

Roller Derby Revival

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Overview

Premise: Skate fast, hit hard, and kick ass! The hard-hitting, fast-paced game of roller derby, made popular in the 60s and 70s, has returned in the form of an all-girl grassroots revolution. Take your shot by leading a team of strong-willed, colorful skaters through the local, regional and national circuit where you will earn a slot into the Dust Devil National Tournament and have a chance at becoming roller derby champions!

Overall Purpose: The latest roller derby revival began in Austin, TX in 2001 with the latest iteration focusing on competition rather than the pageantry of derby's past. The revival has spread rapidly over the past few years with over 5,000 ladies playing roller derby in leagues throughout the US. Even though all leagues in each city are independently operated by the skaters, the leagues have banded together to form a sanctioning body called the Women's Flat Track Roller Derby Association (WFTDA), to form a nationwide championship circuit and further promote the sport.

Roller Derby Revival would serve as both a sport entertainment game and marketing tool to help advertise the sport of roller derby. Establishing licensing agreements with prominent leagues in order to use actual teams and skater likenesses within the game will provide more realistic experience, and give WFTDA leverage in reaching a newer audience.

Platform: *Roller Derby Revival* will be developed using the Torque game engine with a targeted release for the PC. With the user interface development focused toward a gamepad, rather than keyboard & mouse, the game should be easily ported onto a game console environment.

Genre: Sports

Target Demographic: The target group would center on two core groups:

- Young men (ages 16 – 34) who have grown up playing contact sports in real life or in a video game environment. The game should get these men interested in viewing roller derby as sport rather than scantily-clad girls on skates.
- Young women (ages 18 – 34) who may not otherwise actively pursue a team sport.

For both groups, the focus will remain on marketing roller derby rather than making a pure sport simulation (i.e. *Madden 2K7*). Hence, exaggerated imagery that highlights the spectacle should play as much of a role as accurate gameplay. As well, younger women may not have as much video game experience in the sports genre, necessitating a

simplified controller set to allow them to jump into the game without being overwhelmed by the various action combinations.

Rating: Teen (Mild Violence and Language)

Basic Storyline: You play the role of a strong, independent young girl who gets inspired to play roller derby after meeting with skaters from the top-ranked team at a past national event. With your city just forming a league, you rally together your friends to form a team and compete in the league's season.

Goal: As a roller derby team captain, your dream is to be crowned national roller derby champions. Reaching this overall goal requires your team to compete in the local and regional circuits, defeating teams in bouts to win the respective championships and be considered eligible for national competition. If you win enough bouts against formidable opponents, you will get an invite to the tournament and compete for the national title.

Role of Player: During each bout, the player takes the role of both a team member and manager. As a team member, a player has the ability to choose to play in the offensive role (jammer) or the defensive roles (pivot or blocker). As the jammer, the player must pass opposing players to collect points, using her blockers to help her navigate through the pack. As a blocker, the player must prevent the opposing jammer from passing her teammates. The blocker may accomplish this by directly helping in knocking down opposing players, or calling plays to prevent the opposing jammer from advancing. A pivot is considered the lead blocker, yet their role does not stray from the role of the blocker. A roller derby team normally consists of one jammer, one pivot, and three blockers.

Furthermore, the player also takes on the role of team manager. During the bout, characters (both human-controlled and NPCs) will fatigue due to factors such as damage received from hits or staying out on the track for too long. The player must make roster rotations to keep the best characters in the game and give themselves the best opportunity to win the bout. At the conclusion of each bout that results in victory, a player will receive a number of experience points and cash to advance their teammates' abilities, through improving skill areas or new equipment. The player must determine how to divide the winnings in order to improve their team and stand the best chance for advancing through the game.

Major Challenges: The major challenges facing the player include: learning how to control characters in this fast-paced game, adapting game strategies as the difficulty level in opposing team's increases, and properly managing their teammates' abilities to provide themselves with the best set of characters for winning the next bout.

Player Mode: The game will allow for career and quickplay modes. Career mode, geared toward a single player, will take a player through the story. At each bout within career mode, the player will assume control of either the offense player (jammer) or any defensive position (pivot or blocker). Quickplay mode will allow players to

immediately jump into a bout with an available team (either user-generated or a team one competes against in career mode). Quickplay offers both single and multiple players. With multiplayer mode allowing for players to control characters on the same team (cooperate) or square off against each other in a bout (head-to-head).

User's POV: During each bout, the player will view their controlling character from a third-person perspective.

Setting: Roller derby bouts are played on a flat oval track in a variety of locales. Starting off in career mode, the bouts will take place in small, generic venues that highlight the do-it-yourself nature of the sport (e.g., tennis court, basketball court, roller rink). As the player advances to the regional and national levels, the venues will become larger, with the background imagery highlighting stereotypes for the locales where the game takes place. For example, the Wisconsin team will have audience members wearing cheese-heads and ringing cowbells.

As well, the surface of the track floor should affect the physical abilities of the characters. Hardwood floors provide less traction than textured tennis courts, yet tennis courts take more effort for skaters to maintain speed, making them fatigue at quicker rate.

Characters: Each skater on a team has a set of attributes that will determine their behavior during a bout. The skills that define the skaters include:

- *Speed:* Higher values provide quicker accelerations and top skating speeds.
- *Brutality:* Higher values imply that the skater can dish out harder hits, giving them a better likelihood of knocking down opposing players.
- *Stability:* Higher values mean the skater has better control while in motion, making them more resilient to hits (e.g., harder to knockdown) and easier for a human player to control.
- *Awareness:* Higher values indicate better situational awareness and better probability of executing actions. For NPCs, awareness is tied to the performance provided by the AI component within the game. For human-controlled characters, better awareness means a greater likelihood of an action request (e.g., performing a hit, assisting another skater) being performed successfully. The *Gameplay* section will explain action success probabilities in more detail.
- *Stamina:* Higher values will slow the player's performance degradation during the game. As well, players with higher stamina will recuperate faster while resting or off the track.

Each skill will have the current value and maximum value. Giving a player experience points from successful bouts will increase their current value of the chosen skill. Expanding a skater's potential skill level will be done through improving the characters'

physical condition (e.g., make them train instead of rest between bouts) or giving them better equipment.

Each skater will be represented through a human-like avatar. The player has the ability to create their own avatars (in terms of physical appearance and dress) and alter the costumes & equipment worn by their teammate avatars.

Structure: Each bout played in the career mode represents a level within the game. Hence, the completion of each level should bring you closer to accomplishing the overall goal of winning the national championship. Yet, the game will not have a definite level count required for advancing through the sub-goals of the game (e.g., winning city championship, winning regional championship, winning national tournament). Management decisions made between bouts will effect how quickly one advances to each sub-goal.

Gameplay

Scoring: The object of the roller derby bout is to score more points than the opposing team. A point is scored each time the team's jammer laps an opposing player within the track boundaries. The pivot and blockers assist their jammer by engaging the opposing players. In roller derby, one may use physical contact to move or knock down opponents in order help your jammer make scoring passes. However, certain contact is deemed illegal (e.g., throwing an elbow, tripping, push from behind, etc.) and will result in the skater receiving a foul if caught executing the illegal contact. Too many fouls by a player will result in the player being removed from the track, penalizing the team by losing a member for a period of time and giving the opposing team easier scoring opportunities.

The rules for scoring on a team that's short-handed are the following:

- For each player in the penalty box, the pivot's point total increases by one. For example, if the team has one player in the penalty box, passing the pivot is worth two points as opposed to one.
- The team will lose the position along with the player. If the team's jammer ends up in the penalty box, then the team cannot substitute the jammer position until the penalized player leaves the box. Hence, a team could be without any offensive capabilities during the game.

Core Gameplay: In the game, the player will have the ability to play in either the offensive (jammer) or defensive roles (pivot or blocker). The player may select the "Switch Role" action, which will flip their control to either the jammer or one of the defensive characters. The switch from offense to defense will have the player in control of the defensive character closest to the jammer. At that point, the player can cycle through the various blockers to control one of interest. Performing the "Switch Role" action again will put the player back in control of the jammer.

Moving the skater on the track will require using the analog toggle switch on the gamepad. Pressing forward will increase the skater's speed while pushing back will reduce it. Push either left or right will have the skater's strafe in the corresponding direction. Utilizing a gamepad with two analog toggle switches would allow for a larger variety of movements. For instance, slowing down a skater gradually would require pulling back on one toggle switch, while a hard stop would require pulling back on both switches.

In keeping with the simplified control set, the player's will select an action category to help them in their roles, rather than having the controls map to specific actions. To execute the action, the player would press a button to initiate the desired action category. If the player is in a position appropriate for that action, a reaction-time bar will appear that will prompt for the player's response. If the player responds within the time constraints, the action will execute successfully. An unsuccessful attempt would lead to a consequence against the player's character. The speed of the reaction-time constraint will depend on the character's *Awareness* skill level. Better *Awareness* makes it easier for the player to respond to the reaction-time constraint.

Listed below are the action categories along with information detailing the action's benefit and consequence of failing the reaction time prompt:

- Assists - As a jammer, you can call a teammate for an assist to help you pass by opposing players. When executed, the jammer will get a brief acceleration boost to help them get through the pack. When controlling the jammer character, you can only call for an assist if you're near a teammate. As a blocker or pivot, you can give an assist if your character is close to the jammer. Failing the reaction time requirements will cause your character to slow down or fall.
- Legal Hit – Whenever your character is within range of an opposing character, you can select to perform a legal hit on your opponent; knocking them across the track or flat on the ground. The animation for the action should demonstrate a legal hit when performed. Failing the reaction time requirement will cause your character to miss the hit, receive a hit in return, or draw an illegal contact foul. To simulate human referee error, even a successful legal hit can still draw a foul. However, the probability of this occurring will be low.
- Illegal Hit – Sometimes desperate times call for desperate measures. The setup for performing this action is similar to a legal hit, with the outcome being far more devastating to the recipient. Along with higher devastation, the reaction-time requirements will be easier for successfully executing an illegal hit rather than a legal one (It's always easier to cheat than play by the rules). However, the probability of drawing a foul performing this action is far higher than taking the legal route.

During the game, the camera should remain focused on the back of the player; allowing you to see what's ahead on the track. However, one may periodically want to scan what's occurring behind their character to prepare for their next action. In that case, a button press should be available that allow the user to get an "over the shoulder" view of what's occurring behind their character at a given moment.

Relation of Character Skill to Gameplay: As noted in the *Overview* section, each skating character will have a set of attributes (skills) that will determine their behavior during a bout. Each skill contains both a current value and a maximum value, with the current value affecting the abilities of the character during a bout. While the skater remains on the track, the current values for their skills will diminish based upon their *Stamina* rating. Also, events such as the skater falling down or taking a vicious hit will further reduce their current skill level values.

As team manager, the player must rotate characters into the game to periodically give them time to rest and replenish their skill values. Because of this heavy rotation, having a well-balanced team should provide more success to a player than developing a few characters with extraordinary skill levels. These considerations should make team development an important aspect for the player in career mode.

Levels & Ticking Clock: A bout will be divided into a series of jams, with a jam lasting no more than two minutes. After the start of the jam, the first jammer to make it through the pack cleanly (in bounds & no fouls) becomes lead jammer. The lead jammer has the ability to stop the jam prior to the two minute boundary. At the end of jam, the skaters return to their starting positions and begin the next jam. Typically, a bout will have two timed periods, with each period containing as many jams as possible.

After each bout, the player will have a number of days until their next bout. A player advances through each day by either assigning physical training to their skaters or resting them. Training days allow a skater to develop and boost their maximum value for a particular skill. Resting a skater allows them to recuperate, allowing them to replenish their energy for the next bout. Training days provide some recuperation, but far less than a resting day.

Interface: During the bout, a HUD should be present to display key information on the status of the game. Static HUD elements that will persist throughout the game include:

- Points total for both teams.
- Period-time clock (Gives player's an estimate as to the number of jams remaining)
- Jam-time clock.

Dynamic HUD elements, graphics that appear due to certain games events or player actions, will include:

- Time countdown for players in the penalty box
- Reaction-time prompt for executed actions.

During the bout, a player should be able to pause the game and review information about their team. This screen should allow for updating the rotation sequence and observing in-game stats.

Within career mode, a player has the ability to perform tasks that modify their team or setup their schedule between bouts. The menu interface for choosing from these tasks will resemble a girl's desk, with objects on the desk representative of the possible tasks. Listed below are some possible items with their associated task:

- Calendar – Observe the bout schedule (list of games leading up to championship) and assign activities to skaters during the days between bouts.
- Map – View information on other teams within your circuit and use it to schedule bouts with those teams.
- PC w/ huge monitor – Surf the web for shops to purchase new skating equipment and outfits for your teammates.

Audio, Video, and Tactile Feedback

Audio: Sounds will be needed to re-create ambient noises in each venue (e.g., crowd noise, background music, etc.). Although cut-scenes are a necessity in advancing the story, some monologues would help bring the characters and bout environment to life. Examples of monologues could include:

- An announcer for skater introductions.
- Skaters shouting taunts after a successful action.
- Heckling from audience members.

With the roller derby scene inspired heavily by punk rock culture, incorporating songs from the punk rock, rock-a-billy, and heavy metal genres would give a more legitimate feel to the environment. Plus, many PC and console games allow users to create their own playlists using music stored on these platforms.

Video: The concerns with video stem from establishing the proper settings for each venue. The settings should contain both a track with a visually recognizable surface, and a themed environment surrounding the track. Lighting also plays a factor depending on if the venue represents a certain establishment (ex., flashing disco lights for roller rink, dark environment for bar, bright light for outdoor play).

Tactile Feedback: Heavy vibrations of the gamepad would occur if the player receives a hard hit on their character. Also, subtle vibrations in the gamepad will occur in moments where the skater loses grip with the track. This may occur if the player goes too quickly

through a turn or makes a sudden change in direction. The feedback would serve as a cue to help them re-orient the skater and get them moving again along a better path.