Part 1: Requirements Gathering via Mock Interview

Interview Simulation

Interviewer: Software Developer (Student) **Interviewee:** Battleship Enthusiast (User)

Interview Transcript

✓ General Questions

Q1: Have you ever played Battleship before? If so, how often do you play?

A: Yes, I've played Battleship before, but I play it occasionally.

Q2: What do you like most about Battleship?

A: What I like most about the game is that it gives me a sense of leadership. Every decision I make has a significant impact on whether I win or lose, so I avoid making hasty moves.

Q3: Do you prefer playing the physical board game or a digital version? Why?

A: I prefer the digital version because it's easy to access at any point in time. It's also more convenient for remote play and automates scorekeeping.

Q4: How would you explain the game to someone who has never played before?

A: I would describe it as an interactive strategy game where you have to outthink your opponent. Each player strategically places their fleet on a hidden grid, then takes turns calling out coordinates to hit the opponent's ships. The goal is to sink all of your opponent's ships before they sink yours.

© Strategy & Gameplay

Q5: Do you have a specific strategy when placing your ships?

A: Actually, I don't follow the same strategy every time. I tend to switch it up in each game so that I'm not too predictable. Also, I spread my ships out rather than keeping them close together, it makes it harder for my opponent to locate them.

Q5a (Follow-up): Do you prefer to keep them close together or spread them out?

A: I definitely prefer to spread them out. Keeping them too close makes it easier for my opponent to wipe them out quickly once they find one.

Q6: What's your usual first move when attacking?

A: I target the lower back of my opponent's grid. This strategy works almost every time for me \Leftrightarrow . I think most players have a tendency to defend their territory heavily at the front, leaving the back more vulnerable.

Q7: Do you think there's an element of luck in Battleship, or is it mostly strategy?

A: For me, it's all about strategy. If you can think like your opponent and predict their placements, you'll dominate. That's how I end up sinking all their ships.

Q8: Have you ever won a game with a last-minute lucky shot?

A: Yes, I have. There was one game where I had only one ship left to find. It took me a while to locate it, and I almost lost in the process. Luckily, I made a lucky shot at the last moment and won

→ Fun & Personal Experience

Q9: What's the most intense Battleship game you've ever played?

A: The most intense game I've ever played was when I was down to just one ship to sink. It became incredibly suspenseful because I kept missing. I almost lost the game, but finally, I landed the winning shot just in time.

Q10: Have you ever played Battleship with a creative twist, like adding house rules? A: No, I haven't, but I'd be open to trying new twists. It sounds fun.

Q11: If you could design a new version of Battleship, what would you change or add?

A: I haven't really thought about a new version, but I'm always open to trying new variations or features.

Q12: Do you think Battleship could work as a team-based game? How would that work?

A: Honestly, I don't think so. Battleship requires a clear decision-maker. It's like the saying, "too many cooks spoil the broth." In a team format, there might be conflicting strategies, which could make the game chaotic.

Output Closing Questions

Q13: Do you think Battleship is more of a game of patience or quick decision-making? A: To me, it's both. It requires patience in carefully planning your attacks, but sometimes, you need to make quick, bold moves to catch your opponent off guard.

Q14: Would you recommend Battleship to someone who enjoys strategy games? Why or why not?

A: Yes, I would definitely recommend it. It's practical and sharpens your reasoning abilities. The game forces you to think critically and anticipate your opponent's next move.

Q15: If you had to describe Battleship in three words, what would they be?

A: Fun \mathfrak{S} , strategic, and thrilling.

✓ Interview Summary

This detailed interview provided comprehensive insights into the Battleship gaming experience, highlighting both gameplay preferences and strategic considerations.

- **Gameplay Preferences:** The user prefers the digital version for convenience and enjoys the strategic decision-making aspect of the game.
- **Strategies:** They frequently vary their ship placements and target the lower back of the grid, anticipating common defensive patterns.
- **Challenges:** They recognize the importance of both patience and quick decisions, with a strong emphasis on reasoning over luck.
- **User Experience:** They appreciate the game's interactive and leadership-oriented nature, making it ideal for strategy enthusiasts.
- **Feature Ideas:** While they haven't played with house rules or customizations, they're open to creative changes in future versions.

These insights will directly inform the software design, focusing on digital accessibility, strategic gameplay, and user engagement features.

Part 2: User Stories with Acceptance Criteria

User Stories

1. Ship Placement and Setup

User Story:

As a player, I want to place my ships strategically on the grid, so I can set up my fleet before the game starts and user can have a harder time finding them.

Acceptance Criteria:

- The player can select a ship and place it either horizontally or vertically.
- The system prevents ships from overlapping or extending beyond the grid.
- A visual indicator shows the ship's position before placement.
- The player can adjust ship positions before confirming.

2. Grid Interaction

User Story:

As a player, I want to select grid coordinates during my turn, so I can attempt to hit my opponent's ships before they sink mine.

Acceptance Criteria:

- The player can click or select grid cells during their turn.
- The system validates that the same cell is not selected twice.
- The grid displays a "hit" or "miss" marker immediately after the shot.
- Invalid moves (e.g., repeated coordinate) display an error message.

3. Turn Management

User Story:

As a player, I want the game to alternate turns, so each player has a fair chance to play.

Acceptance Criteria:

- The game enforces alternating turns.
- Each player's active grid is displayed during their turn.
- A clear visual indicator shows whose turn it is.
- Players cannot make moves during the opponent's turn.

4. Game Feedback

User Story:

As a player, I want immediate visual and audio feedback for my moves, so I know whether I hit or missed.

Acceptance Criteria:

- The game displays "hit" in red and "miss" in white or blue.
- Audio effects play when a ship is hit or missed.
- Sunk ships are marked differently from individual hits.
- A notification appears when all ships are sunk.

5. Multiplayer Mode

User Story:

As a player, I want the option to play against another person or AI, so I have more gameplay variety.

Acceptance Criteria:

- The game offers two modes: player vs. player and player vs. AI.
- In AI mode, the AI makes randomized but strategic moves.
- The AI difficulty level can be set to easy, medium, or hard.
- The game clearly indicates whether you are facing another player or AI.

6. Score Tracking

User Story:

As a player, I want to see the remaining ships, so I can track my progress.

Acceptance Criteria:

- The game displays the remaining ships for both players.
- Sunk ships are visually distinguished (e.g., grayed out).
- A scoreboard tracks the number of hits and misses.
- The game declares the winner when all enemy ships are sunk.

7. Undo and Confirmation

User Story:

As a player, I want the option to confirm or undo my moves, so I can correct mistakes.

Acceptance Criteria:

- Players can preview moves before confirming.
- The game allows a limited number of undo actions.
- A confirmation prompt appears before finalizing a move.
- Undo is disabled after the move is confirmed.

8. Digital Accessibility and Convenience

User Story:

As a player, I want to play the game digitally so I can access it anytime and anywhere.

Acceptance Criteria:

- The game must be available on a digital platform (e.g., web, mobile, or desktop).
- Players should be able to save and resume their progress.
- The user interface should be intuitive and easy to navigate.

Conclusion

This portfolio outlines the requirements and user stories for a Battleship software solution. The interview provided valuable insights into the game's mechanics and desired features. The user stories define essential functionalities with clear acceptance criteria, ensuring the software meets user needs and provides an engaging experience.