We try to predict which team is getting the next goal given players information, such as team and location, of a timestamp in this project. Here is the use of each file.

* DataParsing contains classes of our training data. GameState class stores the graph and extra information named metadata. Match stores all gamestates object of a single match.
* sports\_gnn folder contains the learning model of this project.
* predict.py get all the prediction output and store in results folder.
* train.py contains the training loop
* utils.py contains all the utils function such as data loading and reshaping data.
* visualizer.py contains the helper class for visualizing results.
* visualize.ipynb is where we visualize our prediction results and other information.
* weights folder stores the parameters of our model.
* results folder stores the prediction results of all matches in .pt format.
* data\_finalized.pickle is inside data\_finalized.zip. It is the dataset we used in our project.

We use pytorch\_geometric for this project. All code is written by us.

Please unzip the file in data\_finalized.zip and place it in the root level before running any code of this project.