Title: Building a Console Application for Managing Player and Team Data

Introduction:

The "Building a Console Application for Managing Player and Team Data" is a C# .NET application designed to help users manage and maintain information about players and teams in a cricket academy. The application utilizes Object-Oriented Programming (OOP) principles to provide an organized and user-friendly interface.

Classes and Their Purpose:

Player:

Properties:

PlayerId: Represents the unique identifier for a player.

PlayerName: Stores the name of the player.

PlayerAge: Stores the age of the player.

ITeam (Interface):

Defines the contract for classes that will handle team-related functionality.

Contains methods to add, remove, retrieve players by ID and name, and retrieve all players.

OneDayTeam:

Properties:

oneDayTeam: A global list to store player objects.

Constructor:

Initializes the oneDayTeam list.

Methods:

Add: Adds a player to the team, adhering to a maximum limit of 11 players.

Remove: Removes a player from the team based on the provided player ID.

GetPlayerById: Retrieves a player from the team based on the provided player ID.

GetPlayerByName: Retrieves a player from the team based on the provided player name.

GetAllPlayers: Retrieves a list of all players in the team.

Main Program:

Manages lists of players.

Provides methods to add and display player data.

Properties:

Players: Gives access to the list of players.

Application Flow:

Initialize a team object.

Enter a loop to present a menu of options to the user until they choose to exit.

Display a menu with options to:

- Add a player.
- Remove a player by ID.
- Get a player by ID.
- Get a player by name.
- Get all players.

User Input Loop:

Depending on the user's choice, the application will perform the corresponding action.

Users can add, remove, and retrieve player information, view all players as well as exit the application.

The application handles exceptions by displaying an error message if any issues arise during user interactions.

Creating a GitHub Repository:

Create a new GitHub repository named "PlayerTeamManagementProject"

Initialize a Git repository in the local project folder:

```
git init
git add .
git commit -m "Player Team Management"
git branch -M master
git remote add origin
git push -u origin master
```

Conclusion:

The "Building a Console Application for Managing Player and Team Data" project creates a user-friendly interface for managing player and team data. It emphasizes encapsulation, abstraction, and modularization through class definitions, interfaces, and methods. The GitHub repository ensures proper version control and collaboration. This application serves as a valuable tool for cricket academies to efficiently manage player and team information.

GitHub Repository Link:

https://github.com/PrashastVats1/PlayerTeamManagementProject