**Risk Management Report**

**Project Overview:** The "Animal Farm" web game project involves the development of an interactive virtual farm simulation game with two different versions, each offering unique features and enhancements.

**Objective:** The project aims to create an engaging and user-friendly web-based game where players can raise virtual animals, manage their farm, and experience interactive gameplay.

**Scope:** The project scope includes user registration, login, farm management, animal market functionality, and enhanced user interaction (Version 2).

**Risk Identification and Assessment:**

**Risk 1: Complex Interaction Logic**

* Category: technical risks
* Impact: High
* Probability: Moderate
* Total Risk Score: 6
* Documentation and Reasoning: The new interaction mechanics in Version 2 introduce complex logic, increasing the potential for bugs and inconsistencies.

**Risk 2: Usability Challenges**

* Category: User Experience Risks
* Impact: Moderate
* Probability: Moderate
* Total Risk Score: 4
* Documentation and Reasoning: Enhanced features in Version 2 may lead to user confusion and difficulties navigating the interface.

**Risk 3**: **Monetization Effectiveness**

* Category: Financial
* Impact: Moderate
* Probability: Moderate
* Total Risk Score: 4
* Documentation and Reasoning: The success of monetization strategies in Version 2 is uncertain and could affect revenue generation.

**Risk 4: Third-Party Services**

* Category: Technical Dependencies
* Impact: Moderate
* Probability: Low
* Total Risk Score: 3
* Documentation and Reasoning: Reliance on external services (e.g., Heroku) could lead to potential service interruptions impacting game availability.

**Risk 5: Code Conflicts**

* Category: Version Control Challenges
* Impact: Low
* Probability: Low
* Total Risk Score: 1
* Documentation and Reasoning: Multiple developers working on different features may encounter code conflicts during integration.

**Risk Mitigation and Control:**

**Risk 1: Complex Interaction Logic:**

* Mitigation Plan: Conduct thorough code reviews and extensive testing of interaction mechanics to identify and address potential bugs.
* Historical Records: Maintain a record of identified issues and actions taken to resolve them.

**Risk 2: Usability Challenges:**

* Mitigation Plan: Engage users in usability testing and implement iterative design updates based on feedback.
* Historical Records: Document usability testing results and design changes.

**Risk 3: Monetization Effectiveness:**

* Mitigation Plan: Continuously monitor user engagement, analyze player behavior, and adapt monetization strategies as needed.
* Historical Records: Keep track of revenue data and adjustments made to monetization approaches.

**Risk 4: Third-Party Services**

* Mitigation Plan: Establish contingency plans for service disruptions, such as having an alternative hosting solution in place.
* Historical Records: Maintain a log of service availability and any instances of disruptions.

**Risk 5: Code Conflicts**

* Mitigation Plan: Enforce version control guidelines, use feature branches, and conduct regular code reviews to prevent and address code conflicts.
* Historical Records: Document code conflicts and resolutions during integration.

**Week-by-Week Risk Management:**

| **Week** | **Risk 1 score** | **Risk 2 score** | **Risk 3 score** | **Risk 4 score** | **Risk 5 score** |
| --- | --- | --- | --- | --- | --- |
| 1 | 6 | 4 | 4 | 3 | 1 |
| 2 | 6 | 4 | 4 | 3 | 1 |
| 3 | 6 | 3 | 4 | 3 | 1 |
| 4 | 5 | 3 | 4 | 3 | 1 |
| 5 | 5 | 3 | 3 | 2 | 1 |
| 6 | 5 | 3 | 3 | 2 | 1 |
| 7 | 5 | 3 | 3 | 2 | 1 |
| 8 | 6 | 4 | 4 | 3 | 1 |

**Conclusion:** The risk management approach for the "Animal Farm" web game project involves thorough risk identification, assessment, mitigation, and control strategies. By categorizing and evaluating potential risks, assigning impact and probability scores, implementing mitigation plans, and maintaining historical records, the project team aims to address challenges and uncertainties effectively throughout the 8-week development timeline.