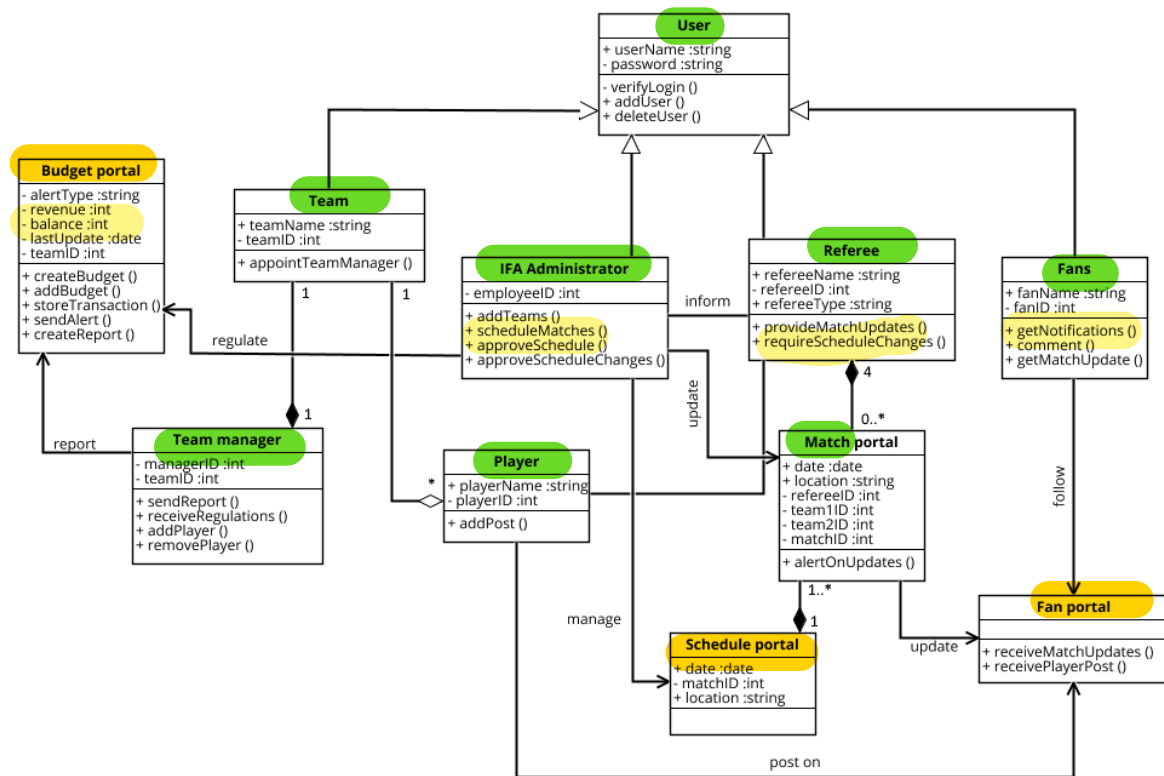# 1. IFA Portal conceptual models

1.1 A static/structural conceptual model in the form of an UML class diagram.

The UML class diagram below presents the domain entities and the relationship between *IFA system* entities. Since the starting point of this diagram were user stories, most of the users that were mentioned in user stories are classes in this diagram. The **superclass** of this diagram is *User*, since it is a good starting point to emphasise on the fact that from that point, the login process starts and User is later defined as one of the **subclasses**, such as *Fan* or *IFA Administrator*. Four classes present the stakeholders from the system – *IFA Administrator, Fans, Team* and *Referee*. Additionally to *Team*, there is a class *Player* that is also a stakeholder, however, it is only used when referring to the stakeholder *Team*. Nevertheless, because class *Player* has a role in *Fan portal* and relation with the class *Referee*, this stakeholder was included in the diagram. There are a couple of classes that do not represent the stakeholders but the main processes that occur in the system, those are *Budget portal, Fan portal*, *Schedule portal*, and *Match portal*. There are **seven directed associations** that briefly explain what action one class have to another. These associations were given to the relations between classes that are in the system defined as *the stakeholders* (the ones who do the action) and *processes* (the ones on whom the action is executed). Next, there are five general associations that define a class and its subclasses. The class *User* has its four subclasses, while subclass *Team* also has its subclass Team manager. Additionally, there is **one aggregation association** between *Team* and *Player*, meaning that the *Player* is part of a *Team*. However, the *Player* can be a *free agent*, so this was the main reason why in this relationship, there is aggregation instead of composition association. Lastly, there are **three composition association**.