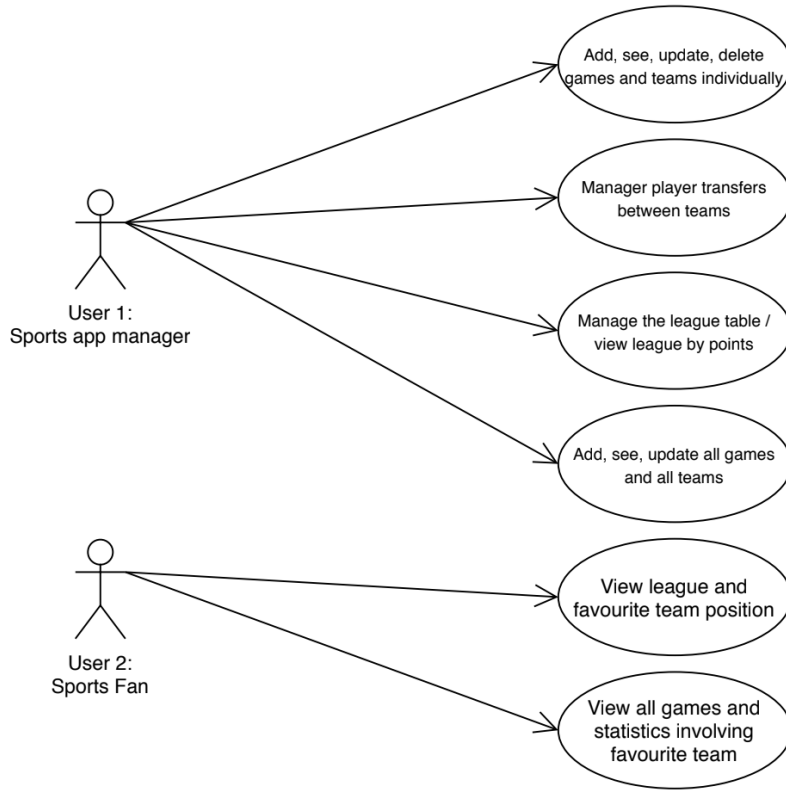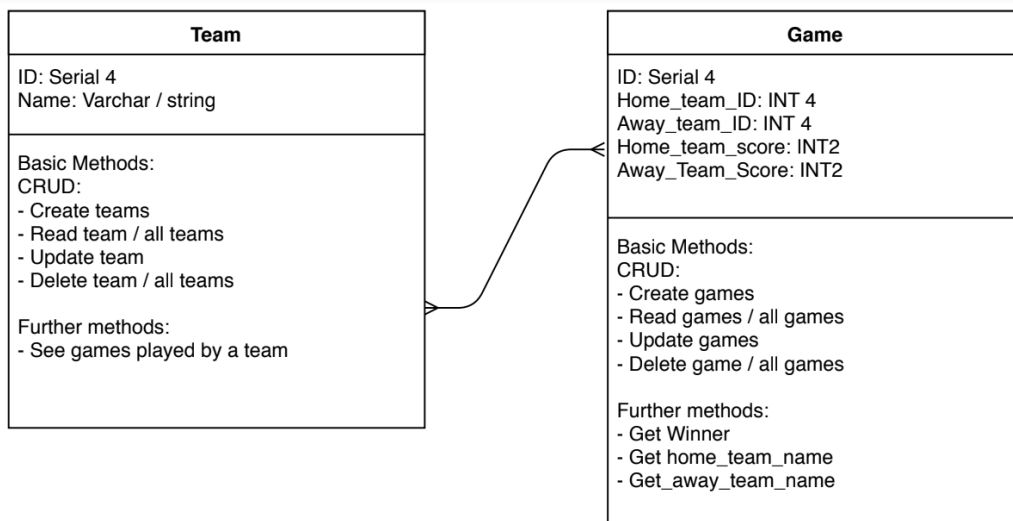# A and D 1. Example of a use case diagram
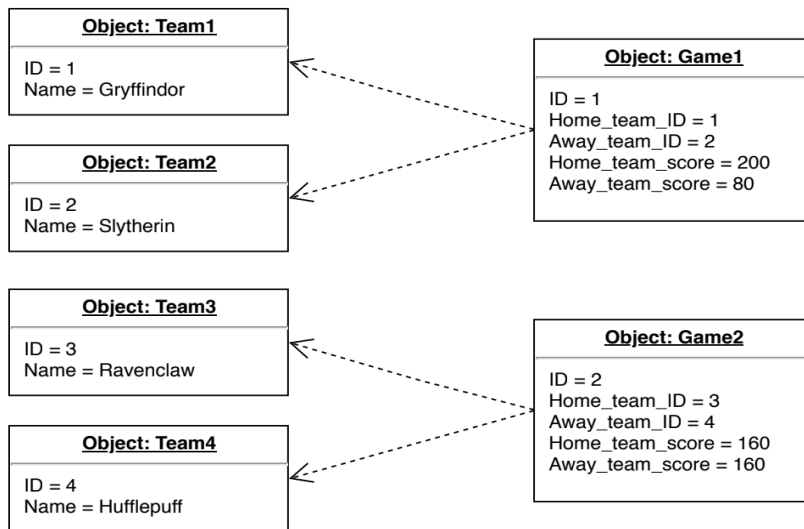

A and D 2. Example of a class diagram

A and D 3. Example of a object diagram

Object: Team1

ID = 1
Name = Gryffindor

Object: Team2

ID = 2
Name = Slytherin

Object: Team3

ID = 3
Name = Ravenclaw

Object: Team4

ID = 4
Name = Hufflepuff

Object: Game1

ID = 1
Home_team_ID = 1
Away_team_ID = 2
Home_team_score = 200
Away_team_score = 80

Object: Game2

ID = 2
Home_team_ID = 3
Away_team_ID = 4
Home_team_score = 160
Away_team_score = 160

A and D 4. Example of a activity diagram

App Manager logs on

Clicks on league table to view teams

Clicks on team to view team info

Chooses to edit team

Team updated

Invalid entry

Error message and back to edit screen

Team updated message

End
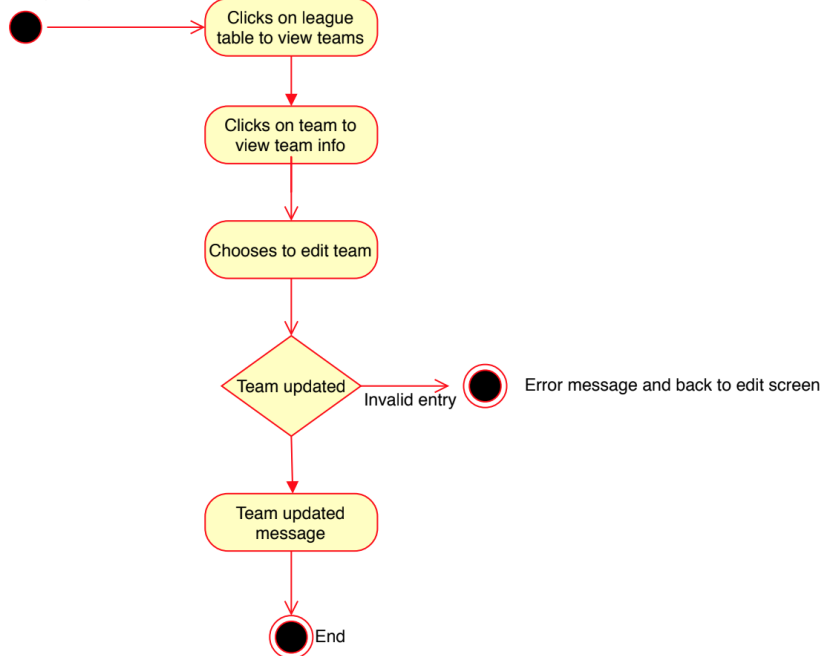
A and D 5: Example of an inheritance diagram (within a class diagram)

ITEM

Brand Name (String)
Model (String)
Purchase date (String??)
Buy price (double)
Shipping price (double)
Market value
Is sellable? Boolean

Getters and setters for all
ChangeFavouriteStatus
ChangeSaleStausToTrue
ChangeSaleStatusbacktoFalse
CalculateProfitIfSold
Calculate %ProfitIfSold

«interface»
ISell

COLLECTION

Items (ArrayList)

Getters and setters for all
countItems
addAnItem (buy method)
removeAnItem (sell method)
calculateTotalSpend
calculateTotalShippingSpen
calculateTotal

«Enumerator»
CollectionType

INHERITANCE

DRINK

Brand Name (String)
Model (String)
Purchase date (String??)
Buy price (double)
Shipping price (double)
Market value
Is sellable?
Type (Enum)

getDrinkType
getBrand
getModel

ACTION FIGURE

Brand Name (String)
Model (String)
Purchase date (String??)
Buy price (double)
Shipping price (double)
Market value
Is sellable?
Type (Enum)

getName
getActionFigureType
getMove
markForDonation
getDonationStatus

CollectionsManager

SellablesItems(ArrayList)
DonateItems(ArrayList)
Profit (double)
ItemsDonated (int)

- getSellableItems
- getDonatableItems
- countSaleItems
- countDonatableItems
- addSellableItem
- addItemForDonation
- getProfit
- addSellableItemsFromACollection
- CalculateTotalProfitIfSold
- CalculateTotal%Profit
- SellItem
- FindItemInDonationList
- DonateItem
- sortByProfit
- sortByPurchaseYear
- SwapItem
- DonateManyItemsAtOnce

«Enumerator»
DrinkType

«Enumerator»
ActionFigureType

«interface»
ISwap

«interface»
IDonate

A and D 6: Example of Implementation Constraints Table

	Constraint and possible effect	Solution
Hardware and software	• Only allowed to use apps / languages used since week 1	• Code front end in css/html in absence of Javascript Focus on functionality rather than features /

platforms		looks
Performance requirements	● Limited processing power as only local machine	● Only small amounts of data and small amounts of code to be used
Persistent storage and transactions	● No transactions required ● Database storage local only	● Only small amounts of data to be stored
Budgets	● No budget whatsoever	● Free software to be used
Time	● 7 days for project from conception to presentation	● Effective planning and time-management ● Focus on important functionality only ● Minimise time spent on fancy features / styling