

Problem Description

Background

UEFA European Football Championship

The UEFA European Football Championship, less formally the European Championship and informally the Euro, is the primary association football tournament organized by the Union of European Football Associations (UEFA). The competition is contested by UEFA members' senior men's national teams, determining the continental champion of Europe. It is the second-most watched football tournament in the world after the FIFA World Cup; the Euro 2016 final was watched by a global audience of around 600 million. The competition has been held every four years since 1960, except for 2020, when it was postponed until 2021 due to the COVID-19 pandemic in Europe but kept the name Euro 2020. Scheduled to be in the even-numbered year between FIFA World Cup tournaments, it was originally called the European Nations' Cup before changing to its current name in 1968. Since 1996, the individual events have been branded as "UEFA Euro - year".

Problem Statement

Participants need to predict the winners of each match, margin of victory of each match and phase-wise top goal scorer of each of the 3 Phases of UEFA EURO 2024.

PHASE 1: Group Stage [36 Matches]

PHASE 2: R16 + R8 [12 Matches]

PHASE 3: Semi-final and final [3 Matches]

Datasets

Participants can refer to any publicly available authentic datasets. However, the team is liable to mention the sources of all datasets used in the model. You are encouraged to pull in, curate and share (only when asked) data sources:-

Links to some useful data repositories have been mentioned in the table below. They can use these datasets to build their models but using only these datasets is not compulsory.

<u>UEFA Euro 2020 - dataset by cervus data.world</u>	Data from UEFA Euro 2020 tournament (held on 11 June – 11 July 2021)
<u>UEFA Euro Cup All Matches</u>	Results of all historical Euro Cup Matches
<u>FIFA World Cup 2022 Player Data (kaggle.com)</u>	Comprehensive player level data from the FIFA World Cup 2022.
<u>2020 European Championship Stats FBref.com</u>	Player level data for 2020 European Championship

Submissions

Predictions	Deadline	Eligibility	Submission Required
Phase 1	14-Jun-24 5:30PM IST, 14-Jun-24 2:00 PM CEST, 14-Jun-24 6:00 AM MST	All Teams	i) Code ii) Predictions for Phase 1 iii) Datasets Used – Only when asked for.
Phase 2	29-Jun-24 5:30PM IST, 29-Jun-24 2:00 PM CEST, 29-Jun-24 6:00 AM MST	All Teams	i) Code ii) Predictions for Phase 2 iii) Datasets Used – Only when asked for.
Phase 3	09-Jul-24 5:30PM IST, 09-Jul-24 2:00 PM CEST, 09-Jul-24 6:00 AM MST	All Teams	i) Code ii) Predictions for Phase 3 iii) Datasets Used – Only when asked for.
Final Presentation		Only Qualified Teams	i) Presentation in PPT format

Note:

- 1) Format for prediction submission for Phase 1 can be downloaded using the following link [\[Format_Prediction_Phase1\]](#). A sample submission file for Phase 1 can be referred using the following link [\[Sample_Prediction_Phase1\]](#).

[SampleSubmission_Templates_Phase1]. Phase 2 submission format will be shared by final match of phase 1 and phase 3 submission template will be shared after final match of phase 2.

- 2) Your submitted files should be named as

"EuroCup24_Hackathon_TeamName_Dateofsubmission(dd-mm-yyyy)". A proper naming convention is expected to be followed by each team. Sample submission template will be shared with the teams.

- 3) All Phase 1 submission needs to be uploaded through the following submission form:

<https://forms.office.com/r/NkFSCBZUB>



The preferred mode of accessing the submission forms is through EXL laptop.

Submission file should not be more than 10MB in size.

- 4) All Phase 2 submission needs to be uploaded through the following submission form:

<https://forms.office.com/r/lde7WrQea9>



The preferred mode of accessing the submission forms is through EXL laptop.

Submission file should not be more than 10MB in size.

- 5) All Phase 3 submission needs to be uploaded through the following submission form:

<https://forms.office.com/r/dbRqTDK0W0>



The preferred mode of accessing the submission forms is through EXL laptop.

Submission file should not be more than 10MB in size.

- 6) Predictions need to be submitted for the winners of each match, margin of victory of each match and phase-wise top goal scorer of each of the 3 Phases of UEFA EURO 2024.
- 7) Between the Phases, teams can tune/modify their models based on their performance in Phase 1/Phase 2.
- 8) After 3 Prediction Phases, final presentations will be held for the top 5 or 6 teams along with submission of a writeup on the prediction methodology used. Winners will be decided based on the prediction accuracy and the approach used.

Evaluation Criteria

The judging criteria of the models and presentation are described below:

The following points system will be used for Evaluation:

Phase 1: 1 point if you predict the match result correctly and another 1 point if you predict the exact goal difference. If you are off by just one goal (or error of 1 goal difference in the predicted vs actual goal difference) in your prediction, you get 0.5 point. You only get goal difference points if your match result prediction is right. You can earn a maximum of 2 points for each Phase 1 match.



Here is how the points system works for predicting the highest overall goal scorer for phase 1:

6 points for accurately predicting the top goal scorer (with a correct prediction for the 1st rank). If your predicted player ends up in the actual top 3, you'll earn 4 points, and if they're among the top 5 goal scorers, you'll earn 2 points.

The maximum points a team/participant can get in **phase 1** is 78.

Phase 2: 2 points if you predict the match result correctly and another 2 points if you predict the exact goal difference. If you are off by just one goal (or error of 1 goal difference in the predicted vs actual goal difference) in your prediction, you get 1 point. You only get goal difference points if your match result prediction is right. You can earn a maximum of 4 points for each Phase 2 match.

Here is how the points system works for predicting the highest goal scorer for phase 2:

12 points for accurately predicting the top goal scorer (with a correct prediction for the 1st rank). If your predicted player ends up in the actual top 3, you'll earn 8 points, and if they're among the top 5 goal scorers, you'll earn 4 points. Goals scored in a penalty shootout do not add to the total.

The maximum points a team/participant can get in **phase 1** is 78.

Phase 2: 2 points if you predict the match result correctly and another 2 points if you predict the exact goal difference. If you are off by just one goal (or error of 1 goal difference in the predicted vs actual goal difference) in your prediction, you get 1 point. You only get goal difference points if your match result prediction is right. You can earn a maximum of 4 points for each Phase 2 match.

Here is how the points system works for predicting the highest goal scorer for phase 2:

12 points for accurately predicting the top goal scorer (with a correct prediction for the 1st rank). If your predicted player ends up in the actual top 3, you'll earn 8 points, and if they're among the top 5 goal scorers, you'll earn 4 points. Goals scored in a penalty shootout do not add to a player's or the team's goal total.

The maximum points a team/participant can get in **phase 2** is 60.

Phase 3: 5 points if you predict the match result correctly and another 5 points if you predict the exact goal difference. If you are off by just one goal (or error of 1 goal difference in the predicted vs actual goal difference) in your prediction, you get 2.5 point. You only get goal difference points if your match result prediction is right. You can earn a maximum of 10 points for each Phase 3 match.

Here is how the points system works for predicting the overall highest goal scorer for phase 3:

12 points for accurately predicting the top goal scorer (with a correct prediction for the 1st rank). If your predicted player ends up in the actual top 3, you'll earn 8 points, and if they're among the top 5 goal scorers, you'll earn 4 points. Goals scored in a penalty shootout do not add to a player's or the team's goal total.

The maximum points a team/participant can get in **phase 3** is 42.

Final Presentation Round:

Teams qualified for final presentations will be presenting their models and strategies to the Judges and the team with the best modeling technique and presentation skill will win the contest.

Rules and Regulation

- 1) A minimum of 1, and a maximum of 4 participants are allowed to form a team. Each participant can be part of only 1 team.
- 2) Teams should be made up exclusively of the current employees of EXL who organizers are not, volunteers, judges, sponsors, or in any other privileged position at the event.
- 3) Teams can use libraries, frameworks, or open-source code in their projects. Working on a project before the event and open sourcing it for the sole purpose of using the code during the event is against the spirit of the rules and is not allowed.