

Tennis Annotation Guideline

This document serves as a comprehensive operational manual for the annotation of tennis match footage. It outlines the end-to-end workflow for processing full-length matches, which are divided into five-minute segments to facilitate consistent labeling. The guide details the requirements for capturing game context, identifying point boundaries, recording precise game data, and generating high-quality captions, while also providing standardized procedures for quality control and auditing to ensure data accuracy and consistency.

Objective

The primary objective is to **capture all point segments in tennis matches** and **annotate them with detailed captions and comprehensive game data**. Segments commence upon service and conclude when a point is scored. Timestamps must be precise; avoid including extraneous activity occurring before or after the point.

Focus Areas

- Identify **every point** throughout the match.
- Include **relevant game data** (server, receiver, score, etc.) and provide dense, high-quality **captions** to enhance understanding.
- The **start and end times** must not extend more than **2 seconds before or after** the actual point.
- Keep timestamps tightly aligned with each point to maintain consistency.
- Include **essential contextual information** such as crowd reactions, player emotions, and relevant audio cues.

Video Data Preprocessing

Prior to this annotation project, 250 full tennis match videos (each running 2 to 3 hours) were sourced for labeling. We prioritize full matches over short clips to preserve consistent game context from start to finish. Given the file size constraints and loading challenges within our [SuperAnnotate](#) web interface, and to mitigate annotator fatigue over long durations, we divide full-length videos into five-minute segments. Processing each segment as an independent task allows for consistent focus, while additional fields ensure these annotations can be seamlessly stitched together into a unified full-match record.

Match Context

Has the Match Context been provided in Segment 1? ⓘ

☒ Yes
 ☐ No

Player 1 Name

Novak Djokovic

Enter appearance/visual description of Player 1

"Novak Djokovic" is a Serbian tennis player, wearing a red t-shirt with white stripes, white shorts, white socks, and red shoes.

Player 2 Name

Rafael Nadal

Enter appearance/visual description of Player 2

"Rafael Nadal" is a Spanish tennis player wearing a blue t-shirt, blue shorts, white socks, black shoes, and a red headband with a white Nike logo.

Summarize the Match

This is the 2020 Roland-Garros men's singles final played between Rafael Nadal and Novak Djokovic at Court Philippe-Chatrier in Paris. It was held on October 11, 2020 (Sunday). The match was played indoors due to the rain. It was a one-sided match that lasted 3 sets, with all 3 won by Nadal. As this Grand Slam final follows a best-of-five-sets format, Nadal won by taking the first three sets. He won the first set with a score of 0–6, the second set with 2–6, and the third set with 5–7.

Figure 1: Game context annotation example

The labeling process is performed and checked in multiple quality control layers to ensure the best annotation quality. The following includes the step by step guide for annotators, quality controllers, and auditors.

Step-by-Step Guide for Annotators

Tennis matches naturally segment into distinct points, which form the basis of our point-by-point annotation workflow. A point commences with the service and concludes once a player scores. Each five-minute video segment requires two primary annotation phases: (1) Game Context and (2) Point Annotation.

1. **Game Context:** Game context is required only for the first video segment of each match. While "Match Context" must be marked "Yes" for all segments, provide detailed information exclusively within the first segment (see Figure 1). The annotator must populate the following:

- 1.1. Player 1 Name & Visual Description
- 1.2. Player 2 Name & Visual Description
- 1.3. Match Summary (including tournament name and location)

2. **Event Annotation:**

- 2.1. **Identifying points:** Click "Add Event" to begin identifying points.



- **Start Time:** Timestamp right before the serving player starts the serve.
- **End Time:** Timestamp the definitive end of the point (e.g., ball out, net, bounce twice, winner, etc.).

NOTE: Maintain precise and tight timestamps for point boundaries; exclude extraneous post-point activity, e.g., players walking around after the point.

- 2.2. **Annotate Mandatory Fields:** For each point, accurately complete the following three fields:

- Point Annotation (Fig 2)
- Winner (Fig 3)
- Loser (Fig 4)

NOTE: Provide dense, high-quality captions with additional game data to enable deeper insights.

NOTE: After completing the steps above, make sure to click **SAVE**, then repeat the same process until the segment ends.

3. **Submission:** Review the completed work and submit for Quality Control (QC).

Point Annotation

Point started in this video segment?

☒ Yes
☐ No

Point concluded in this video segment?

☒ Yes
☐ No

Server

☒ Player 1
☐ Player 2

Server Location

☐ Far-court
☒ Near-court

Receiver

☐ Player 1
☒ Player 2

Receiver Location

☒ Far-court
☐ Near-court

Winner

☒ Server
☐ Receiver

Number of Serving Attempts

2

Number of Shots

4

Score Before

"Djokovic vs. Nadal : {0-0, 0-0}"

Score After

"Djokovic vs. Nadal : {0-0, 15-0}"

How did the point end?

☐ Ace: is when the server scores in the first shot. The receiver didn't touch the ball.
☐ Double Fault: The server misses both first and second serves, resulting in an automatic point for the opponent.
☐ Winner: When a shot (other than serve) lands in and isn't touched or can't be returned. Clean shot not returned
☐ Forced Error: error caused due to pressure from the opponent's aggressive or well-placed shot. e.g., rushed forehand sent long after a powerful serve or wide angle. The opponent pressured into an error.
☒ Unforced Error: player makes a mistake during the point without significant pressure such as hitting the ball outside of the court (long or wide) or into the net during a routine shot. Routine miss without pressure.
☐ Violation: Rule-based loss of point includes player touching net, ball touches player, double bounce, foot fault, etc.
☐ Retirement/Default: Player stops playing due to injury or penalty
☐ Point ended by review

Describe how the point ended:

The point ended when Nadal hit a full-swing forehand beyond the baseline.

Caption the point:

Djokovic serves to the No-Man's land in the first attempt, and in the second attempt, Djokovic serves to the deuce side. At the 4th shot, Nadal strikes a full-swing forehand that goes beyond the baseline.

Audio Cues: ⓘ

Grunts, thwacks, thumps, umpire's call.

Figure 2: Point annotation example

Winner

Shot Type *
down-the-middle ace

Shot Trajectory *
n/a

Hand Used *
BH (backhand)

Figure 3: Winner annotation example

Loser

Shot Type *
groundstroke hit flat or very little spin

Shot Trajectory *
cross court

Hand Used *
FH (forehand)

How Point Ended (Error Type) *
out

Lateral Movement *
L2R (left to right)

Depth Movement *
No depth movement

Figure 4: Loser annotation example

Field Description

Field Name	Description
video_id: string	This is a unique identifier for the video segment.
Video_path: string	s3 path for the video segment.
Match Context: dict	Provide a detailed visual description of each player, including their attire and accessories. Example: 'Ben Shelton' is wearing a black t-shirt and shorts, a white headband, and yellow shoes. 'Alexander Zverev' is wearing a white t-shirt, black shorts, a yellow headband, and black shoes.
Original Video - Start Time: "hour:minute:second"	The start time of the video segment in the original video, e.g., "00:05:00".
Original Video - End Time: "hour:minute:second"	The end time of the video segment in the original video, e.g., "00:10:00".
id: string (UUID)	Unique identifier for the point
start_time: number	Point start time in seconds (relative to segment)
end_time: number	Point end time in seconds (relative to segment)
point_start_in_segment: string	Whether the point starts in this segment ("Yes" / "No")
point_concluded_in_segment: string	Whether the point ends in this segment ("Yes" / "No")
server: string	"Player 1" or "Player 2"
receiver: string	"Player 1" or "Player 2"
winner: string	"Server", "Receiver", or empty if the point is incomplete in the current video segment as a result of video segmentation.
server_location: string	e.g. "Far-court", "Near-court"
receiver_location: string	e.g. "Far-court", "Near-court"
num_serving_attempts_until_successful: number	The number of times the server tried until served properly. A server gets 2 chances before losing the point.
num_shots_exchanged : number	Total shots in the rally (e.g. "9", "0" for double fault). The number of back and forth shots exchanged between the 2 players from start to finish.
score_before: string	The score before this point started in a special format (See appendix). For example: "Djokovic vs. Alcaraz: 6-3, {4-4, 15-40}"
score_after: string	The score after this point ended in a special format (See appendix). For example: "Djokovic vs. Alcaraz: 6-3, {4-4, 30-40}"

how_point_ended: multi-choice	A point can end in different ways. It can happen during serving or in a rally (i.e., when shots are exchanged). It takes one of the following bold values. For example, the first two cases (1-2) happen at serving, and the next three (3-5) cover normal rally cases. 1) Ace: when the server scores on the first shot. The receiver didn't touch the ball. 2) Double Fault: The server misses both the first and second serves, resulting in an automatic point for the opponent. 3) Winner: When a shot (other than a serve) lands in and isn't touched or can't be returned. Clean shot not returned 4) Forced Error: error caused by pressure from the opponent's aggressive or well-placed shot. e.g., rushed forehand sent long after a powerful serve or wide angle. The opponent is pressured into an error. 5) Unforced Error: player makes a mistake during the point without significant pressure, such as hitting the ball outside of the court (long or wide) or into the net during a routine shot. Routine miss without pressure. 6) Violation: Rule-based loss of point includes player touching net, ball touches player, double bounce, foot fault, etc. 7) Retirement/Default: Player stops playing due to injury or penalty 8) Point ended by review
how_point_ended_description: string	Free-text description of how the point ended. For example, "Volley Winner", "Net Winner", or "Net Error" – These are types of winners or errors, often specified to add context (e.g., "net play" is not an outcome by itself but part of a play style). Examples: - The point ended when Zverev hit the ball into the doubles alley. - Zverev made a change of direction and forced Shelton into an error, hitting the ball into the net. - Shelton returned but hit the ball out of bounds.
point_caption: string	Provides a comprehensive, natural-language description of the point, incorporating detailed technical tennis terminology. Annotators may augment these descriptions with relevant commentary or insights from the commentator. Example: - "Djokovic saves a break point with a clutch wide serve, pulling Alcaraz off the court. He steps in to drill a forehand winner down the line, roaring in celebration as the crowd erupts. This marks his fifth ace or clean winner on break point this tournament—calm under pressure once again." Additional Guidance: - Describe emotional responses and reactions (e.g., "Nadal clenched his fist after the rally"). - Include observations on body language (e.g., expressions of confidence, fatigue, or frustration). - Note player rituals (e.g., ball-bouncing habits before a serve). - Detail player/shot style (e.g., backhand, forehand, specific shot types). - Document positional and visual information. Please refer to Point Caption Guidance in the appendix for important aspects to consider.
audio_cues: string	Notable sounds. It is meant to capture non-speech audio elements that are relevant to the event (e.g., "Whistle, Cheers, Thump, Player grunts, Claps").

winner_shot_type: string	One of "slice", "ace", "groundstroke with heavy topspin", "groundstroke hit flat or very little spin", "passing shot", "drop shot", "overhead smash", "volley", "half-volley", "lob (high shot)", "other", "unknown", or "n/a".
winner_shot_type_other: string	Free text when the winner shot type is "other".
winner_shot_trajectory: string	One of "cross court", "down the middle", "down the line", "deuce court", "ad court", "no man's left", "no man's right", "other", "unknown", or "n/a".
winner_shot_trajectory_other: string	Free text when the winner trajectory is "other".
winner_hand_used: string	One of "FH (forehand)", "BH (backhand)", "other", "unknown", or "n/a".
winner_hand_used_other: string	Free text when the winner_hand_used is "other".
loser_shot_type: string	One of "wide serve", "down-the-middle-serve", "kick serve", "groundstroke with heavy topspin", "groundstroke hit flat or very little spin", "passing shot", "drop shot", "overhead smash", "volley", "half-volley", "slice", "lob (high shot)", "other", "unknown", or "n/a".
loser_shot_type_other: string	Free text when the loser shot type is "other".
loser_shot_trajectory: string	One of "cross court", "down the middle", "down the line", "deuce court", "ad court", "no man's left", "no man's right", "other", "unknown", or "n/a".
loser_shot_trajectory_other: string	Free text when loser shot trajectory is "other".
loser_hand_used: string	One of "FH (forehand)", "BH (backhand)", "other", "unknown", or "n/a".
loser_hand_used_other: string	Free text when the loser_hand_used is "other".
loser_point_ended: string	How the loser's final shot ended (e.g. "out", "net", "no contact by loser", "other", "unknown", or "n/a").
loser_point_ended_other: string	Free text when loser_point_ended is "other" (e.g. "Double fault").
loser_lateral_movement: string	One of "L2R (left to right)", "R2L (right to left)", "No lateral movement", "other", "unknown", or "n/a".

loser_lateral_movement_other: string	Free text when loser lateral movement is "other".
loser_depth_movement: string	One of "F2B (front to back)", "B2F (back to front)", "No depth movement", "other", "unknown", or "n/a".
loser_depth_movement_other: string	Free text when loser depth movement is "other".

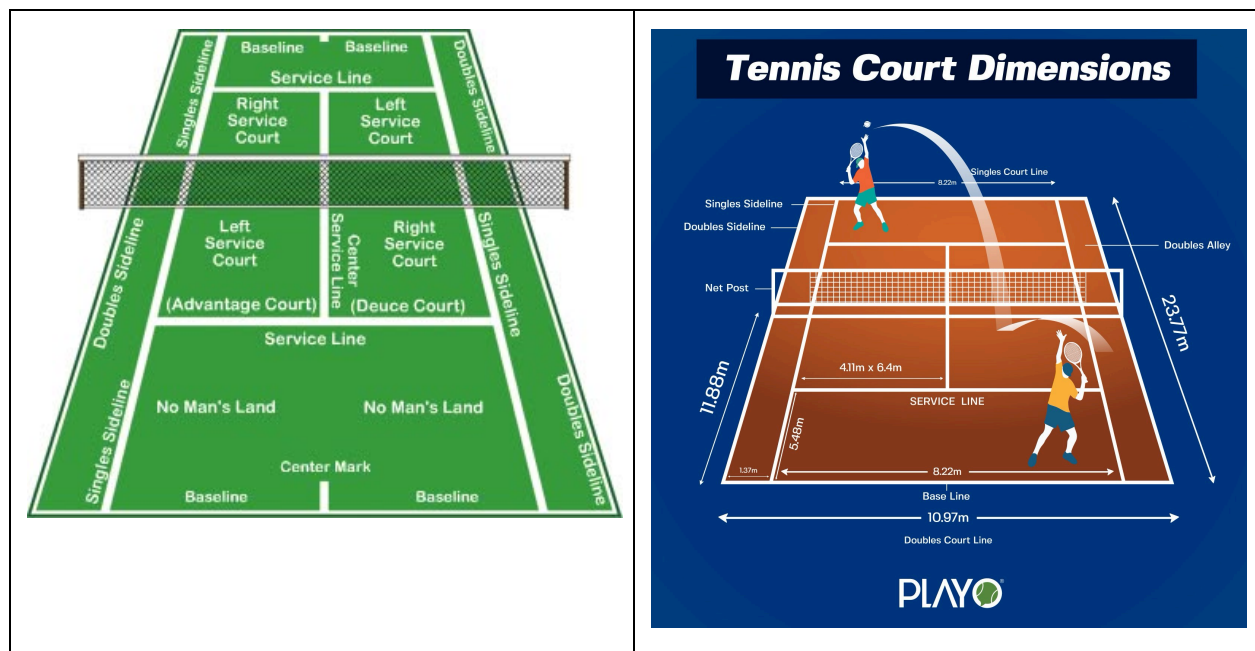


Figure 5: Various sections of a tennis court

Annotation Guide

In tennis, a point is the smallest unit of scoring. It is a single play sequence that commences with a serve and concludes when a player wins the exchange according to official rules.

A point begins when:

- The ball is served (the server hits the ball).

The point ends when:

- A player allows the ball to bounce twice on their side of the court without returning it.
- A player hits the ball out of bounds (regarding the designated court lines).

- A player commits an error, such as hitting the ball into the net or failing to execute a valid serve.
- A double fault occurs (the server fails to convert two serve attempts).

Figure 5 illustrates the various sections of a tennis court. The terms “Near Court” and “Far Court” are relative to the camera's perspective: the “Near Court” refers to the area closest to the camera, while the “Far Court” refers to the area furthest from the camera.

Point Dense Captions

Always include:

- What happened in the rally
- How the point was won/lost
- Player actions (e.g., forehand, drop shot, wide serve)
- Crowd or commentator reaction (if visible)
- Player emotions or body language (e.g., frustration, confidence)
- If a point is unclear, slow the video down or rewatch

The following table summarizes the focus areas.

Focusing Area	Proposed Description
Sport Insights	Provide visually grounded technical insights and observations. Note whether the player scored with a forehand, backhand, or drop shot.
Visual Elements	Describe visual aspects, including setting, background, objects, and participants. Focus on specific details such as clothing colors, hairstyles, and accessories (e.g., glasses, headbands).
Relative Positioning	Note relative positioning, such as whether play is occurring in a specific corner of the court or the location of officials.
Contextual Information	Provide relevant contextual information to improve understanding, such as crowd reactions, tournament details, or the venue.
Emotional Tone	Describe the emotional tone of the segment (e.g., intensity, confidence, or pride).
Key Events or Moments	Identify and describe key events or highlights within the segment crucial for understanding the narrative.

Forced Error

An error that results from **pressure** by the opponent, typically due to a powerful, well-placed, or fast shot.

Examples:

- Defensive shot sent wide after being pulled off court by an angled backhand
- Hitting into the net while lunging to return a drop shot
- Rushed backhand going long after an aggressive serve

Video Example:  Forced Error.mp4

Unforced Error

An error made **without significant pressure**, usually on a routine shot that should have been playable and a shot that should reasonably be returned.

Examples:

- Hitting a neutral forehand into the net
- Sending an easy baseline shot wide
- Double faulting without any external interference

Video Example:  Unforced Error.mp4

Quick Rule-of-Thumb:

Was the player under pressure?

- Yes → Forced error
- No → Unforced error

Violation Examples

- Player touches the net during a rally
- Ball bounces twice before being returned
- Ball hits the player's body
- Foot fault during serve
- Player returns serve before it bounces
- Player reaches over the net to hit the ball
- Drops racket and fails to make contact
- Hits the ball before it crosses the net

- Deliberate hindrance (e.g., yelling, distracting behavior)

Number of Serving Attempts

This field refers to the total number of times the server attempted a serve during the point, regardless of whether the serve was successful. A server is allowed up to two attempts per point.

- If the first serve is successful, the count is **1**.
- If the first serve is a fault but the second serve is successful, the count is **2**.
- If both serves result in faults (i.e., a double fault), the count remains **2**, as the player attempted two serves.
- A **let** is considered a **serve** (a re-serve), and therefore it must be included as a serving attempt.

NOTE: Always record the total number of serve attempts performed, regardless of whether the serve was successful.

Number of Shots Exchanged

This refers to the total number of times the ball makes contact with a racket after the serve is in play, until the point ends.

- The count begins with the server's racket (the successful serve).
- Include every racket contact from both players (even if the shot hits the net or lands out).
- Do not exclude failed returns or mishits; if the ball hits the racket, it counts.

Rule of thumb:

Count how many times the ball touches a racket starting from the successful serve to determine the num_shots_exchanged.

When **NOT** to Count

- If double fault → 0 (No rally, point never started)
- If a violation (like a time violation or foot fault) ends point → 0

Examples of exchanged shots:

- Scenario: **Ace**
 - What Happens: Player 1 serves, Player 2 doesn't touch the ball
 - → Shot Count: 1
- Scenario: **Return Error**
 - What Happens: Player 1 serves, Player 2 returns, but hits into the net

- → Shot Count: 2
- Scenario: **4-Shot Rally**
 - What Happens: Serve → Return → Forehand/Backhand → Error
 - → Shot Count: 4
- Scenario: **Long Rally**
 - What Happens: 10 back-and-forth hits ending in a forced error
 - → Shot Count: 11
- Scenario: **Double Fault**
 - What Happens: Player misses both first and second serves
 - → Shot Count: 0

IMPORTANT: We count exchanged shots only after a valid serve lands in and the point begins. **Example:** If the first serve is missed and the second serve lands in, we start counting after the second serve is returned.

Tennis Scores + Formatting

The standard tennis scoring format is a progression beginning from points, to games, to sets, and ending with a match winner. This format includes tiebreaker games, if a set reaches a score of 6-6.

Points → Games → Sets → Match

Points: The scoring progresses from 0 to 40 as shown below.

- 0 points = "Love"
- 1st point = "15"
- 2nd point = "30"
- 3rd point = "40"
- 4th point = "Game" (if the player leads by at least 2 points)
- **Exceptions**
 - Deuce: If the score reaches 40-40, it is called "deuce". A player must win **two consecutive points** from deuce to win the game.
 - **First point:** Advantage (Ad)
 - **Second point:** Game

Example:

- Score: 40-40 (deuce)
- Player 1 wins the next point → Advantage Player 1 shown as {0-0, Ad-40}
- If Player 1 wins one more point, they win the game → the set score becomes {1-0, 0-0}

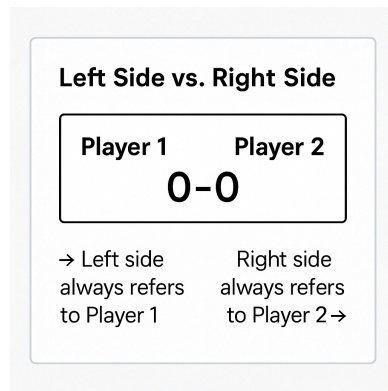
→ In simple terms:

- **Score before:** {0-0, Ad-40} and **Score after:** {1-0, 0-0}

NOTE: if score before is {0-0, AD-40} and Player 2 scores 1 point, score after is {0-0, 40-40}

Also note that:

- **Player 1** is always the player on the left side of the overlaid scoreboard.
- **Player 2** is always the player on the right side of the overlaid scoreboard.



Game to Sets: A player needs to win **6 games** to win a **set** (and have at least a 2-point difference).

- 6-4 wins a set
- 0-6 wins a set
- If the score reaches 6-6, a **tiebreak** is usually played.

Point-Game-Set-Match Summary

- **Point:** Smallest unit of scoring. Starting at love (0 points), points increment from 15-30-40-game.
- **Game:** A game consists of 4 points, as long as the leading player has at least a 2-point advantage.
- **Set:** A set is won when a player wins 6 games with a lead of at least 2 games.
- **Match:** Whichever player/team wins the majority of sets wins the match. A match is always an odd number of sets, usually 3 or 5.

Tiebreaker Games

- Instead of 15, 30, 40, the tiebreak is played 1, 2, 3... until **7 points**.
- The first player to reach **7 points** wins the tiebreak — **but must lead by at least 2 points**.
- The tiebreak points are often recorded in parentheses after the set score.
- If the score is tied (e.g., 6-6), the tiebreak continues until one player leads by 2 (e.g., 8-6, 10-8, etc).
- **Serving Pattern**
 - Player 1 serves the 1st point
 - Then, Player 2 serves points 2 and 3

- Player 1 serves points 4 and 5
- Player 2 serves points 6 and 7, and so on...
- After the first serve, players serve two points at a time, alternating
- **Side Changes**
 - Players switch sides every 6 points
- **Scoring**
 - Points are counted as 1, 2, 3... (not 15, 30, 40 like regular games)

→ Once the tiebreak ends, the player who wins it also wins the set. The match then continues as normal (or ends, if it's the final set).

Recording Scores with Example

Note:

- Most matches are **best of 3 sets** (first to 2 sets).
- Match score is written as the number of games won in each set from left to right.
- Tiebreak score is included in parentheses after the set score if applicable.
- **Always** use double quotation marks, e.g., "....."

→ **NOTE:** In Grand Slam Men's Singles matches are best of 5 sets.

Example (with a tie break):

Player 1: Nadal

Player 2: Federer

1) First Hit (first event on SA)

- **Score Before:** "Nadal vs Federer: {0-0, 0-0}"
- **Score After:** "Nadal vs Federer: {0-0, 0-15}"

→ Federer wins first point of first game

2) End of First Game

- **Score Before:** "Nadal vs Federer: {0-0, 0-40}"
- **Score After:** "Nadal vs Federer: {0-1, 0-0}"

→ Federer wins first game

3) End of First Set

- **Score Before:** "Nadal vs Federer: {0-5, 0-40}"
- **Score After:** "Nadal vs Federer: 0-6, {0-0, 0-0}"

→ Federer wins first set (since he won 6 games)

4) First Hit of Second Set

- **Score Before:** "Nadal vs Federer: 0-6, {0-0, 0-0}"
- **Score After:** "Nadal vs Federer: 0-6, {0-0, 15-0}"

→ Nadal scores first point

5) End of First Game of Second Set

- **Score Before:** "Nadal vs Federer: 0-6, {0-0, 40-15}"
- **Score After:** "Nadal vs Federer: 0-6, {1-0, 0-0}"

→ Nadal wins first game of second set

6) End of Second Set

- **Score Before:** "Nadal vs Federer: 0-6, {6-6,(9-8)}"
- **Score After:** "Nadal vs Federer: 0-6, 7-6(10-8), {0-0, 0-0}"

→ Nadal wins the tie-break game with 10 points (a 2-point difference) and wins the second set with 7-6. If a tie-breaker is ongoing then use a comma before brackets, and if the tiebreaker is finished remove the comma.

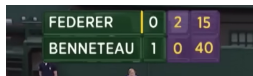
7) End of Match

- **Score Before:** "Nadal vs Federer: 0-6, 7-6(10-8), {5-2, 40-15}"
- **Score After:** "Nadal vs Federer: 0-6, 7-6(10-8), 6-2"

→ Federer won the first set, Nadal won the second set with a tie-break, Nadal won the last set

Winner: Nadal (wins 2 sets out of 3 which is the majority)

NOTE: For some matches, only the set wins are listed; make sure not to write set wins for scoring (i.e., 2-0) and only match wins (i.e., 0-6, 7-6(10-8), 6-2). For example, in the following snapshot the white text on the green background is the set scores, make sure not to include it.



Formatting Tips:

Always put the ongoing set into curly brackets. Example scoring format:

6-4, 6-7(4-7), 7-6(10-8), {1-1, 0-15}

This means:

- The 1st player won the first set 6 to 4.
- The second player won the 2nd set after a tiebreak (4-7).
- The 1st player won the 3rd set.
- In the ongoing set (curly brackets), each player won 1 game and the 3rd game score is 0-15.

If a new game starts, the scoring should be captured as:

- score before: {0-0, 0-40}
- score after: {0-1, 0-0}

→ player 2 won the first game and now it is back to 0 for the next game.

Always list **ongoing games** in **curly brackets {...}**.

- {0-0, 15-0}
- {1-0, 15-0}
- {4-5, 0-30}

Always list **finished sets** as 6-2, 4-6... etc. **without parentheses or curly brackets**.

→ **Exception:** Only if there was a tie break, you can include parentheses

Examples:

- 4-6, {0-0,0-0}
 - One finished set and start of first game in second set
- 4-6, 6-4, 6-3
 - Finished match
- 0-6, 7-6(10-8), 6-2 (tiebreak example)
 - Finished match with tie-break

Video Segmentation Notes

- Each full tennis match is split into 5-minute video chunks (segments).
- Each segment is named following this format:
 - **videoID_seg_X.json** (e.g., **videoID_seg_1.json**, **videoID_seg_2.json**, etc.)
- Each segment is treated as an individual task in SuperAnnotate.
- Multiple annotators (for now) will be assigned an entire folder containing all segments for a full match to maintain continuity.
- Annotators will be able to see the **Video URL** of the original full-length video. This allows for cross-referencing when needed.

A tennis point can be split into two segments as a result of video segmentation.

Scenario: tennis rally starts in one segment and ends in the next segment:

- The annotator working on **Segment 1** should check the box:
 - “Point started in this video segment”= **Yes**
 - “Point concluded in this video segment” = **No**
- The annotator working on **Segment 2** should check the box:
 - “Point started in this video segment”= **No**
 - “Point concluded in this video segment” = **Yes**

NOTE: If the rally does not fully appear in the current segment, leave the **start time** or **end time** blank (depending on when the point started/ ended within segments). Only the annotators working on segment 2 will annotate that point.

When to leave specific fields blank

- 1) **“Match Context”** fields in every segment except segment 1
- 2) **“Score Before”** field or **“Score After”** field if the point has not ended within that specific segment
 - a) **IMPORTANT:** when a point ends within an event, the score before and after should be annotated, but if a point does not end within a specific segment and transfers over to the next, score before and score after should be annotated **in the next segment when the point is ending**
- 3) **Number of Serving Attempts** if it was captured already in previous segment

If Segment 1 ends at 300 sec and the point is only finished in segment 2 then the fields:

- Score Before & Score After
- Winner
- Number of Serving Attempts
- Number of Shots
- How did the point end?
- Describe how the point ended:
- Caption the point:

→ **Should be left blank by annotators and have all these fields filled out in the next segment when the point ends**

These fields still need to be filled out even if the point is not ending within specific segments:

- Point started in this video segment
- Point concluded in this video segment
- Server
- Receiver
- Server Location
- Receiver Location
- Audio Cues

Audio Cues

This field is meant to capture **non-speech audio elements** that are relevant to the

event. This can provide additional context, especially when the audio indicates the nature or timing of a point.

Examples of Audio Cues to include:

- Thwack(s) - Typical sound of a racket hitting a ball, often from a hard hit
- Pop - Alternative sound description from a lighter hit, or when something else hits the ball such as a foot
- Thud - When the ball hits a wall or something hard that's not a racket (e.g., floor)
- Bang - When the ball hits something off-court that produces a "bang" sound
- Clang - When the ball hits something off-court that produces a "clang" sound
- Clack - When the racket either hits or gets tossed/thrown on the ground
- Net/Net hit(s) - When the ball clearly hits the net or top of the net (lighter hits don't necessarily make sounds, and sometimes this can be covered up by other noise such as grunts)
- Trinity Beep / Beep(s) - When the trinity beep / machine beeps (after a serve hits the net)
- Grunt(s) - Sound made by players; plural when relevant
- Shout - When the player shouts (not to be confused with "crowd shout/shouting" below)
- Squeak(s) - Sounds made by players' shoes (doesn't happen on every court type); plural when relevant
- Shuffle(s) - Sounds made by players' shoes (doesn't happen on every court type); plural when relevant
- Slide - When the player slides on the court (separate from squeaks and shuffle, but may sound close to shuffle)
- Gasps - When the crowd makes a "shocked" or "surprised" noise. Can often roll into a cheer
- Groans - When the crowd is disappointed by a play
- Cheers - When crowds celebrate after a play, typically a mix of voice and clapping
- Roar - A particularly loud cheer; may roll into a more standard "cheer" sound
- Claps/clapping (pick one) - When only clapping is heard
- Crowd murmur(s) - When a portion of the crowd is making small noise
- Crowd shout/shouting - When one or more people in the crowd shout something out
- Boos - When the crowd boos
- Bounce(s) - When a player, often the server, bounces the ball
- Umpire's call(s) - When the umpire makes a call such as "fault," "let," "out," etc.

Do NOT include:

- Spoken language or commentary
- Music unless it's directly relevant to the gameplay

NOTE: If you notice an important sound in the clip that helps explain the event, simply add a short, clear description like:

→ **EX:** Audio Cues: Cheers, Whistle, Umpire's Call, Thwack, Clapping

If there's **no notable audio cue**, you can **leave this field blank**.

Winner/Loser Structured Fields

To improve the quality, precision, and consistency of our tennis point annotations, we have introduced a set of structured fields to capture key details for every point. These fields are mandatory for each event and ensure that the data is rich and standardized.

Please complete each field carefully, following the instructions and examples provided. If you are uncertain about which value to select, choose “unknown”. By default, all fields are set to *unknown*, and annotators can update them using radio buttons.

There are three main dropdown categories: “Point Annotation”, “Winner”, and “Loser”.

Point Annotation Field:

→ Explained before

How the Point Ended for the Winner

1) Winner.ShotType

- Ace (an unreturned serve)
- Groundstroke with heavy topspin (regular hit with curve)
- Groundstroke hit flat or very little spin (regular hit with no curve)
- Passing shot (when opponent is near net and player tries to hit past them)
- Drop shot (a shot with a softer landing over the net, typically close to the net)
- Overhead smash
- Volley (hitting the ball before it hits the court)
- Half-volley
- Slice (when player does more of a downward slicing action with racket vs swing)
- Lob
- Unknown
- N/A

- Other→ string field

2) Winner.ShotTrajectory

- Cross court
- Down the middle
- Down the line
- Deuce court
- Ad court
- No man's left
- No man's right
- Unknown
- N/A
- Other→ string field

3) Winner.HandUsed

- FH (forehand)
- BH (backhand)
- Unknown
- N/A
- Other→ string field

How the Point Ended for the Loser

1) Loser.ShotType (see explanations above)

- Wide serve
- Down-the-middle serve
- Kick serve
- Groundstroke with heavy topspin
- Groundstroke hit flat or very little spin
- Passing shot
- Lob (high shot)
- Drop shot
- Overhead smash
- Volley
- Half-volley
- Slice
- Unknown
- N/A
- Other→ string field

2) Loser.ShotTrajectory

- Cross court
- Down the middle
- Down the line
- Deuce court
- Ad court
- No man's left
- No man's right
- Unknown
- N/A
- Other → string field

3) Loser.HandUsed

- FH (forehand)
- BH (backhand)
- Unknown
- N/A
- Other → string field

4) Loser.End

- Out
- Net
- No contact by loser
- Unknown
- N/A
- Other → string field

5) Loser.LateralMovement (referring to player)

- L2R (left to right)
- R2L (right to left)
- No lateral movement
- Unknown
- N/A
- Other → string field

6) Loser.DepthMovement (referring to player)

- F2B (front to back)
- B2F (back to front)
- No depth movement

- Unknown
- N/A
- Other → string field

UI Notes

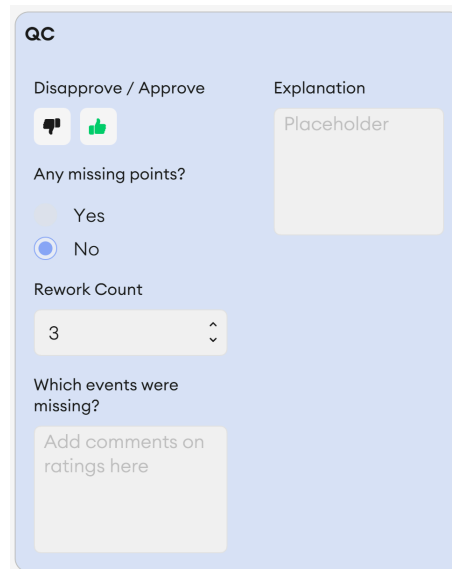
- Each field is a radio button with the last option as “other” that opens up as a string field once selected.
 - “Other” should be selected if none of the options fit
- Keep “unknown” strictly for cases where the annotator cannot see the action, the action is not visible, or annotation was stopped.
- Fill out these fields immediately after annotating each point, in addition to your usual captions and other table data.

Step-by-Step Guide for Quality Controllers

Objective: Check annotators' captioning; feedback should be directed to the annotator

1) Check Match Context

- a) In Segment 1, check accuracy of Match Context info
- b) If NOT segment 1, make sure “Yes” has been check marked and fill out QC box



The QC form is a light blue rectangular box with a white border. It contains the following elements:

- QC**: A small black text label at the top left.
- Disapprove / Approve**: A label above two icons: a thumbs down (disapprove) and a thumbs up (approve).
- Explanation**: A label above a large, empty, light gray rectangular box.
- Any missing points?**: A label above two radio buttons: "Yes" (unselected) and "No" (selected).
- Rework Count**: A label above a dropdown menu showing the number "3".
- Which events were missing?**: A label above a text input field with the placeholder text "Add comments on ratings here".

2) Click the pencil on the first event

- a) Watch the event all the way through
- b) Check point annotation, winner and loser fields accuracy
- c) Click Disapprove / Approve if the timestamp is incorrect/correct.
 - i) If **thumbs down**, provide an explanation to the annotator
- d) Repeat steps for **all events**

NOTE: Some segments do not include the full play. In that case, refer to the “Video Segmentation Notes” section for guidance. Additionally, some segments might be corrupted. In that case, report them to the client.

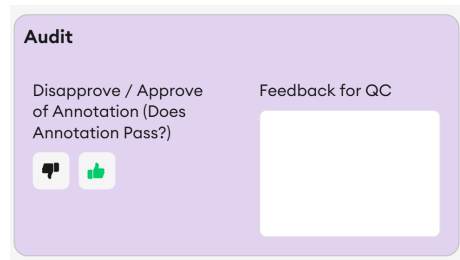
3) Review and submit to router

- a) If the entire task is **correct**: **Completed**
- b) If any segment is **incorrect**: **Returned_To_Annotator**

Step-by-Step Guide for Auditors

Objective: Check QC's work; feedback should be directed towards the QC

- 1) Match context
 - a) Check accuracy of QC Disapprove / Approve



The screenshot shows a purple-bordered box titled "Audit". Inside, on the left, is the text "Disapprove / Approve of Annotation (Does Annotation Pass?)" above two buttons: a thumbs down icon and a thumbs up icon. On the right is a text area labeled "Feedback for QC".

NOTE: For “Has Match Context been provided” the answer should ALWAYS be “Yes” (we assume it’s been provided)

- 2) Click the pencil on the first event
 - a) Watch the event all the way through
 - b) **Check point annotation accuracy:** # serving attempts/shots, scoring, how point ended, description, caption
 - c) Click Disapprove / Approve
 - i) When it’s marked “thumbs up” you agree with the annotator their work should be passed
 - ii) When it’s marked “thumbs down”, you disagree with the annotator and the annotator's work should be sent back
 - iii) When there is a thumbs down from QC, and audit also marks it thumbs down, you agree with the QC
 - iv) When there is a thumbs up from QC and audit marks it thumbs down, you disagree with the QC and there should be feedback provided for QC
 - d) Repeat steps for **all events**
- 3) Review and submit to router
 - a) If **agree** with QC's work: **Completed_Passed_Audit**
 - b) If **disagree** with the annotator's work: **Returned_to_QC**