Football Geovisualizations

Information and Informed Consent

Information

Hello! Thanks for opening the link to this survey.

I am Joel and currently doing my master's thesis research about football geovisualizations. I am part of the International MSc. on Cartography of TUMunich, TUWien, TUDresden and the University of Twente.

On this first page, you can have an overview of what is this survey about. Please, take your time to read it and I will be thankful to you if you accept to move forward. If you have any questions, do not hesitate to contact me at: joel.salazar@tum.de

About the research
Geovisualizations or GIS enhanced visualizations, offer a powerful way to capture the dynamic nature of football* games through spatiotemporal analysis and visualization, enhancing the perception and understanding of football, also known as soccer.

This study aims to evaluate how inexperienced users and football fans understand specific football animations enhanced with GIS (Geographic Information Systems) techniques.
*for this study, football will be used instead of soccer.

Voluntary participation and right to refuse or withdraw
Your participation in this research is entirely voluntary. You may stop participating in the research by clicking 'no' on this page or closing the webpage at any point during the survey.

Procedure
    1. Basic information
In the evaluation, you will first be asked to fill in primary demographic data and some questions to filter your knowledge around football.
    2. Training Animation
A training football animation will familiarize you with the shape, speed, and type of animation you will see during the evaluation section.
    3. Evaluation
For the evaluation, six animations will be displayed from three different events of a football match. You will be asked to answer some questions about the animations displayed.

Duration

Confidentiality
All the information you provide will be anonymized and will only be used for this research project.

Who to Contact
If you have any questions, please get in touch with Joel Salazar (joel.salazar@tum.de).

Informed Consent*

Statement by the participant:
I have been invited to participate in this study about football animations. I have read the previous information. I agree that the data gathered might be published in a research paper. I consent voluntarily to be a participant in this study.

○ Yes	○ No

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Demographic information

What gender do you identify as?*

○ Female

○ Male

○ Non-binary

○ Prefer not to say

Which category below includes your age?*

○ 18-20

○ 21-25

○ 26-30

○ 31-35

○ 36-40

○ 41-45

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○ 46-50

○ 51-55

○ 56-60

○ 60 or older

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Football knowledge

How long does a football match take?*
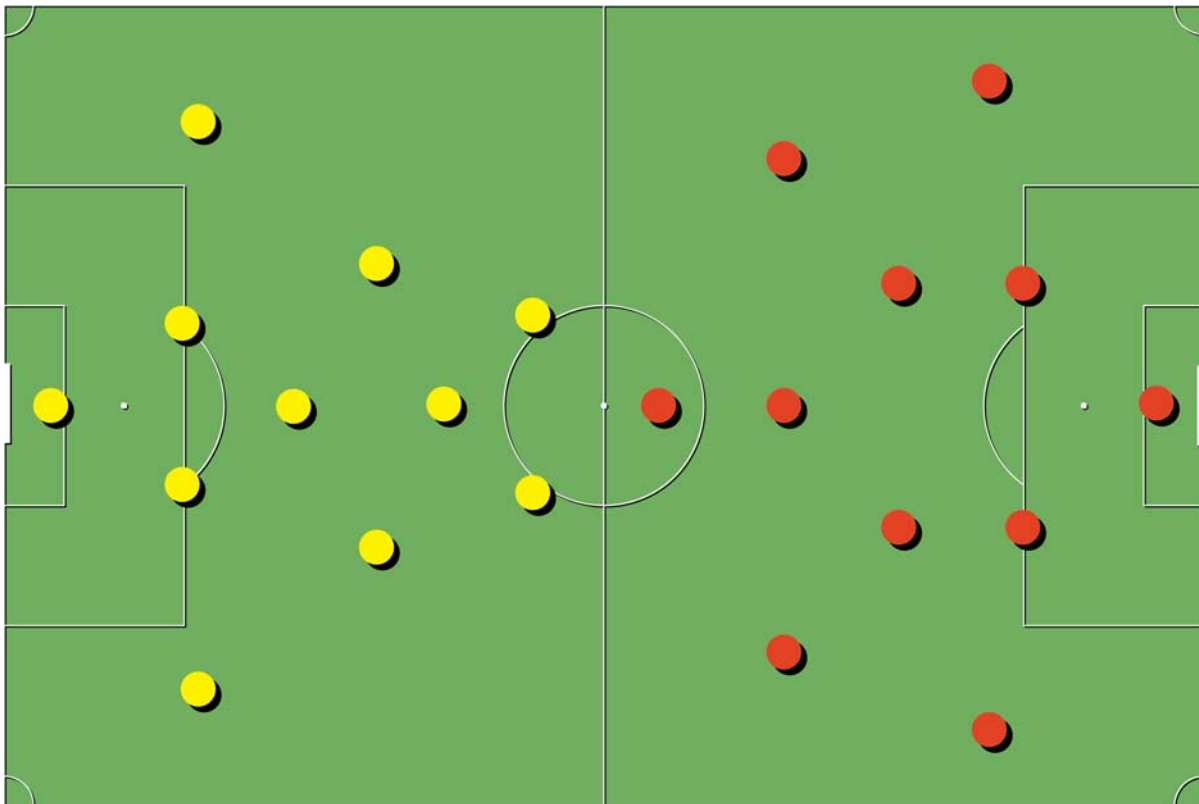
○ 90 minutes

○ 45 minutes

○ I don't know

Which team won the last FIFA World Cup?*

○ France

○ Argentina

○ I don't know

From the image above, what is the lineup of the teams?*

○ Team yellow 4-3-1-2 and Team red 4-2-3-1

○ Team yellow 4-2-1-3 and Team red 5-2-3

○ I don't know

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Training animation

Basic details about football

Team **red** and **blue** are displayed on a basic football pitch. Team red on the left side and team blue on the right side.
Both teams fight for the possession of the ball in **yellow** color.
If a team has possession of the ball, it attacks the opposing side of the pitch in an attempt to score at the goal of the other team. Conversely, the team that does **not have possession** of the ball defends its own goal against the attacking team.

Players numbers
Each player has a number to be identified.
Goalkeepers are number 1 and are near the goal of their own team.
Defenders, midfielders, and forwards have numbers in ascending order up to 11.
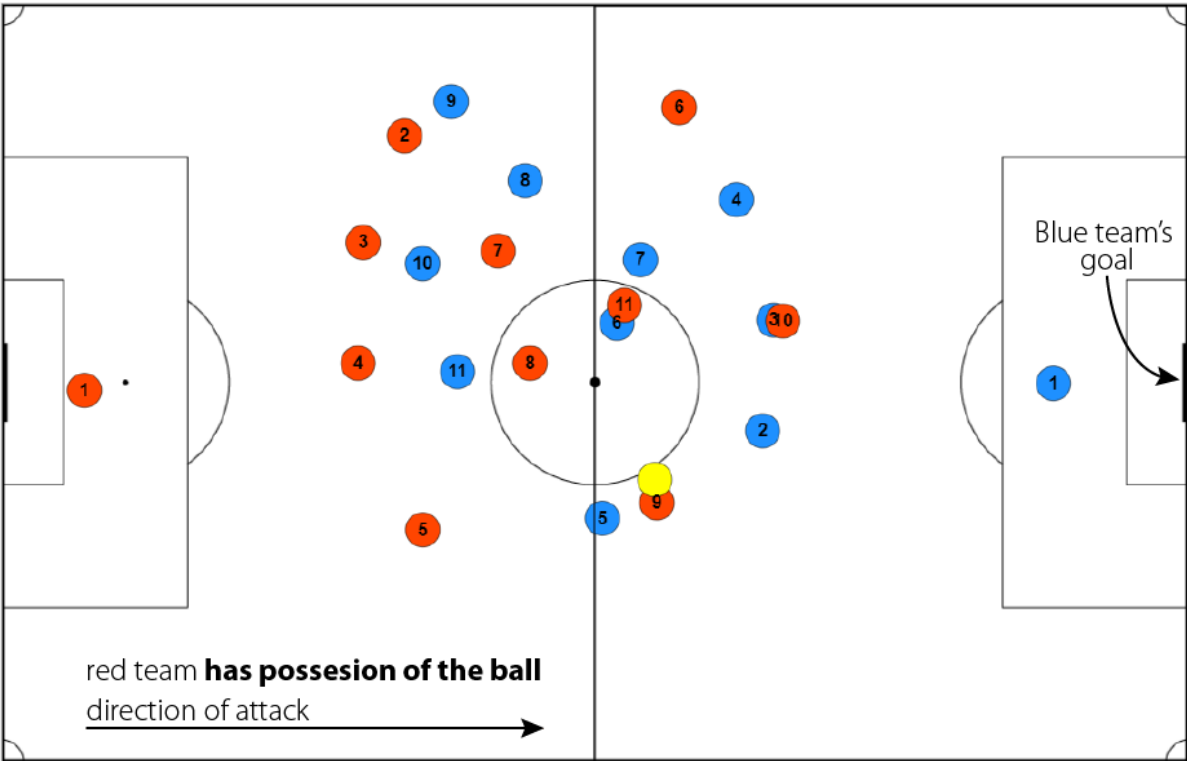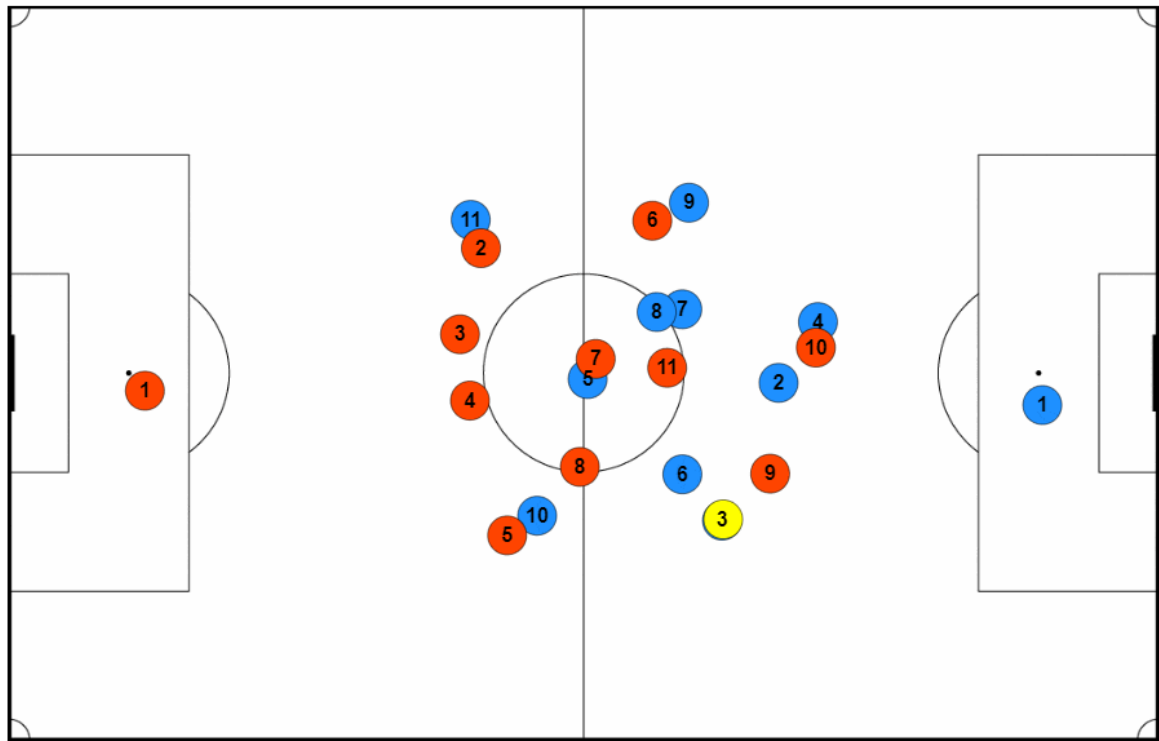
Position of players on the pitch
Defenders protect the goal near the goalkeeper of their own team.
Midfielders run along the middle of the pitch.
Forwards try to remain ahead of their team to be able to attack when the team has ball possession.
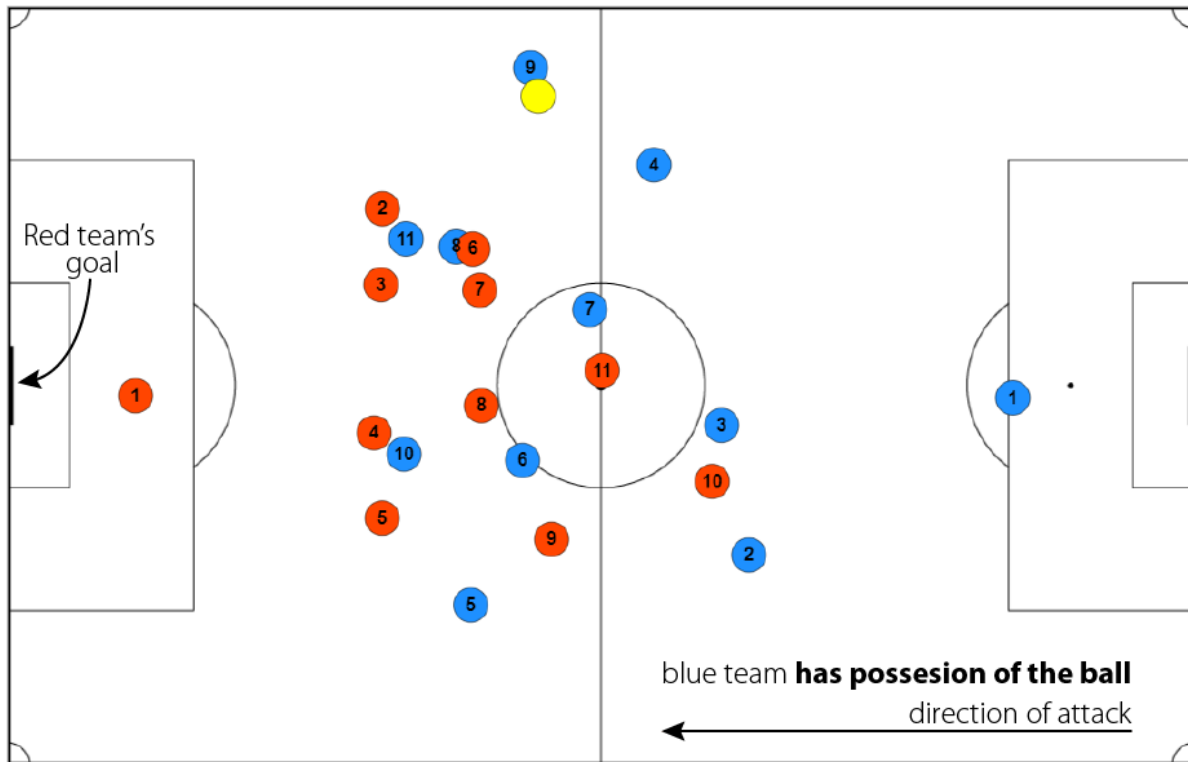
Blue team's goal

red team **has possesion of the ball**

direction of attack

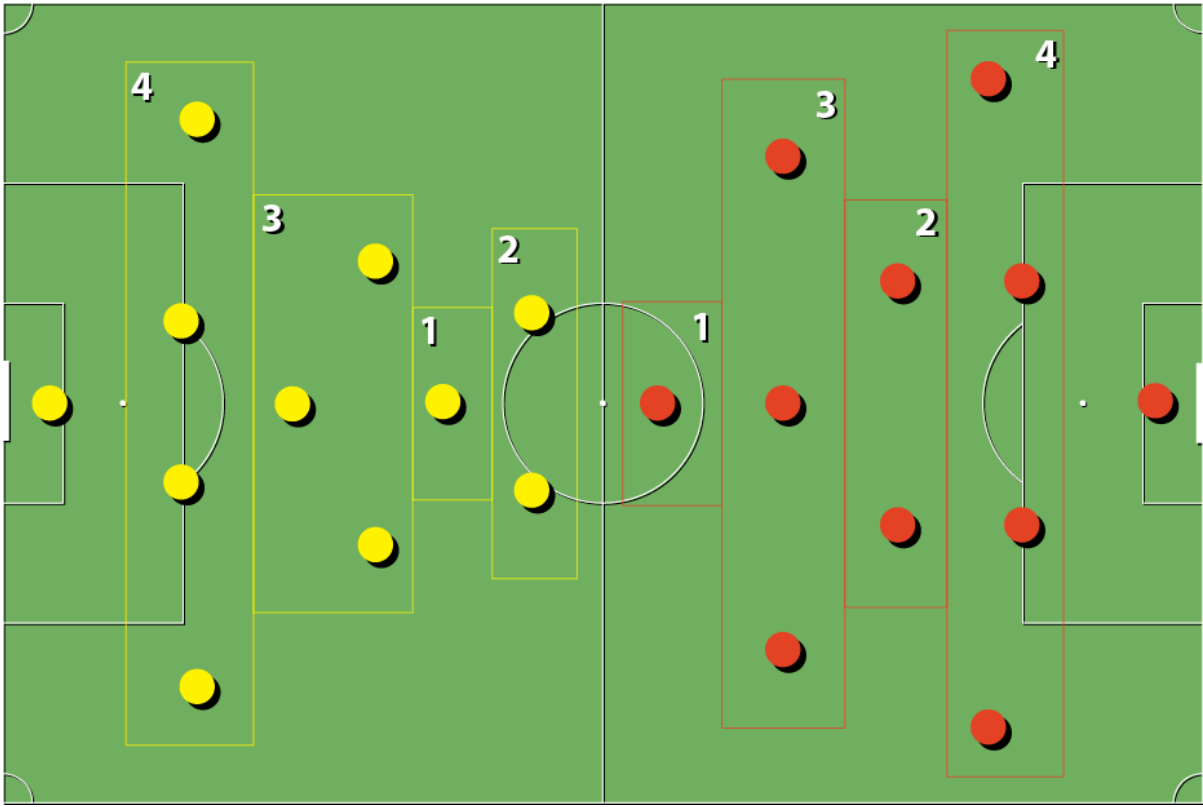Saved   Joel

Formation of teams
Usually, each forward player is marked by one defender.
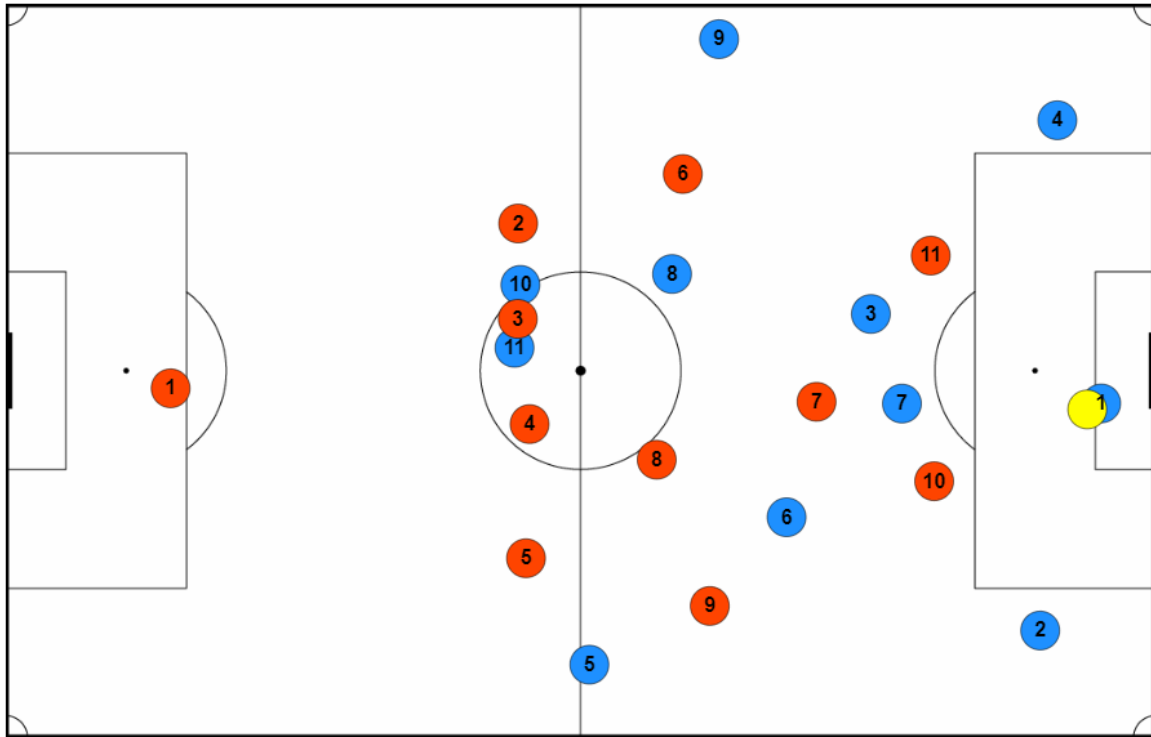Each team is **lined up** or arranged in a strategic **formation** on the pitch.

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Evaluation: Animation 1

What is the formation of the red team?*

● 3-4-1-2	○ 4-4-2	○ 3-5-2

○ I don't know

When the blue team has possession of the ball, how would you describe the positioning of the defenders from the red team?*

○ The red team's defenders are closer to the **goal**

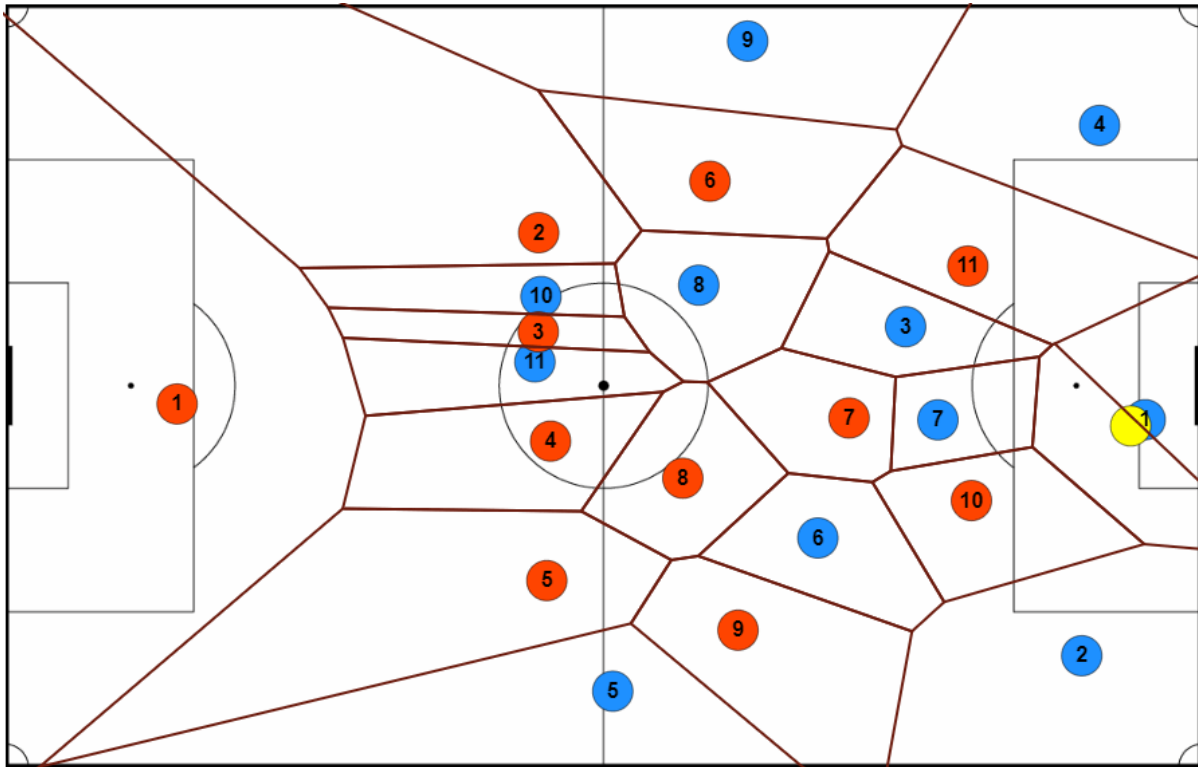| ● They are running towards the blue team's goal |
|---|

Joel

○　The red team's defenders are closer to the **ball**

○　I don't know

What was the role of player #2 in the red team?*

○　To deffend

○　To attack

○　To remain at the goal

○　I don't know

Ideally, a defender should be positioned between the goal and the attacker. Based on your observations, the player #2 from the red team is:*

○　between the red team goal and the blue team's attacker.

○　not playing a role in the game.

○　running towards the blue team's goal.

○　I don't know

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Evaluation: Animation 2

What is the formation of the red team?*

- ◯ 2-1-4-3
- ◯ 2-5-3
- ◯ 4-4-2
- ◯ I don't know

When does a team cover a larger area of the pitch?*

- ◯ When the team is Defending
- ◯ When the team is Attacking

◯ I don't know

In what situations do a team's players get close to each other?*

◯ Defending

◯ Attacking

◯ I don't know

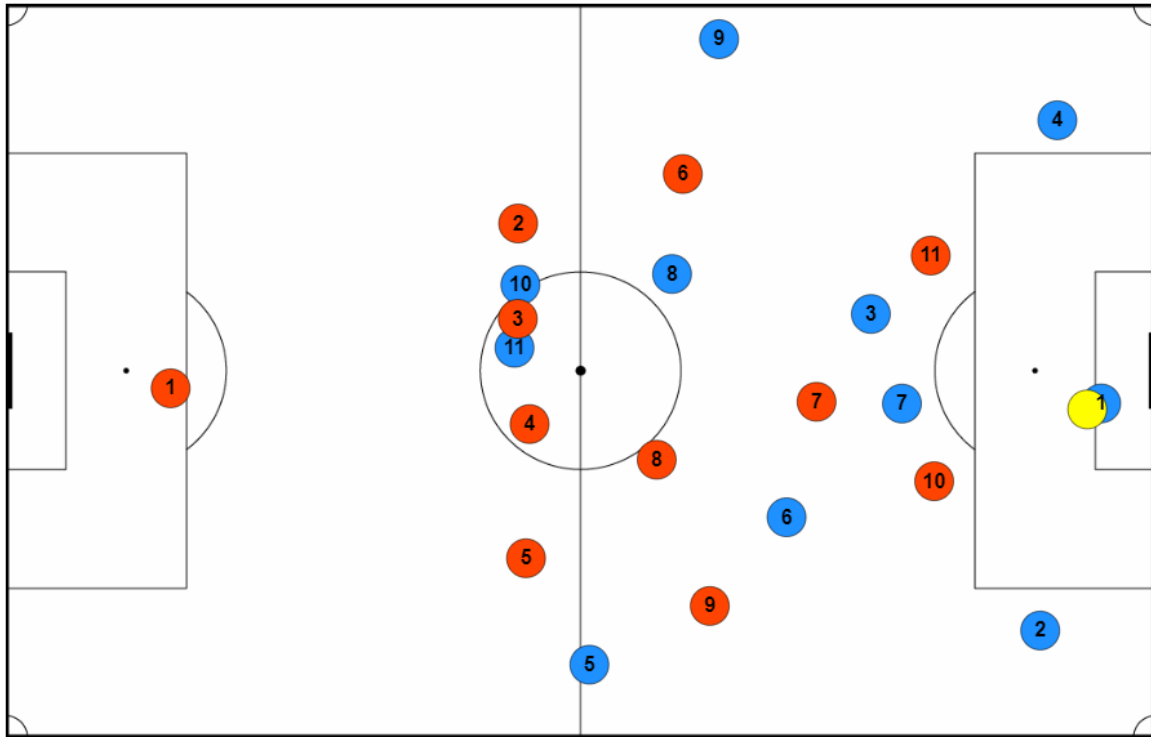Back   Next   Page 6 of 10

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Evaluation: Animation 3

What is the formation of the red team?*

- ○ 4-4-2
- ○ 1-3-4-2
- ○ 3-5-2
- ○ I don't know

When does a team cover a larger area of the pitch?*

- ○ When the team is Attacking
- ○ When the team is Defending
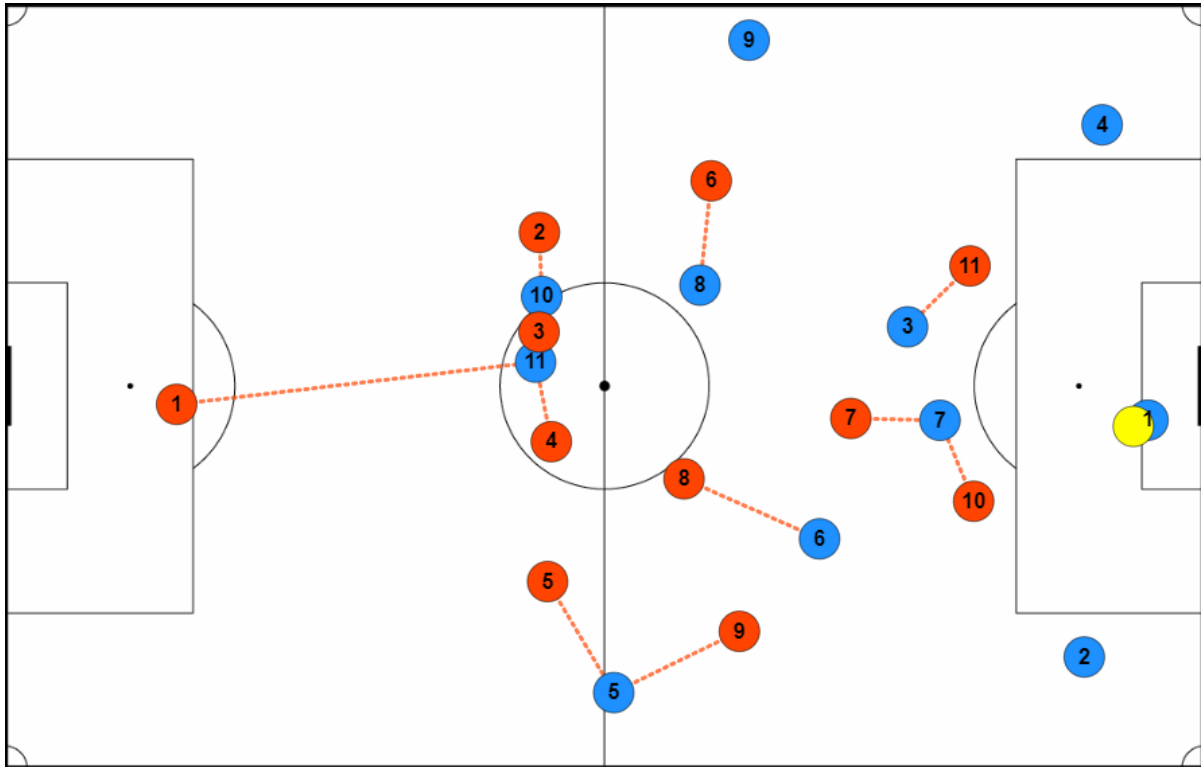
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I don't know

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Evaluation: Animation 4

What is the formation of the red team?*

- ◯ 3-4-1-2
- ◯ 4-4-2
- ◯ 3-5-2
- ◯ I don't know

When the blue team has possession of the ball, how would you describe the positioning of the defenders from the red team?*

- ◯ The red team's defenders are closer to the **goal**
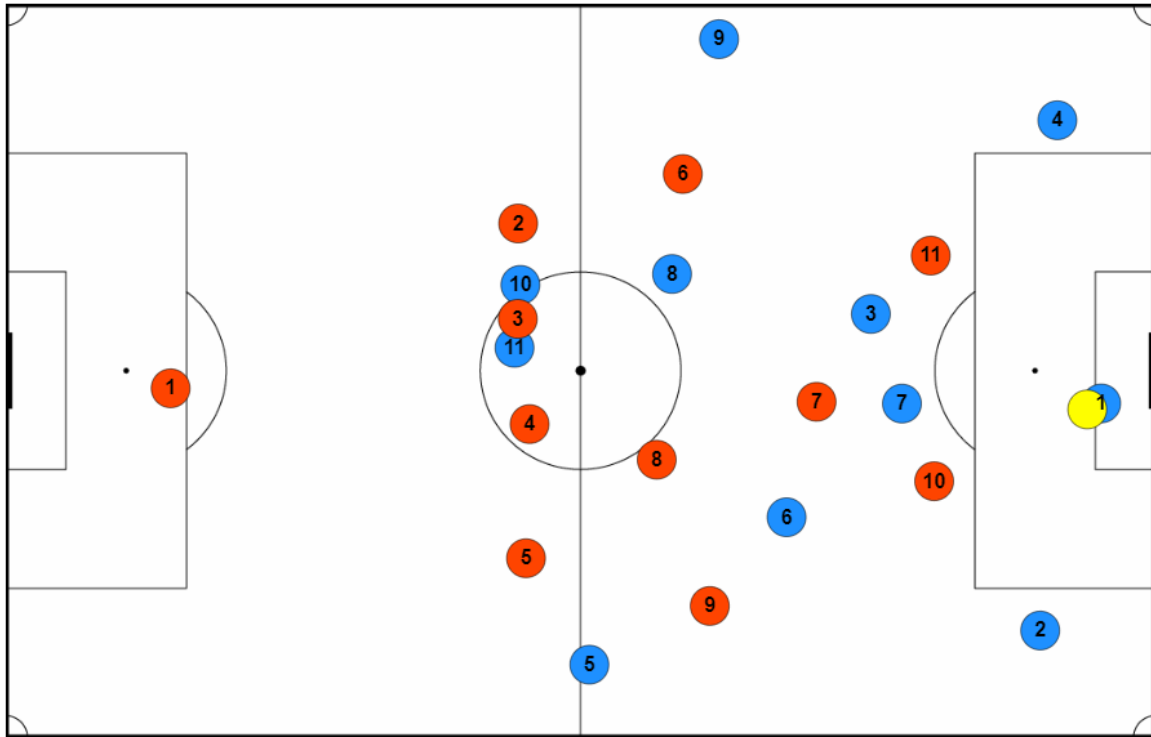- ◯ They are running towards the blue team's goal

○   The red team's defenders are closer to the **ball**

○   I don't know

What was the role of player #2 in the red team?*

○   To deffend

○   To attack

○   To remain at the goal

○   I don't know

Ideally, a defender should be positioned between the goal and the attacker. Based on your observations, the player #2 from the red team is:*

○   between the red team goal and the blue team's attacker.

○   not playing a role in the game.

○   running towards the blue team's goal.

○   I don't know

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Evaluation: Animation 5

What is the formation of the red team?*

◯ 2-1-4-3	◯ 2-5-3	◯ 4-4-2

◯ I don't know

When does a team cover a larger area of the pitch?*

◯ When the team is Defending

◯ When the team is Attacking

○ I don't know

In what situations do a team's players get close to each other?*
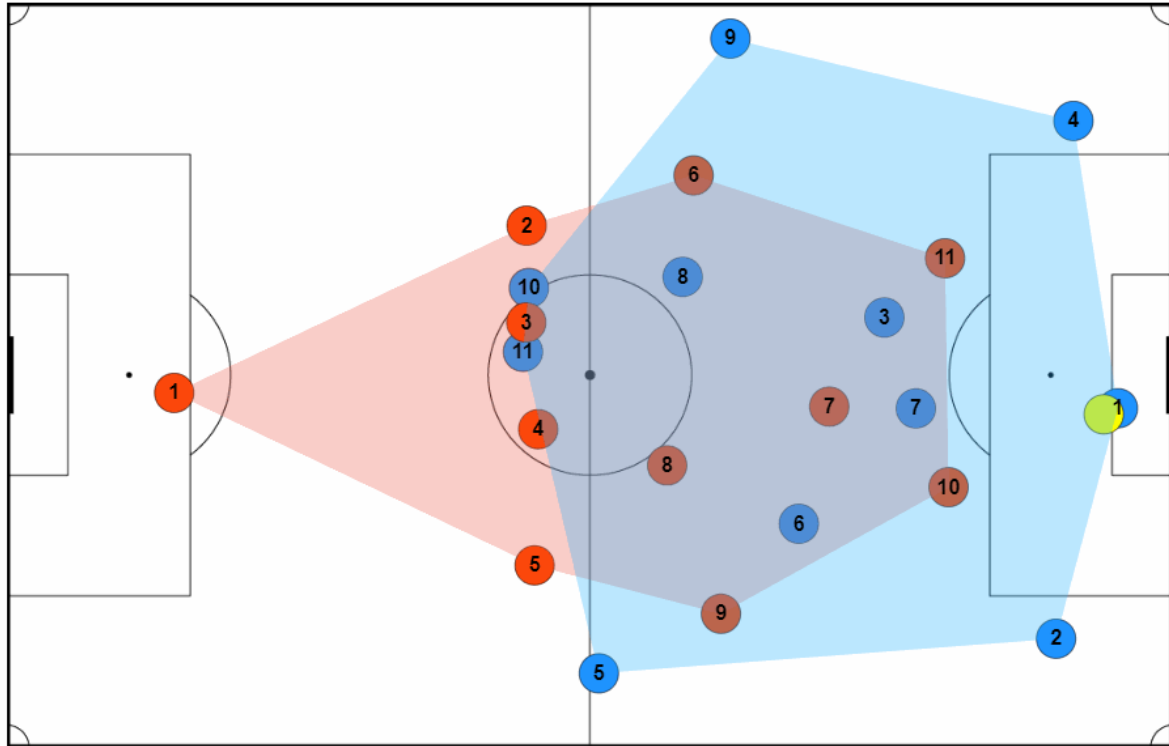
○ Defending

○ Attacking

○ I don't know

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Evaluation: Animation 6

What is the formation of the red team?*

◯ 4-4-2	◯ 1-3-4-2	◯ 3-5-2

◯ I don't know

When does a team cover a larger area of the pitch?*

◯ When the team is Attacking

◯ When the team is Defending

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I don't know

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