

# Back-end Code Challenge

## Tournament bracket

A [bracket](#) is a series of games between participating teams involved in a single-elimination competition. The winner of that game advances to the next round. Every sports league or major team tournament will utilise a bracket. Here is a bracket for the 2022 soccer world cup.



## Coding Challenge

Create a tournament bracket generator for the soccer world cup.

To build a bracket, the following actions need to be implemented. Example method signatures are specified.

Action	Method
Seed teams for the round of 16	SeedTeam(seed, team)
Advance team as winner	AdvanceTeam(team)
Get tournament winner	GetTournamentWinner()
Path to victory	PathToVictory()

**i** Ignore the group stage of the world cup and start with the round of 16

## Bonus 1

The world cup is 16 team bracket. Extend the code to a 64 team bracket like NCAA soccer <https://www.ncaa.com/brackets/soccer-men/d1/2021>

## Bonus 2

Add code to support the group stage of the world cup

### How to complete the challenge

1. Use the code stub (in dotnet) to complete challenge. The stub contains sample data.
2. Update the readme file with
  - a. Instructions to build the test the code
  - b. Discussion of technologies used
3. Zip the folder(only code files) and send it to us.