces a social element to the game, allowing players to enjoy Wordle within a community-driven platform. By leveraging Discord's interactive features, WordleBot aims to attract a wider audience, fostering engagement and competition.

**Technical Framework and Conceptual Design:**   
Developed in Java, WordleBot replicates the engaging gameplay of the classic Wordle game. It employs a color-coded feedback system through Discord emojis, offering an intuitive and visually engaging way for players to receive instant feedback on their guesses.

**The emojis represent:**  
Green for letters in the correct position,   
Yellow for correct letters in the wrong position,   
Gray for incorrect letters.   
This feedback mechanism is central to the game's strategy, prompting players to think critically about their next guess.

**User Features:**   
!play <5\_letter\_word>: Users can guess the Wordle of the day, receiving feedback through colored emojis.   
!leaderboard: Displays the server's highest win rates.   
!daily: Shows the set number of points available for that day.   
!streak: Reveals the highest win streak in the server and the user holding it.   
!bet <number\_of\_points>: Allows users to wager points on the game, with the potential to double their points for a win or lose them for a loss.   
!points: Users can check their current points.   
!shop and !buy <item>: Players can spend points to purchase advantages for the next game, such as revealing a letter or adding an extra guess

**Background:**   
Numerous Java-based versions of the Wordle game exist, each offering different features or twists on the original concept. Our project distinguishes itself by integrating Discord bot functionality and incorporating a data chart to track players' win streaks and the number of guesses for each victory. This innovative approach not only enhances the gameplay experience but also promotes a competitive and communal atmosphere.

**Vision Statement**

This is for the communities WHO seek to enforce their language skills and senses of camaraderie through the vocabulary game, this bot empowers users to engage in daily linguistic puzzles, and compete with each other., Unlike the traditional wordle game, or bot will provide active learning and social interaction, focusing on the joy of discovery and competition. OUR Bot enables users to customize their experience on the game with features like betting and purchasing strategic advantages, this approach ensures that every interaction is not just a game, but a step towards building a more connected, engaged, and intellectually stimulated community.

**User Persona 1**

Name: Tyler

Age: 21

Occupation: Computer Science student

Tyler, a computer science student Tyler, age 21, is a student at Temple University studying computer science in Philadelphia, PA. He is a junior, who has finished most of the curriculum to attain his degree. He was born in King of Prussia, PA, where his father worked in the technology industry as a software engineer and his mother was a stay-at-home mom. He moved to Philadelphia to pursue his degree and lives with a few of his high school friends that also study at Temple. He primarily uses social media to communicate with his friends and fill his free time. Tyler uses various social media channels to interact with his friends and is extremely interested in technology and programming. He is interested in many forms of gaming and uses social media to communicate with his friends as they play online games together. He believes that he will use Wordle discord bot to share his Wordle results with his friends and engage in friendly competition. As a computer science student, he is frequently online in Discord and is extremely familiar with the application, so he would be excited to use Discord to play online games and communicate with his friends in the same place.

**User Persona 2**

Name: Lauren

Age: 33

Occupation: Stay-at-home mom

Lauren is a 33-year-old stay-at-home parent who loves to unwind with casual games when she gets a moment to herself. Her days are packed with taking care of her children, so she looks for games that she can easily pick up and play in short bursts. Already familiar with Discord, where she occasionally connects with friends, she discovers the Wordle bot. It fits perfectly into her routine. It's simple to understand and doesn't require a lot of time commitment, making it an ideal way for Lauren to relax and challenge her mind between her daily tasks.

Even though Lauren's gaming sessions are brief, she finds immense satisfaction in solving Wordle puzzles. It's a welcome break from the demands of parenthood, allowing her to escape into a world of words and exercise her cognitive skills. The low-pressure nature of the game means she can play at her own pace without feeling rushed or overwhelmed. Each victory brings a sense of accomplishment, however small, and adds a bit of joy to her day. For Lauren, the Wordle bot is not just a game but a moment of calm and mental stimulation during her busy life.

**User Persona 3**

Name: Lexi

Age: 25

Occupation: Software Developer

Lexi has always had a knack for problem-solving and logic puzzles. In her free time, Lexi enjoys unwinding with a good word game, indulging her passion for puzzles. She is driven by the thrill of competition and the satisfaction of solving puzzles. Lexi is always on the lookout for new challenges to conquer and opportunities to test her skills. The Wordle server provides her with the perfect outlet to indulge her passion for word games while connecting with like-minded individuals. Beyond her professional and recreational interests, Lexi is an avid user of Discord. She values the platform not just for its ability to host communities centered around her interests in coding, gaming, and puzzles but also for the seamless communication it facilitates. Lexi frequently engages in discussions, collaborates on coding projects, and participates in competitive word game challenges within various Discord servers. This digital space allows her to connect with a global community of individuals who share her enthusiasm for technology, gaming, and problem-solving. On Discord, Lexi not only learns more and gets better at what she does but also makes important friendships with people who love the same things she does.

**User Persona 4**

Age: 26

Occupation: Software Engineer

Background: Dustin, 26 year old Software Engineer, considers himself a gamer. Dustin uses Discord everyday.

He's been using Discord since he's been in high school as a way to communicate with his friends when they play video games together and to let them know what games he's been playing. Dustin also uses Discord for communication with his fellow engineers. Dustin loves word games and often times when waiting for his friends or during short breaks in between meetings he does his daily Wordle game.

Dustin values efficiency and wishes there was a way he could play Wordle while in Discord. With Discord always open during his working hours and in his free time, a Wordle Bot would provide singularity between the two platforms.

**List of User Features:**

1. Able to type !play(a 5 letter word) to use the Wordle of the day up to 6 times

a. Receive colored emojis in response to simulate results from Wordle

1. Able to type !leaderboard to see the highest win rate within the server
2. Able to type !daily to see the set number of points for the day
3. Able to type !streak to see the highest win streak in the server and who has the streak
4. Able to type !bet(number of points) to play a game of Wordle and wager an amount of points

a. If they win the game, receive double the points b. If they lose, lose wagered amount of points i. Must have less than or equal to amount of points wagered c. Must bet before !play is called

1. Able to type !points to see how many points they have
2. Buy features from shop using collected points (!shop)

a. !buy command to buy something in the shop, such as i. Buy 1 letter revealed for next game ii. Buy 1 more guess in the game iii. Buy 3 letters removed for the next game

**Risk Management Table**

Categories:

* PS: Product Size
* BI: Business Impact
* CC: Customer Characteristics
* PD: Process Definition
* DE: Development Environment
* TR: Technology to be built
* ST: Staff

| **Risk** | **Category** | **Probability** | **Impact** | **RMMM** |
| --- | --- | --- | --- | --- |
| Incompatibility with Discord API updates | DE | Medium | High | Monitor Discord API updates. Design bot for easy adaptation to API changes. |
| Bugs in game logic | TR | Medium | Medium | Implement comprehensive testing phases. Use community feedback for early detection of bugs. |
| Declining user interest over time | CC | Medium | High | Regular feature updates and community engagement strategies. |
| Complexity in user commands | PD | Low | Medium | Design intuitive user interface. Provide detailed user guides. |
| Unauthorized access to game data | BI | Medium | High | Enforce strong security measures and regular security audits. |
| Violation of privacy laws | BI | Low | High | Ensure compliance with legal standards. Regularly review privacy policies. |
| Budget constraints | BI | Low | Medium | Efficient resource management. Explore alternative funding options. |
| Competition from similar bots | CC | High | Medium | Innovate and differentiate from competitors. Focus on unique selling propositions. |